

# **New Insights into Disability Beneficiaries' Pursuit of Work**

## **Presenters**

**Michael Levere, Denise Hoffman, and Gina Livermore  
Mathematica Policy Research**

## **Discussant**

**Paul O'Leary  
Social Security Administration**

**Center for Studying Disability Policy Forum**

**October 17, 2018**



# Welcome

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**Moderator**  
**Purvi Sevak**  
**Mathematica**

# Today's Speakers

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**Michael Levere**  
Mathematica



**Denise Hoffman**  
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**Gina Livermore**  
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Social Security  
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# **Work Activity of Social Security Disability Insurance (DI) Beneficiaries In and Around the Great Recession**

**Michael Levere, Jody Schimmel Hyde, and Su Liu  
Mathematica Policy Research**

**Francoise Becker  
Social Security Administration**

*Presented at the CSDP Forum on New Insights into  
Disability Beneficiaries' Pursuit of Work*

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# Questions we answer

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- To what extent are DI benefits suspended or terminated because of work (STW)?
  - Goal: Develop a compendium of [statistics](#)
  - Data also have same statistics for Supplemental Security Income (SSI) recipients, combined DI/SSI
- How did the Great Recession affect DI beneficiaries' suspensions and terminations for work?

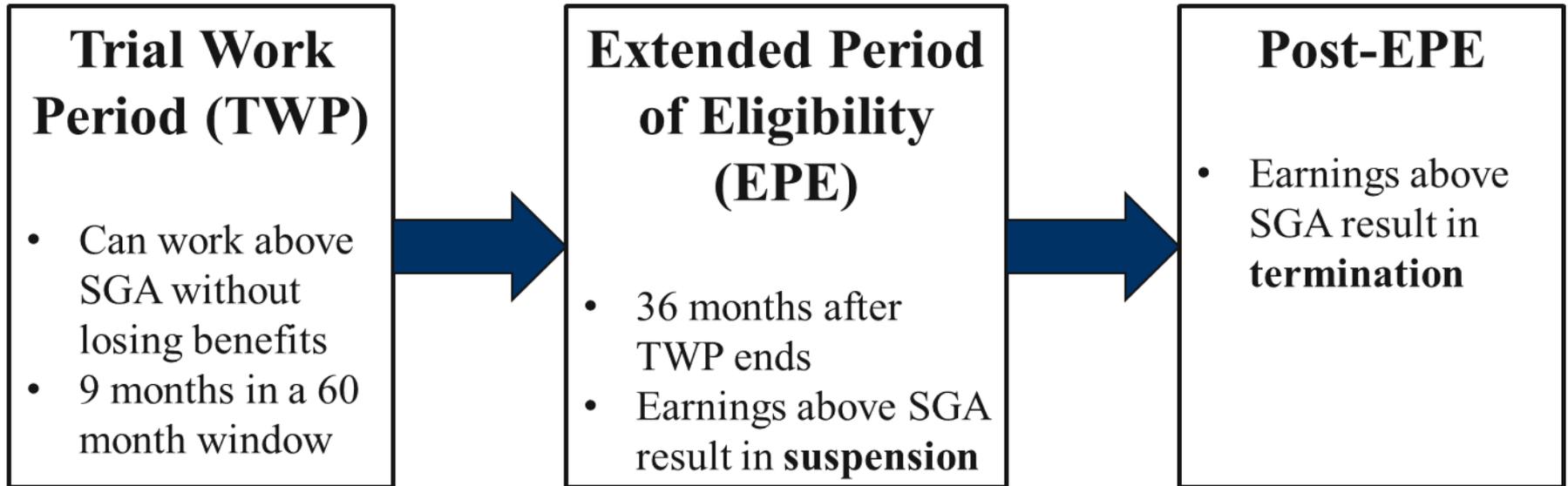
# Eligibility for DI benefits

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- **Eligibility for DI based on:**
  - Significant medical impairment expected to last for 12 months or result in death
  - Impairment leads to inability to engage in substantial gainful activity (SGA)
- **DI beneficiaries may test ability to engage in SGA before losing benefits**

