Social Security Disability Reform and Implications for Employment

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Introduction

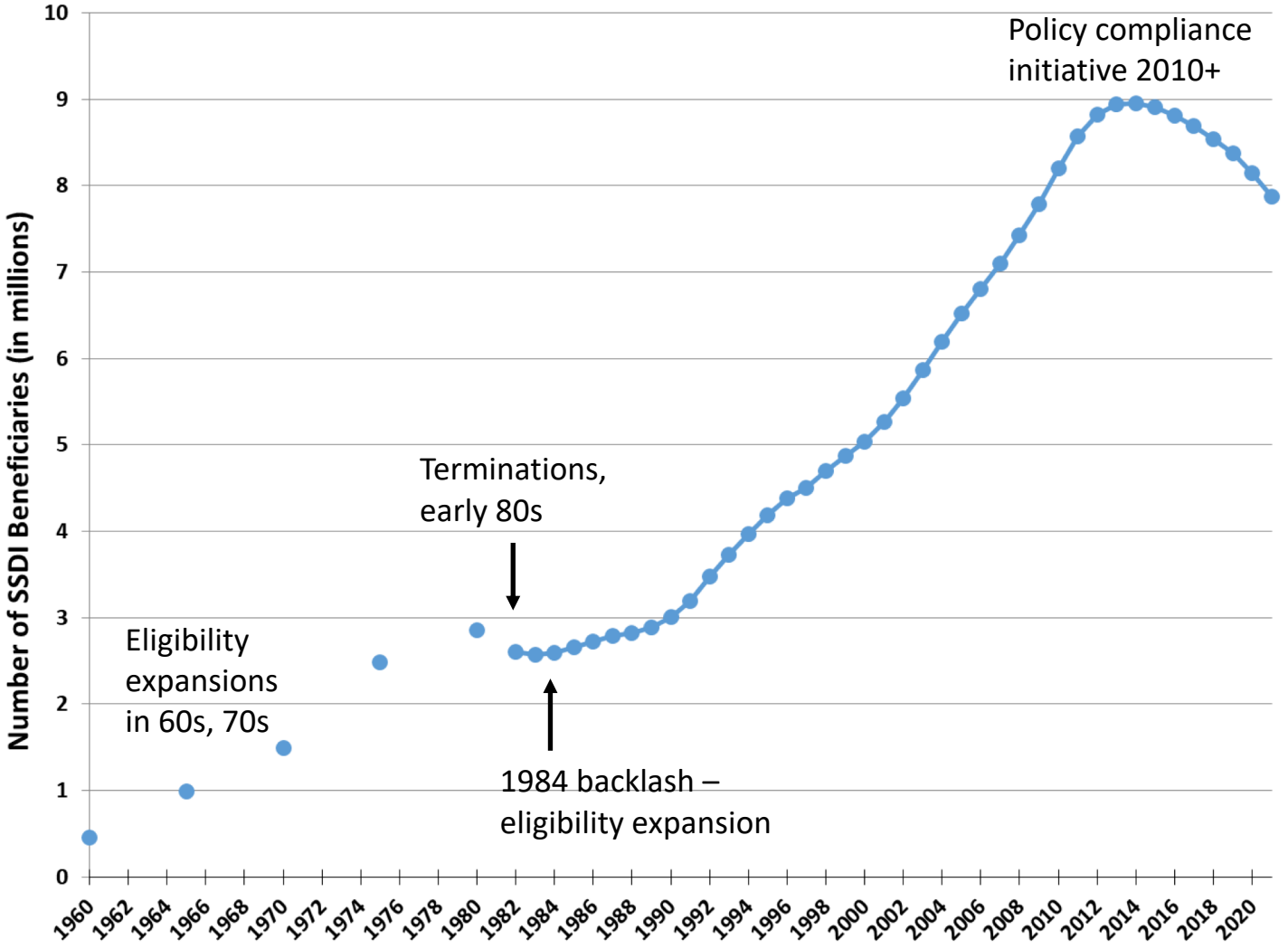
- The SSDI caseload has declined for the last decade after near-continuous growth since SSDI established in 1956
- Notably, SSDI **appellate level allowance rates have declined** from 74 percent in 2006 to 50 percent in 2016
- The literature has studied the period of rising caseloads yet **little attention to recent period**
- In the last decade, the SSDI program has been impacted by major demographic and economic changes—and also—**little-noticed administrative policy reforms**
- SSA launched training initiatives to improve policy compliance and consistency of decisions by appellate judges (ALJs), and expanded the judicial corps to address backlog
- In this paper, we investigate the **effect of these policy reforms** on the appellate allowance rate, and subsequent employment and earnings

Main approach and findings

- We combine SSA data for all appellate cases from 2007 – 2015 with applicant earnings data from the Master Earning File
- We measure the SSDI reforms including the **timing of receipt of policy compliant training for each administrative law judge**
- Our data show a **22 percentage point reduction** in appellate allowance rates (from a peak of 69% in 2008)
- SSA **policy reforms explain 28-36% of this decline**; and we find little role of changes in caseload characteristics or labor market cycles
- Using the policy variables as instruments, we estimate causal effects of SSDI allowance on subsequent employment
- We conclude with suggestive calculations about the role of SSDI policy reform in the recent employment gains among the people with disabilities

The Setting, Prior Work, and Our Approach

Number of SSDI Disabled Worker Beneficiaries, 1960-2021 Along with reform markers



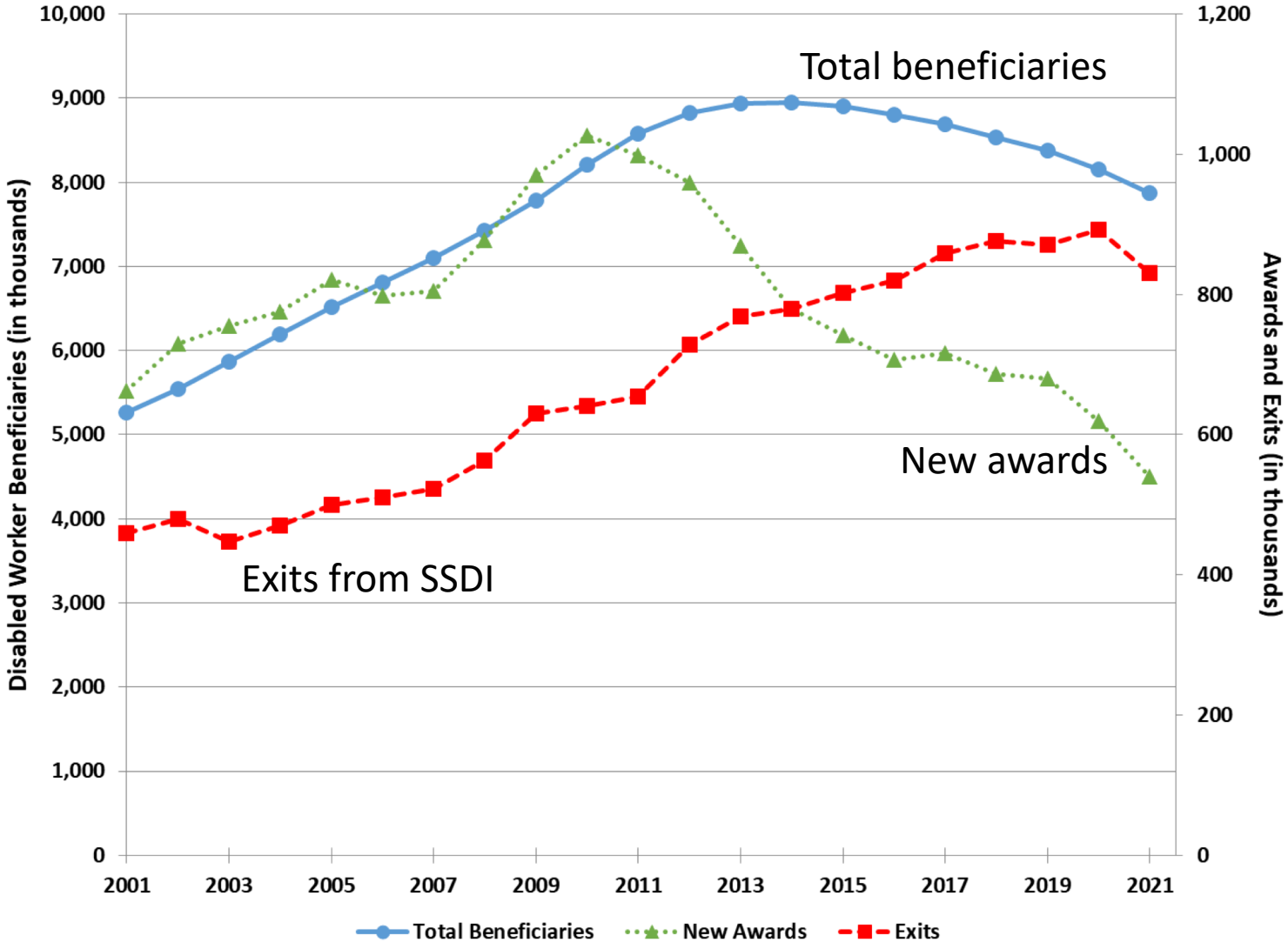
Decline in SSDI beneficiaries begins in 2014

Against the historical SSDI increases, recent period is significant break with trend

Source: SSA, Annual Statistical Report on the Social Security Disability Insurance Program, 2021, Table 1

Recent SSDI caseload decline due primary to fewer awards

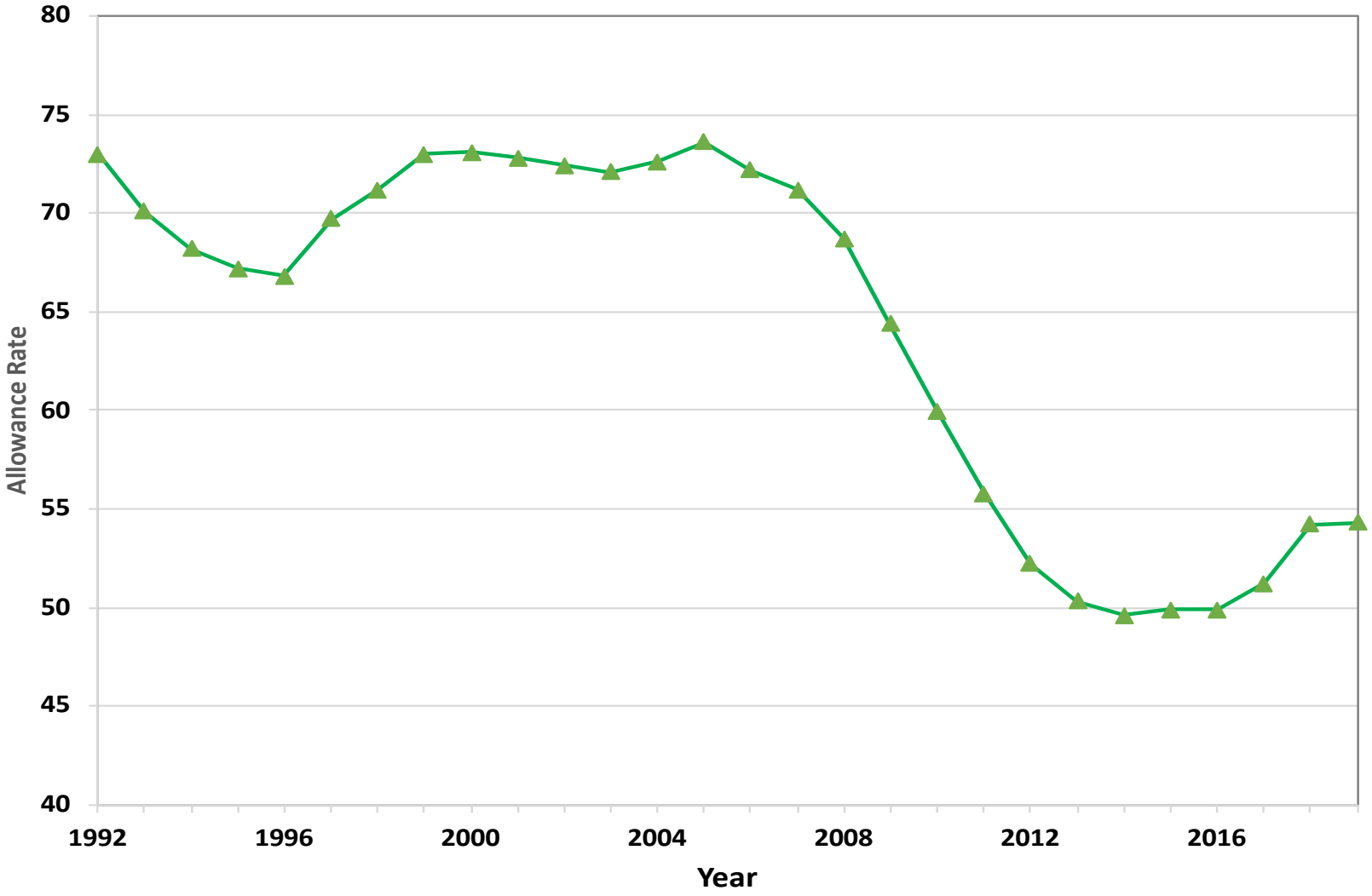
Total SSDI Beneficiaries, Number of Awards and Exits, 2001-2021



Peak in new awards in 2010; declines since

Source: SSA, Annual Statistical Report on the Social Security Disability Insurance Program, 2021, Tables 1, 35, and 49

What has received less notice – steep decline in SSDI appellate allowance rates



Peak of 74% in 2005; down to 50% in 2015

32 percent decline

Source: 2020 SSDI Annual Statistical Supplement. Tables 60 and 63. Appellate level and beyond.

Prior Work

- SSDI caseload growth, role of labor markets, and moral hazard (Parsons 1980, 1982; Haveman and Wolfe 1984a, 1984b; Bound 1989; Bound and Waidmann 1992; Autor & Duggan 2003, Black et al. 2003; Charles et al. 2018; Maestas, Mullen & Strand 2013; French & Song 2014; Liebman 2015; Maestas, Mullen & Strand 2021)
- The value of DI, targeting (Low & Pistaferri, 2015, Gelber, Moore & Strand 2017; Deshpande, Gross, & Su, 2021; Deshpande & Lockwood 2022; Deshpande & Mueller-Smith 2022)
- Little on recent SSDI caseload decline (new WP by Liu & Quimby 2023)
- Caseload decline in other countries, most prominently due to disability reform in the Netherlands (e.g., Koning & Lindeboom 2015; Degroot & Koning 2015)

Research questions

1. How did the SSA policy reforms affect appellate allowance rates? (most of today's presentation)
2. What was the effect of the decline in allowance rates on the employment and earnings of applicants? (also today)
3. To what extent do these reforms explain the trends in employment of the disabled? (preliminary evidence)
4. What do the results tell us about the effects of the policy reforms on targeting and the impact of declining SSDI generosity

   (ongoing research)

The SSDI Program and SSA Policy Reforms

SSDI program (2021 program statistics)

- 7.9M disabled workers receive benefits at cost of $128B in cash benefits
- Social insurance program; eligibility requires:
  - *Insured status:* work history requirement (paying into contributory system)
  - *Work disabling condition:* unable to engage in any substantial gainful activity because of a medically-determinable physical or mental impairment that is expected to last 12+ months (or result in death)
- If claimant is successful, they receive:
  - Monthly cash benefit - avg. $1,358/mo, until full retirement age
  - Lump sum of back pay
  - Medicare (after 29-month waiting period)
- In this project we focus on the **appeals process** – where cases are handled by administrative law judges (after initial denial)

We document that SSA SSDI policy reforms take 3 forms

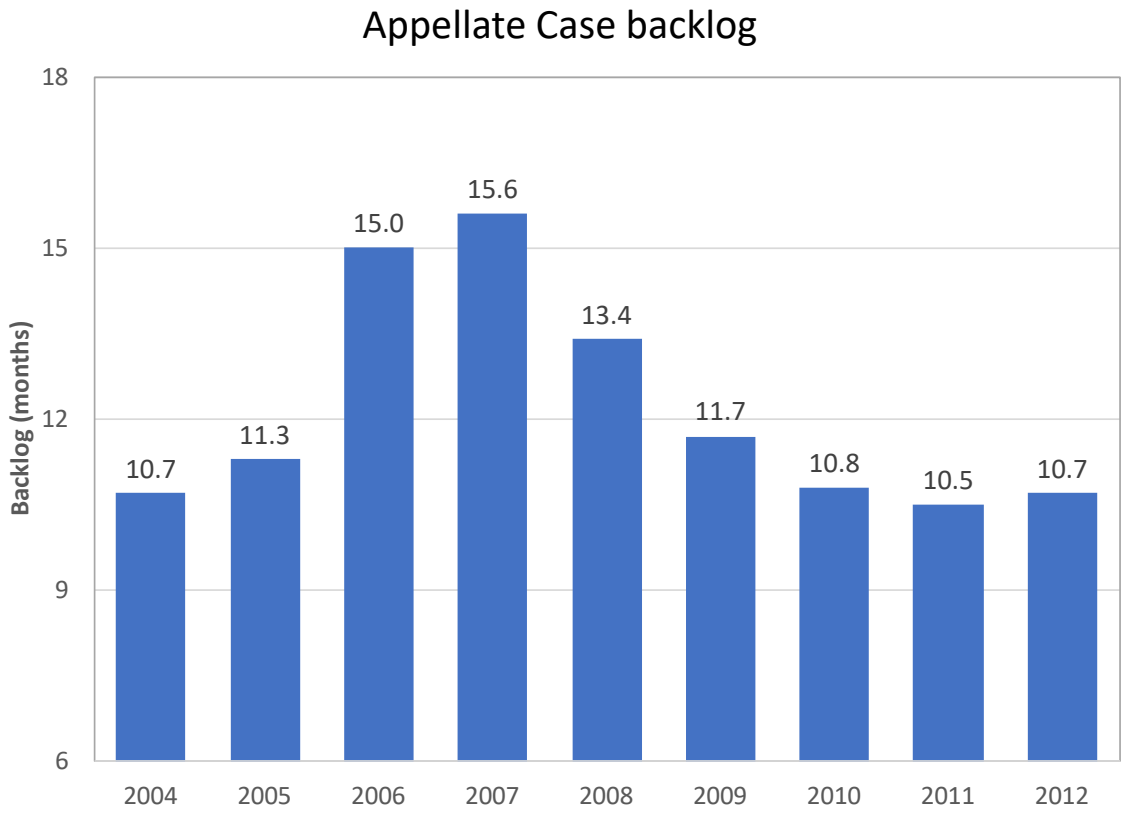
1. Disruption to the hiring of **Administrative Law Judges (ALJs)**
2. Efforts to reduce the backlog, **Senior Adjudicative Attorneys**
3. **Policy Compliant Training**: reforms to make decisions more consistent across judges and offices