# Suspension and termination rules

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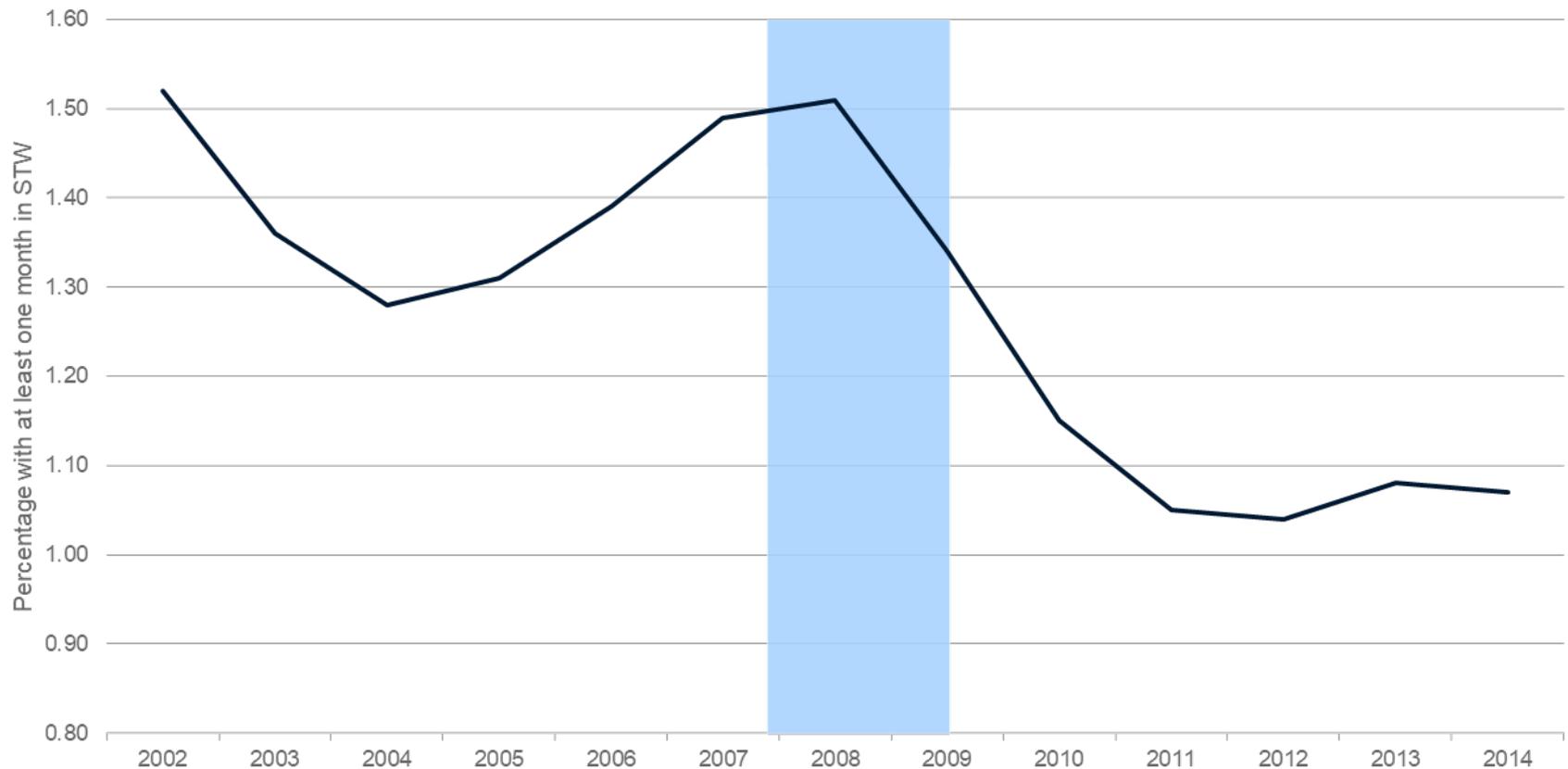
**Suspension or termination results in the complete loss of monthly cash benefits (i.e. the so-called “cash cliff”)**

# Measuring suspensions and terminations for work

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- **Social Security Administration's (SSA) Disability Analysis File (DAF)**
- **Administrative data on all adult DI and SSI beneficiaries from 2002 onward**
- **Monthly indicator for suspension or termination of DI benefits due to work**
  - We combine suspense and termination
  - Data available for both separately

# Percent in STW on DI



Source: Authors' calculations using DAF15.