1. Disruption to the hiring of judges

- From 1999-2007, very few ALJs were hired (throughout fed. govt.)
  - 1999-2003: “ALJ register” (list of qualified candidates) was largely suspended (lawsuit over veterans’ preference in hiring)
  - 2003-2007: lawsuit resolved but OPM did not allow new ALJ applicants to take the relevant exam (necessary to enter the register)
  - October 2007: OPM established new register, new exam → hiring commenced
- **SSA hired 185 judges in FY 2008** (adding to 1,007 incumbent judges)
- Half of judge pool were eligible to retire by end of 2008; bimodal tenure distribution (GAO 2010)

2. Efforts to reduce the backlog

With the suspension of ALJ hiring, the appellate backlog increased:



Source: Annual Statistical Supplement to the Social Security Bulletin, various years

Backlog defined as number of pending hearings divided by the average hearings per month.

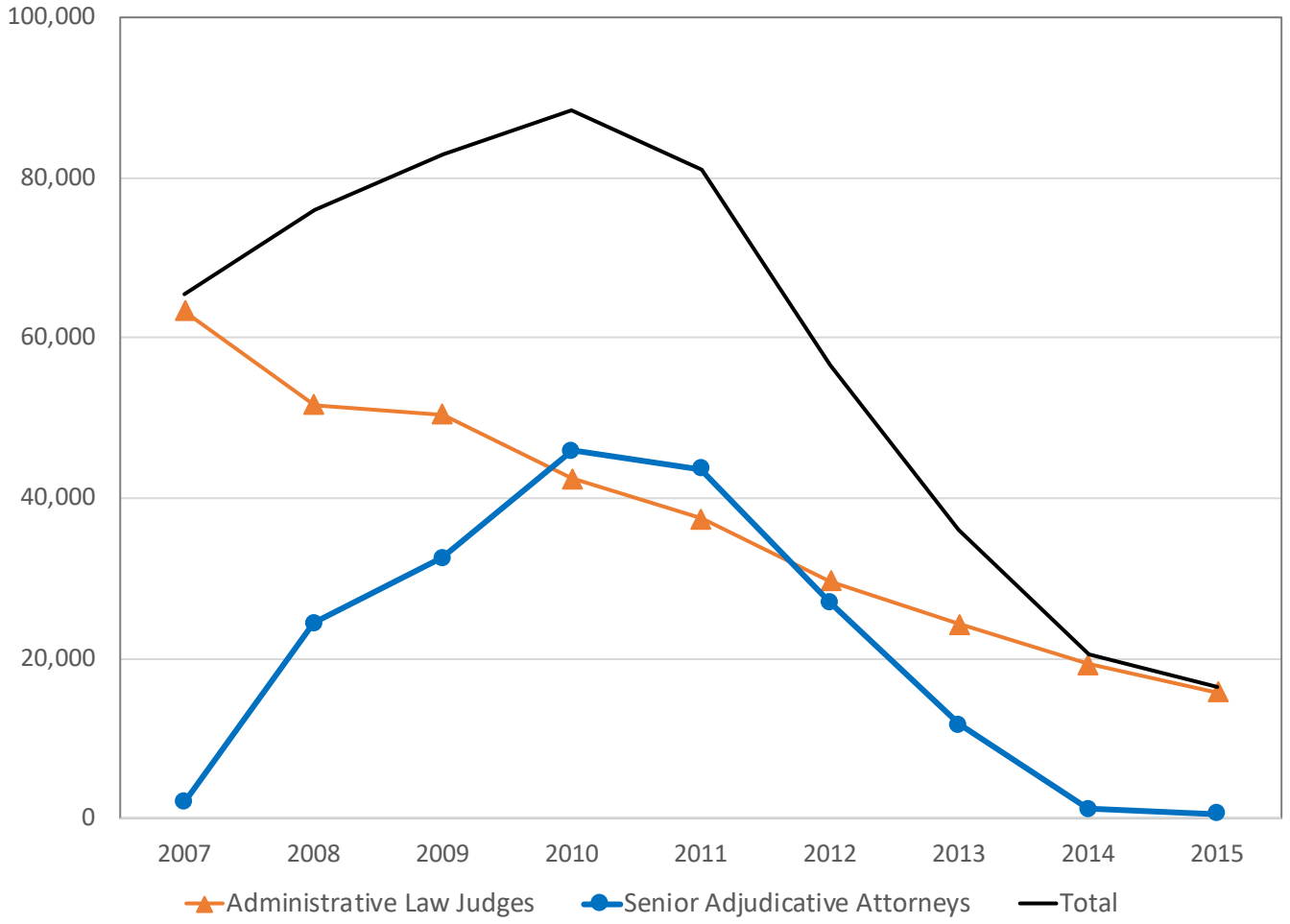
It captures the number of months it would take to eliminate the backlog if counterfactually there were no further applications.

2. Efforts to reduce the backlog (cont.)

SSA policy response to backlog:

- Senior adjudicative attorney (SAA) program begins in **Nov 2007**
  - SAAs have authority to make "on-the-record" allowances (only allow)
  - Evaluate case for existing documentary evidence that can support an allowance and, thus, a hearing with an ALJ is not necessary
  - Typical SAA case: claim is rejected at initial level; additional medical evidence comes in (often with help of representative); SAA looks over case and if complete can allow it; otherwise goes on to ALJ
  - ALJs can also make on-the-record determinations

Number of SSDI On-the-Record Decisions, by year



- SAAs increase after the start of the program (freeing up ALJs to work on appeals); they peak in 2010, and decline thereafter.
- A decline in overall OTR decisions start in 2010 and is due to efforts to create consistency in allowances (discussed next)

Source: Authors tabulations of SSA Case Processing and Management System (CPMS).

3. Efforts to make decisions more consistent

THE WALL STREET JOURNAL.

U.S.

Three Indicted for Alleged Social Security Fraud Scheme in Kentucky

Government disbursed benefits in excess of $600 million as result of scheme, indictment says



Attorney Eric Conn during a Senate committee hearing on Capitol Hill in 2013. He has been indicted by a federal grand jury in Lexington, Ky., on charges including conspiracy to commit mail fraud and wire fraud.

TOP REPS

The Social Security Administration pays legal firms directly for successfully winning disability benefits for their clients. Here are the top 10 individuals collecting fees from 2010.

Name	2010 payments	Based	Comment?
Charles Binder	$22,817,430.62	Hauppauge, N.Y.	Declined to comment
Thomas Nash	$6,292,296.41	Chicago	Didn't respond to request for comment
Eric Conn	$3,815,512.96	Stanville, Ky.	Didn't respond to request for comment
Michael Sullivan	$3,614,429.13	Lousiville, Ky.	Didn't respond to request for comment
Frank Latour	$3,464,262.24	Colton, Calif.	Didn't respond to request for comment

Source: Paletta, Damian. 2011. "Disability-Claim Judge Has Trouble Saying 'No': Near-Perfect Approval Record; Social-Security Program Strained." *The Wall Street Journal*, May 11, 2011.

- **May 2011:** WSJ report on ALJ with a nearly 100 percent allowance rate on SSDI appeals. Rather than scheduling hearings on the usual first-in, first-out system, the judge was reviewing a disproportionate number of applications from one particular attorney.
- **July 2011:** hearing by House Ways and Means Subcommittee
- Before this, SSA had been working on developing **data systems/data analytics** to investigate the **quality and consistency** of appellate decisions (Ray and Lubbers 2015).
- The effort revealed types of decisions where adjudicators made systematic errors by incorrectly applying agency policy.
- It also revealed “outlier” judges who were awarding or denying benefits in a high percentage of cases.

3. Efforts to make decisions more consistent (cont.)

SSA policy response:

- Rolled out new **policy compliant training** for all ALJs
  - ALJs hired after July 2010 received updated training at hire
  - Other ALJs received training over summers of 2011-2013
- **Focused reviews** of judges who were outliers in past decisions
  - Give feedback to judges; and in offices where they reside → could have direct or network effects
- **Software applications** for judges to track and compare their decision making
  - "How MI Doing" introduced (nationwide) in 2011

Data, statistical approach, and descriptive statistics

Data – Link SSA admin data with judge level reforms

- SSA Case Processing and Management System (CPMS) – all SSDI decisions made at the appellate level between 2007 and 2015
  - This identifies decision maker (ALJ, SAA); we use this to identify **cohorts of judges**
  - Supplement with information from Management Information Electronic Disability Folder, the Appointed Representative Data Base, the Modernized Claim System, the 831 files
- SSA Master Earnings File - earnings data of applicants; observe pre-application data and up to six years post appellate determination
- Recorded **dates of training and focused reviews of each judge**, from Judge Ray
- Sample: 4,128,896 allowance decisions; 3,433 decision makers (ALJ, SAA)

First Stage – Effects of Reform on Appellate Allowances

$$D_{ijdt} = \alpha + \gamma' P_{jdt} + \pi' X_{ijdt} + \eta_t + \theta_d + \varepsilon_{ijdt}$$

- $D_{ijdt} = 1$ if individual i appellate case heard by judge *j* in hearing office *d* in period *t* is allowed (0 if denied or dismissed)
- $P_{jdt} =$ policies in place for judge *j* in hearing office *d* in period *t*
- $X_{ijdt} =$ controls at the person, case, and place level (include local labor market conditions, Maestas, Mullen & Strand 2021, Liu & Quimby 2023)
- Cluster standard errors on judge
- "judge" refers to any adjudicator, ALJ or SAA

Construct instruments leveraging that cases are randomly assigned to judges conditional on *assignment variables*

Instruments

Judge Cohort (omitted = incumbent)
FY2008
FY2009
FY2010
FY2011
FY2012
FY2013
FY2014
FY2015

Post Policy Compliant Training *(FY2011+ hired with PCT)*
Incumbent, post PCT
FY2008, post PCT
FY2009, post PCT
FY2010, post PCT
Post Own Focused Review

Assignment Variables

SAA (=1 if SAA)
Trainee (=1 if ALJ in initial 9-mo trainee period)
Office fixed effects
Time fixed effects

Controls

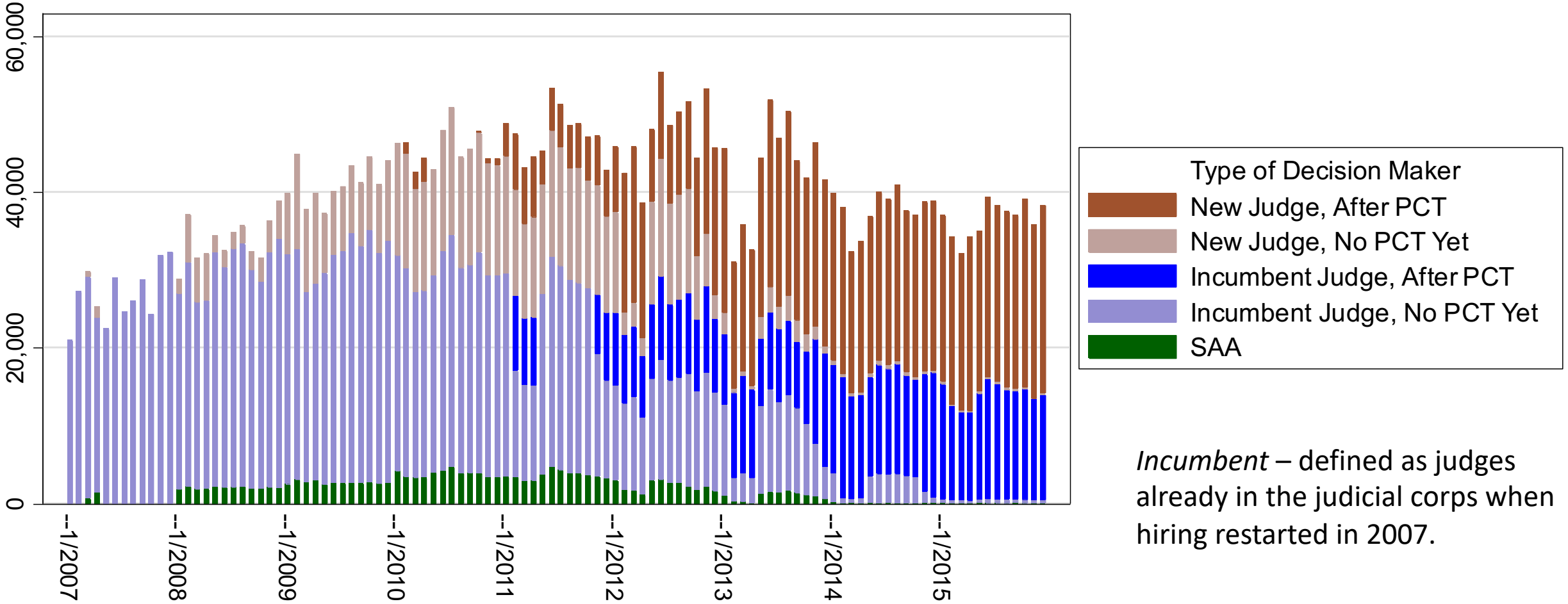
Female
Age category dummies
Body system, major class
Case characteristics (41 vars)

Labor market controls
State-time UR
State-time UR * body system class

Office-month environment
Share with OTR decisions
Number SAAs / Number ALJs
Post focused review in office

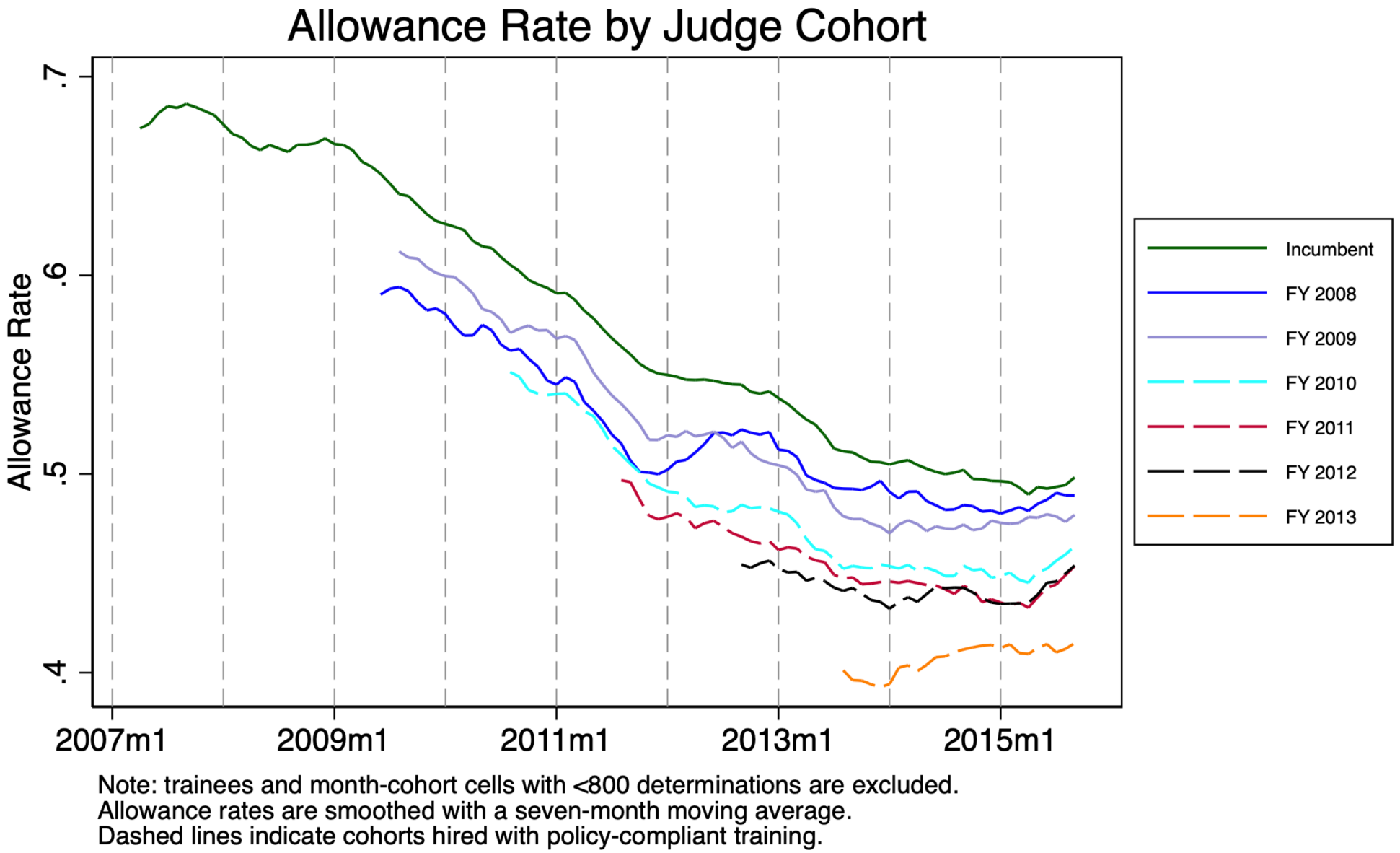
The changing landscape of SSDI appellate decision makers

Number of Appellate Decisions by Type of Decision Maker and Policy Compliant Training



Note: PCT=Policy Compliant Training.

Incumbent – defined as judges already in the judicial corps when hiring restarted in 2007.



Large cohort effects

Cascading lower allowance rates

First Stage Results, Magnitudes, and Threats

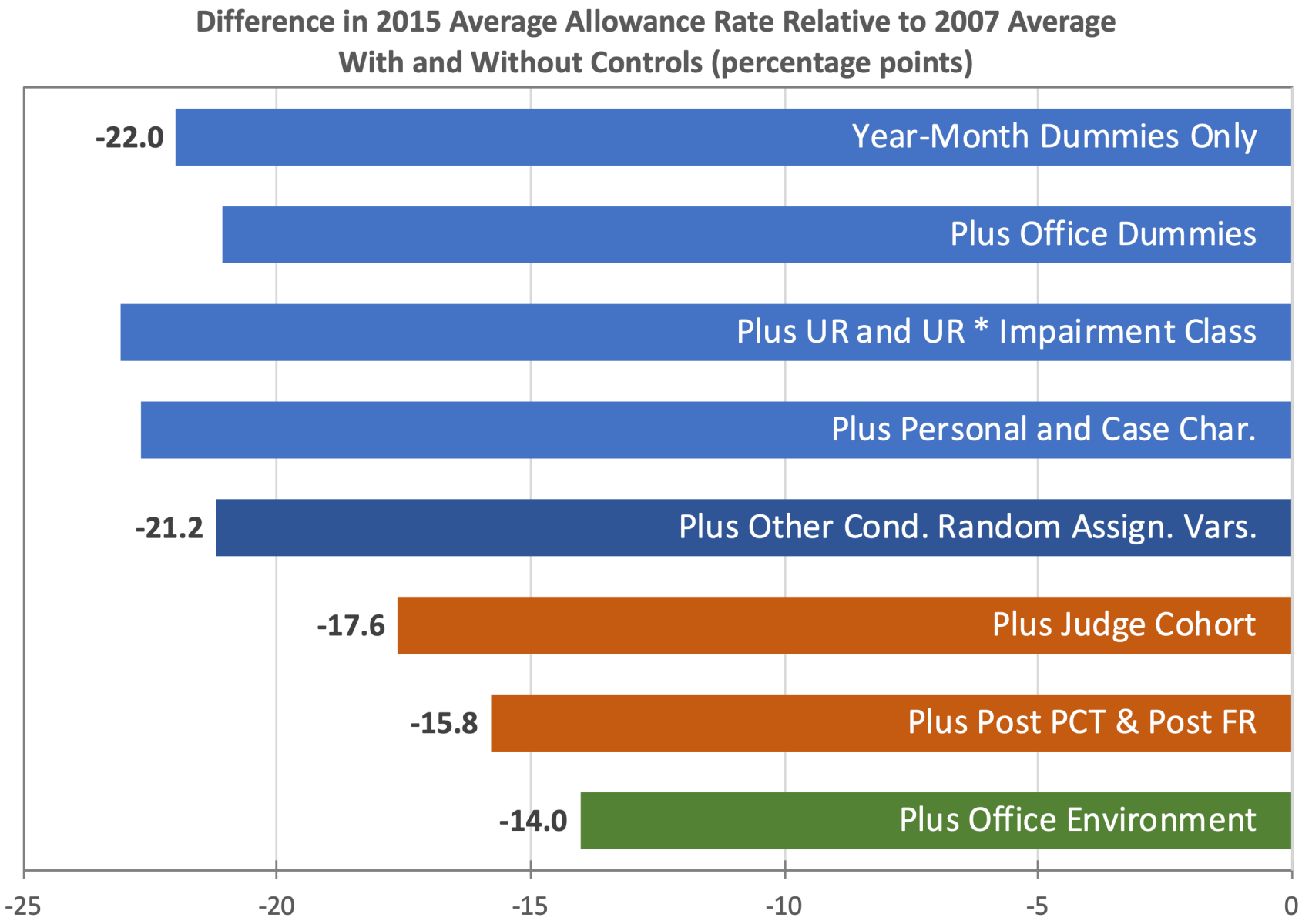
First Stage: Effects of Policy Reforms on Appellate Allowances

Base Specification

	(1)		(2)		(3)	
Judge Cohort (omitted = incumbent)						
FY2008	-0.035**	(0.014)	-0.034**	(0.014)	-0.034**	(0.014)
FY2009	-0.037***	(0.010)	-0.036***	(0.010)	-0.036***	(0.010)
FY2010	-0.051***	(0.008)	-0.049***	(0.008)	-0.049***	(0.008)
FY2011	-0.077***	(0.008)	-0.073***	(0.009)	-0.073***	(0.009)
FY2012	-0.082***	(0.010)	-0.077***	(0.010)	-0.077***	(0.010)
FY2013	-0.108***	(0.011)	-0.102***	(0.012)	-0.102***	(0.012)
FY2014	-0.136***	(0.025)	-0.129***	(0.025)	-0.127***	(0.025)
FY2015	-0.144***	(0.012)	-0.139***	(0.012)	-0.136***	(0.012)
Post Policy Compliant Training *(FY2011-2015 hired with PCT)*						
Incumbent, post PCT	-0.026***	(0.006)	-0.021***	(0.006)	-0.021***	(0.006)
FY2008, post PCT	0.0003	(0.011)	0.004	(0.011)	0.004	(0.011)
FY2009, post PCT	-0.016**	(0.008)	-0.013*	(0.008)	-0.013*	(0.008)
FY2010, post PCT	-0.021***	(0.007)	-0.018**	(0.007)	-0.018***	(0.007)
Post Own Focused Review	-0.047**	(0.020)	-0.045**	(0.020)	-0.045**	(0.020)
Office-Month Environment						
Share with OTR decisions					0.059***	(0.005)
Number SAAs / Number ALJs					-0.047***	(0.009)
Post focused review in office					0.001	(0.005)
Time fixed effects	year		yr-month		yr-month	
Office-Month Environment Variables	No		No		Yes	
Number of observations	4,128,896		4,128,896		4,128,896	
R Squared	0.1615		0.1619		0.1622	
F Statistic	16.85		15.36		15.21	

FY2011-15 ALJ cohort effects include impacts of PCT

Notes: All models control for personal and case characteristics, body system major class, state unemployment rate, unemployment rate by body system class. Clustered on judge.



Our model explains 6.2-8.0 percentage points of the 22 pp decline in allowance rates

Or 28-36% of the decline

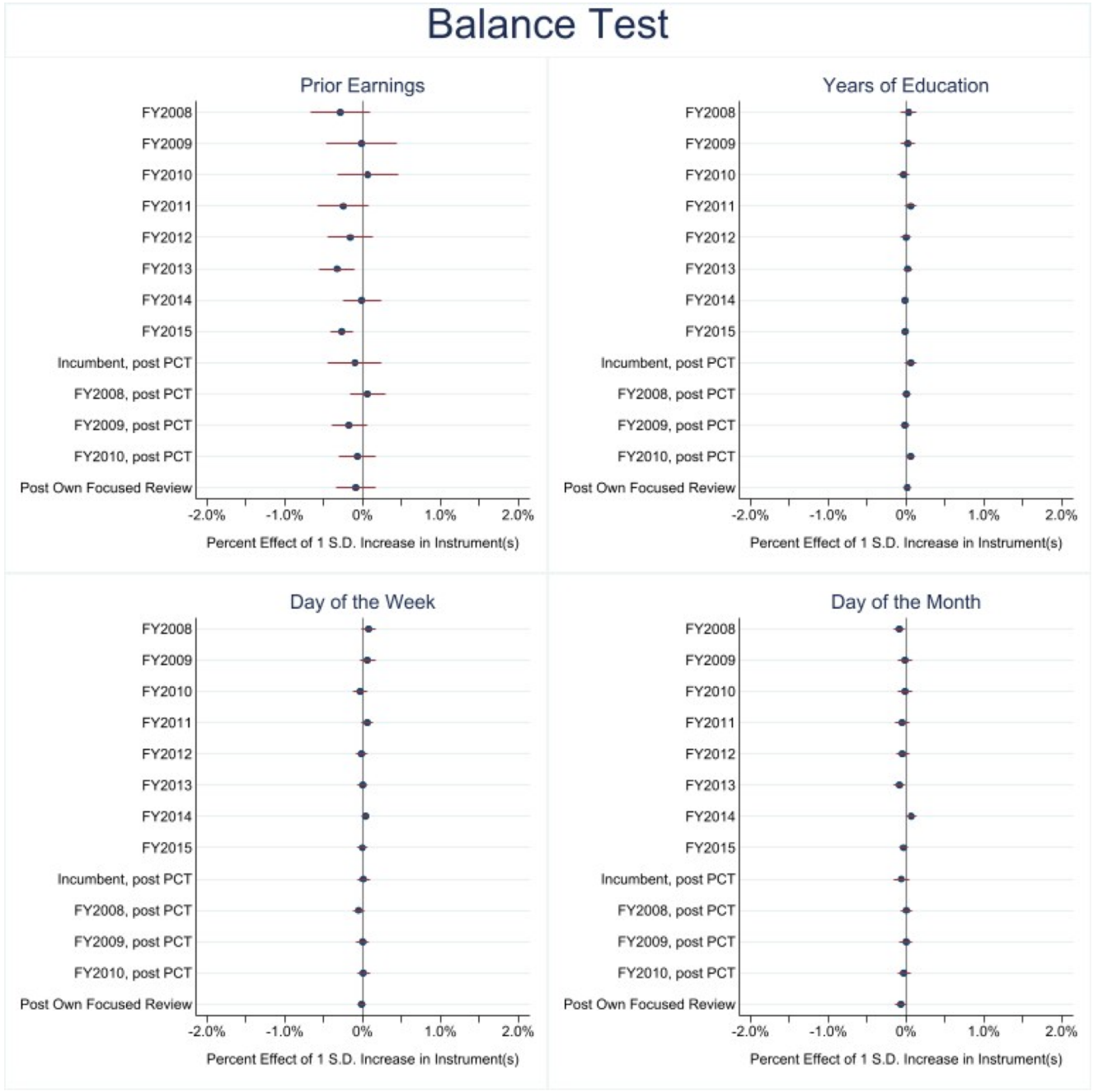
Note this is a cumulative decline in allowance rates with the sequential addition of controls.

Summary of First Stage and Threats to IV

- Hiring of new judges and rollout of policy compliant changes led to large reductions in allowance rates
- Robust to inclusion of labor market variables, case characteristics

In terms of threats to interpreting these findings, we show that:

- Consistent with conditional random assignment, instruments satisfy **balance test**
- The policy reforms **do not lead to a change in claims**; ruling out this as a confounder



Notes: Prior earnings, average of years 6-10 prior to filing, 2014 dollars.

<u>Instruments have no impact (statistically or economically) on:</u>

Earnings prior to filing

Years of Education

Case filing variables

Important evidence for validity of instruments

These estimates are from a regression on our full sample and our base specification (individual + case characteristics, local labor market, office and month-yr FE). We then simulate the effect of a 1 SD change in Z on the outcome, and express it as a percent of the baseline mean of y.

Leads and Lags of Log of Claims Regressed on Instruments (and model controls)

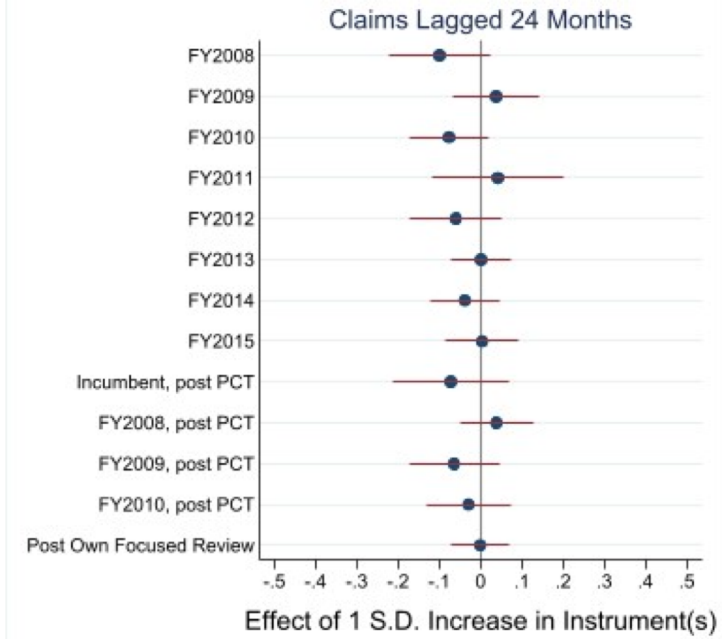
	Models with Lags						Models with Leads					
	5 years	4 years	3 years	2 years	1 year	1 month	1 month	1 year	2 years	3 years	4 years	5 years
Judge Cohort (omitted = incumbent)												
FY2008	-0.125	-0.191	-0.501**	-0.528	-0.521***	-0.558*	-0.563**	0.491	0.273	-0.279	0.660***	0.263*
	(0.395)	(0.387)	(0.191)	(0.335)	(0.152)	(0.313)	(0.261)	(0.349)	(0.214)	(0.204)	(0.185)	(0.155)
FY2009	0.575*	0.271	0.289	0.149	0.337	-0.105	-0.131	0.0552	0.272	-0.111	-0.324	-0.482
	(0.300)	(0.208)	(0.265)	(0.206)	(0.333)	(0.188)	(0.188)	(0.193)	(0.252)	(0.216)	(0.291)	(0.389)
FY2010	0.141	-0.129	-0.542	-0.276	-0.161	-0.122	0.0587	0.347	0.322	-0.145	-0.298	-0.0569
	(0.256)	(0.318)	(0.394)	(0.173)	(0.232)	(0.258)	(0.277)	(0.290)	(0.348)	(0.242)	(0.273)	(0.408)
FY2011	0.0336	-0.038	0.0774	0.162	-0.0715	-0.119	-0.208	0.287	0.633	-0.0452	-0.467	-0.525
	(0.333)	(0.419)	(0.187)	(0.312)	(0.198)	(0.201)	(0.252)	(0.280)	(0.540)	(0.193)	(0.462)	(0.568)
FY2012	-0.402	-1.021*	-0.776*	-0.282	-0.238	-0.296	-0.217	0.0985	0.728	0.156	-0.344	-0.695
	(0.340)	(0.536)	(0.448)	(0.264)	(0.187)	(0.338)	(0.325)	(0.262)	(0.601)	(0.283)	(0.331)	(0.518)
FY2013	-0.0305	0.0182	0.0591	0.00974	-0.00163	0.248	0.346	0.347	0.236	-0.431	-0.453	-0.362
	(0.349)	(0.249)	(0.404)	(0.227)	(0.255)	(0.289)	(0.331)	(0.323)	(0.290)	(0.458)	(0.334)	(0.330)
FY2014	-1.448	-0.683	-0.135	-0.627	-0.751	-0.25	0.284	1.219	1.024	-0.609	-0.799	-0.872
	(1.166)	(0.532)	(0.551)	(0.715)	(0.496)	(0.455)	(0.660)	(1.165)	(0.721)	(0.770)	(0.585)	(0.820)
FY2015	0.498	0.184	-0.186	0.0443	0.126	0.238	-0.0608	0.256	0.413	-0.188	-0.132	-0.141
	(0.522)	(0.369)	(0.295)	(0.513)	(0.474)	(0.267)	(0.328)	(0.331)	(0.369)	(0.271)	(0.390)	(0.361)
Post Policy Compliant Training *(FY2011-2015 hired with PCT*)												
Incumbent, post PCT	0.019	-0.102	0.0225	-0.204	-0.295**	0.0922	0.156	0.422	0.442	-0.169	-0.401	-0.218
	(0.297)	(0.329)	(0.115)	(0.205)	(0.124)	(0.221)	(0.212)	(0.277)	(0.363)	(0.173)	(0.290)	(0.259)
FY2008, post PCT	-0.217	-0.676	0.0139	0.339	-0.0751	0.356	0.347	-0.544	0.424	-0.0801	-0.896*	-0.302
	(0.375)	(0.469)	(0.485)	(0.399)	(0.464)	(0.379)	(0.387)	(0.361)	(0.554)	(0.462)	(0.453)	(0.332)
FY2009, post PCT	0.0897	-0.13	-0.115	-0.379	-0.21	0.137	0.103	-0.0176	-0.247	-0.578	-0.11	0.0899
	(0.322)	(0.408)	(0.387)	(0.326)	(0.225)	(0.256)	(0.247)	(0.324)	(0.335)	(0.389)	(0.275)	(0.271)
FY2010, post PCT	-0.28	-0.236	0.13	-0.152	-0.0295	0.362	0.294	0.42	0.0556	-0.1	-0.231	-0.254
	(0.270)	(0.459)	(0.437)	(0.279)	(0.317)	(0.324)	(0.276)	(0.258)	(0.342)	(0.256)	(0.291)	(0.231)
Post Own Focused Revie	-0.404	-0.779*	-0.720**	-0.00924	0.172	0.503	0.431	0.46	-0.247	0.0946	-0.357	-0.501
	(0.566)	(0.424)	(0.346)	(0.359)	(0.394)	(0.398)	(0.395)	(0.322)	(0.366)	(0.341)	(0.281)	(0.416)
Observations	10,771	10,814	10,845	10,868	10,874	10,875	10,876	10,878	10,874	10,863	10,854	10,843
R-squared	0.885	0.892	0.902	0.902	0.902	0.898	0.896	0.901	0.908	0.914	0.916	0.916

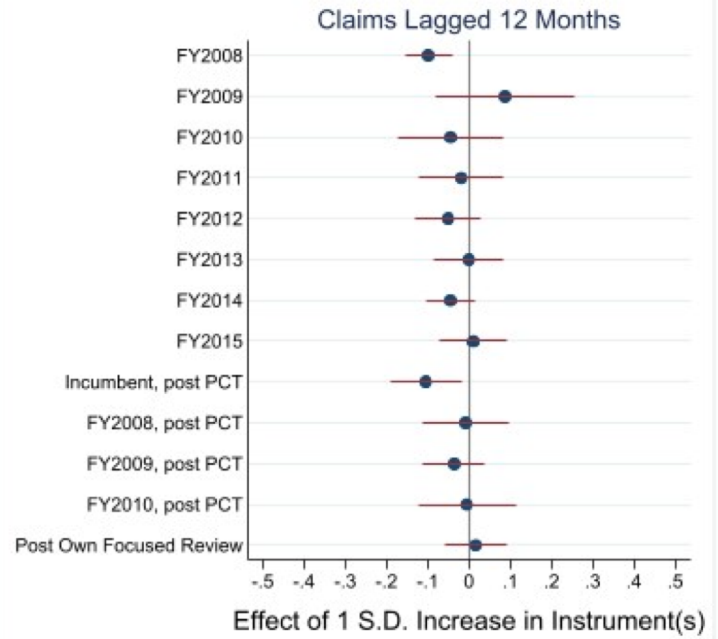
Covariates include assignment variables and office environment variables as the main specification. Weighted by state population. Robust standard errors in parentheses, clustered by DDS office. *p<0.10 ** p<0.05 *** p<0.01

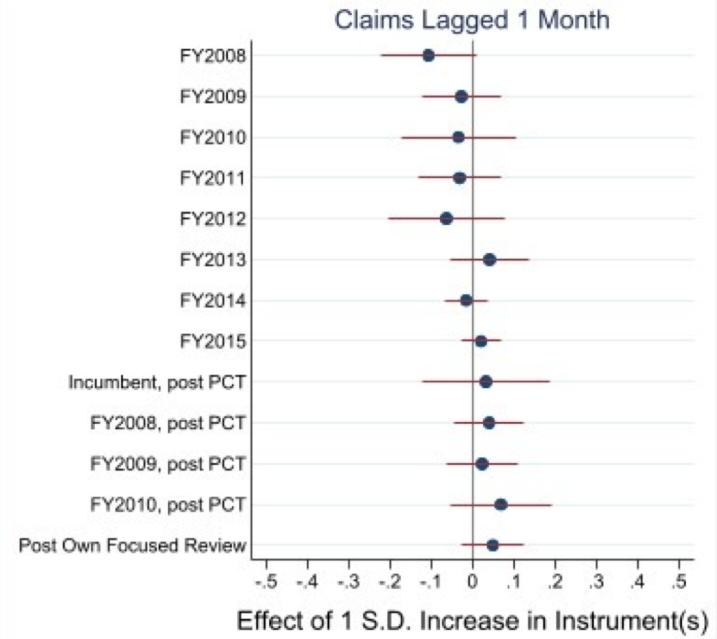
Instruments have no impact (statistically or economically) on SSDI applications

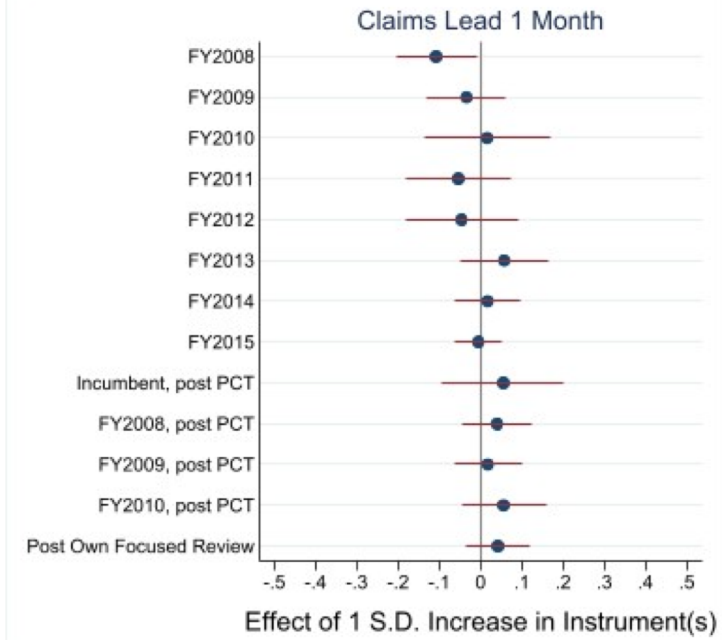
These estimates are from a regression on office-month data on Di applications, with controls (local labor market vars, means of individual + case char., office and month-yr FE).

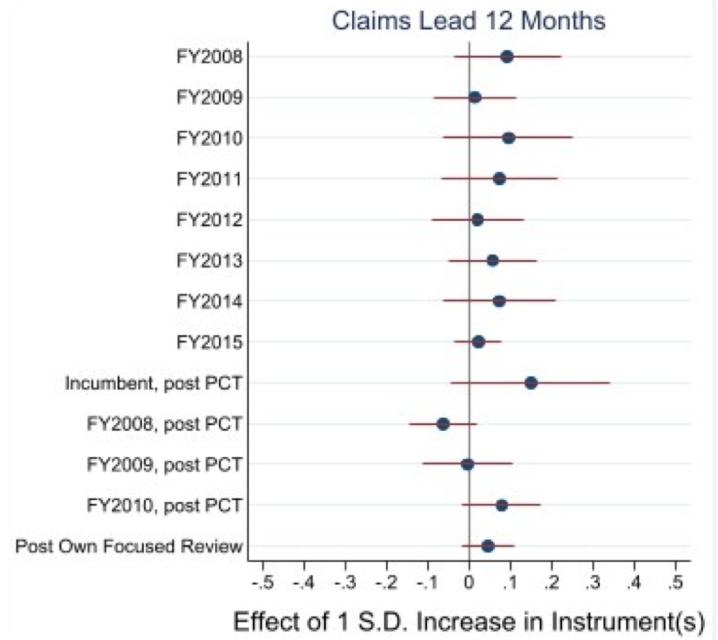
Log Claims Regressed on Instruments

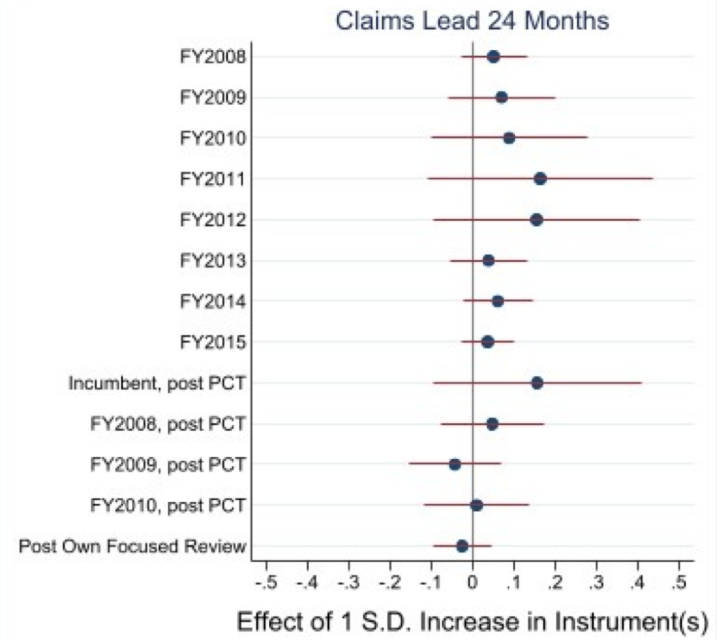












IV Effects on Earnings

2SLS effects on employment and earnings

$$Y_{ijdt} = \alpha + \beta' D_{ijdt} + \vartheta' X_{ijdt} + \eta_t + \theta_d + \epsilon_{ijdt}$$

- $Y_{ijdt} =$ labor supply outcome (earnings, employment)
- $D_{ijdt} = 1$ if case is allowed at appellate level
- Controls as above
- Policy reform instruments

IV Estimates of Effect of SSDI Allowance on Earnings, 4 years after decision

VARIABLES	Earnings	Earnings > $0	Earnings > $1,000	Earnings > SGA	Number of employers	SE Income	SE income > $0
Appellate Allowance	-4,140.455***	-0.221***	-0.220***	-0.141***	-0.430***	-207.379***	-0.017***
	(259.106)	(0.013)	(0.012)	(0.009)	(0.028)	(60.067)	(0.004)
	-15.980	-17.407	-17.843	-16.338	-15.274	-3.452	-4.244
Observations	4,128,896	4,128,896	4,128,896	4,128,896	4,128,896	4,128,896	4,128,896
R-squared	0.093	0.126	0.124	0.085	0.110	0.005	0.013
MeanY	$2,871	0.206	0.178	0.0860	0.380	$212	0.0250

All earnings are annual and in 2014 dollars.

IV Estimates, robust to alternative specifications

IV Estimates of Allowance on Earnings, Alternative Specifications

	(1)	BASE MODEL (2)	(3)
Appellate Allowance	-$4,259	-$4,140	-$4,149
	(251)	(259)	(259)
Time fixed effects	year	yr-month	yr-month
Office-Month Env Var	no	no	yes
Observations	4,128,896	4,128,896	4,128,896
R-squared	0.093	0.093	0.093
MeanY	$2,871	$2,871	$2,871

All earnings are annual and in 2014 dollars.

Magnitudes, Interpretation and Implications for Trends in Work among Persons with Disabilities

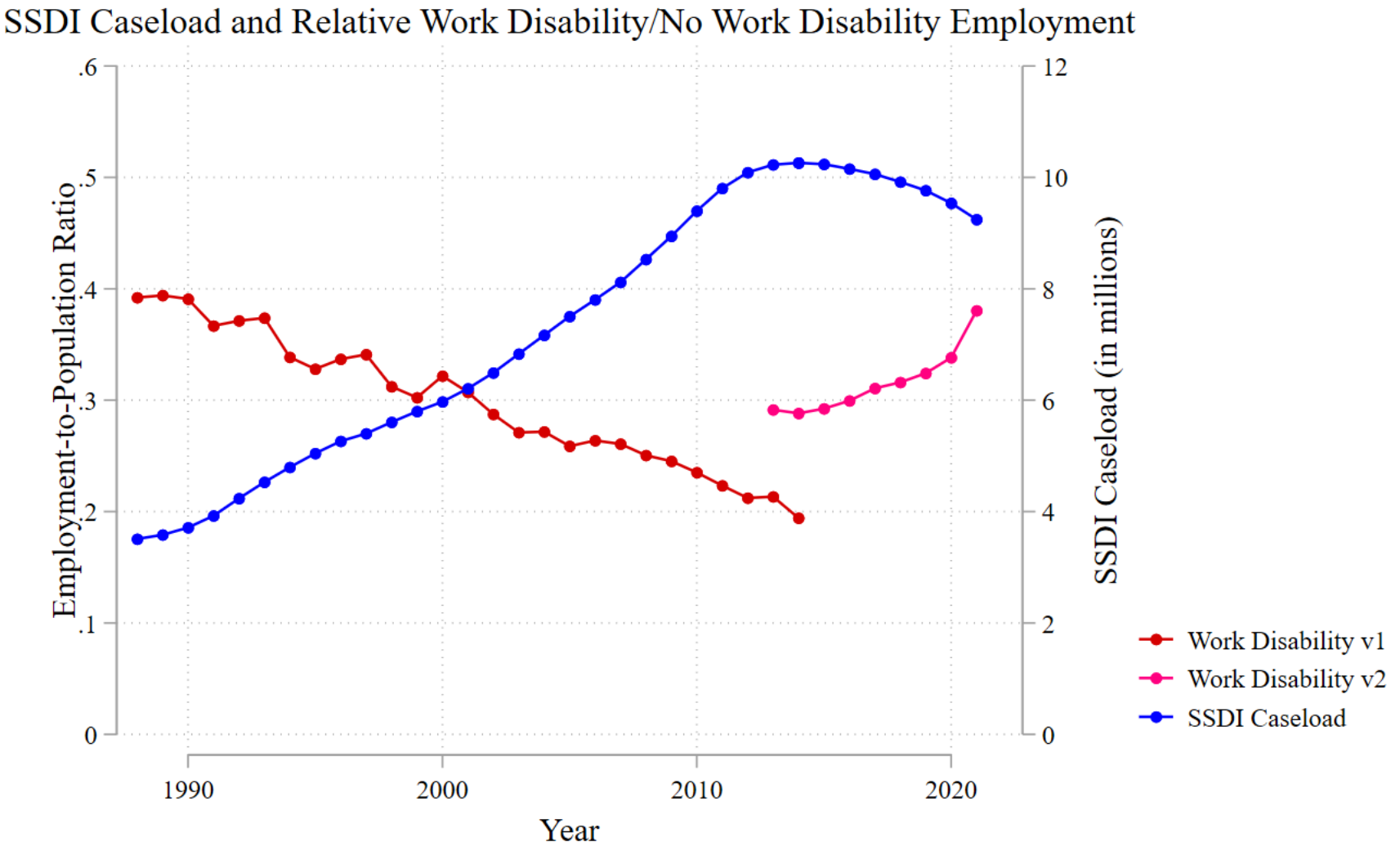
Magnitudes, and Interpretation

- French and Song (2014) use random assignment of judges and SSA data on claims assigned to ALJs in 1990-1999 to estimate causal effects of SSDI allowance on labor supply three years after the decision
- Our results are **12-15 percent smaller** than French and Song (depending on the outcome)

How may our LATE effects from these policy reforms compare to prior work?

1. Reforms → less generous program → smaller treatment effect (marginal denied claimant has lower work capacity)
2. Reforms → improve targeting (?) → larger treatment effect

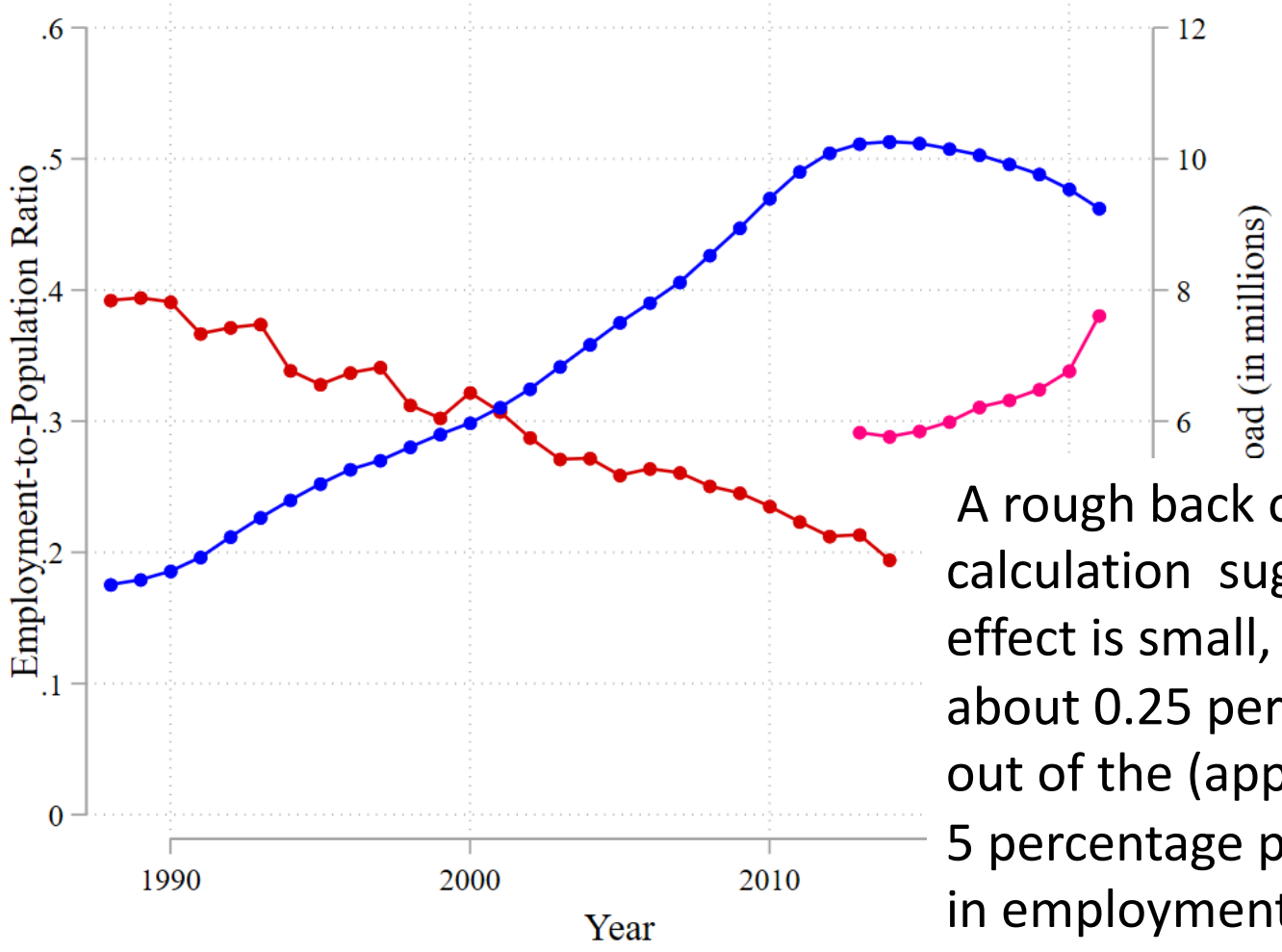
- Our results consistent with (1) though suggestive; we have more work to do here.



Work among people with disabilities increased after the end of the Great Recession after a long period of decline.

What do our estimates imply about how the SSA reforms contribute to this trend break?

SSDI Caseload and Relative Work Disability/No Work Disability Employment



A rough back of envelope calculation suggests the effect is small, explaining about 0.25 percentage points out of the (approximately) 5 percentage point increase in employment among persons with disabilities during our time frame (about 4 percent).

Work among people with disabilities increased after the end of the Great Recession after a long period of decline.

What do our estimates imply about how the SSA reforms contribute to this trend break?

Conclusion

- We document recent reforms to the appellate process in the SSDI program
- These are possibly the most important (and least heralded) SSDI policy reforms of our time
- We show that turnover among judges and the implementation of policy compliant training led to significant declines in the allowance rate, explaining 28-36 percent of the 22 percentage point decline in allowance rates between 2007 and 2015
- Using the policy reforms as instruments, we estimate causal effects of allowance on labor supply outcomes with estimates about 15 percent lower than French and Song (2014)
- In ongoing work, we examine what these estimates say about the nature of the reforms (do they improve targeting?), the role of program generosity, and to what extent they contribute to the recent increases in employment among persons with disabilities

Next steps

- Complete 2SLS analysis: complier analysis
- Use results to simulate the effect of these reforms on labor supply of disabled
- Analyze impact of reforms on retirement of judges (many left the corps before doing PCT)