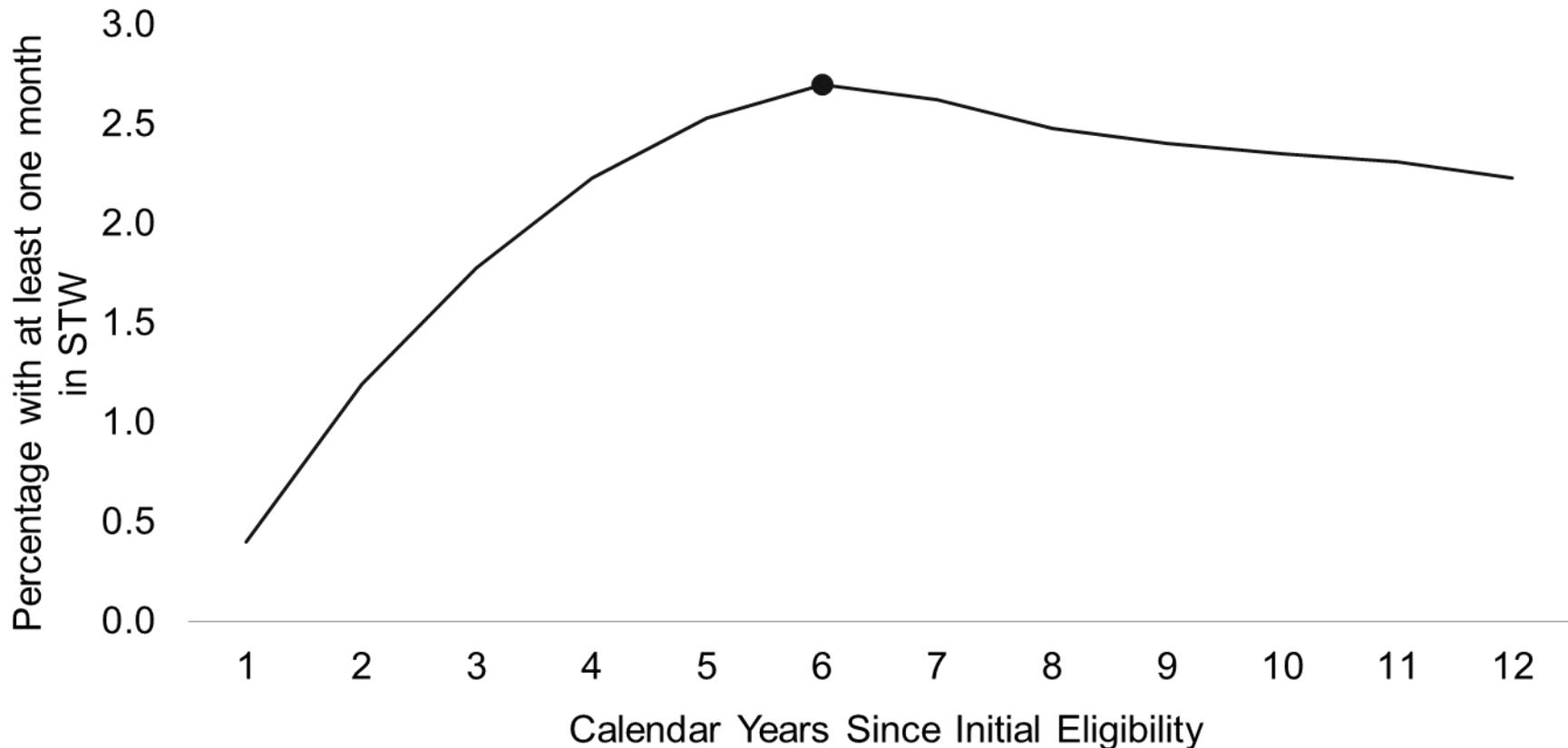
Note: Reports the number of people between 18 and Full Retirement Age (FRA) who have at least one month of STW divided by the number of people between 18 and (FRA) who receive DI benefits in the year, expressed as a percentage.

# Cohort Analysis

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- **Track patterns over time for cohorts awarded in a given year**
  - i.e., among those awarded in 2002, share in STW in 2003, 2004, 2005, etc.
  - Pre-recession cohorts not subject to changing beneficiary characteristics due to recession
- **Recession hits cohorts at different relative points since initial award**

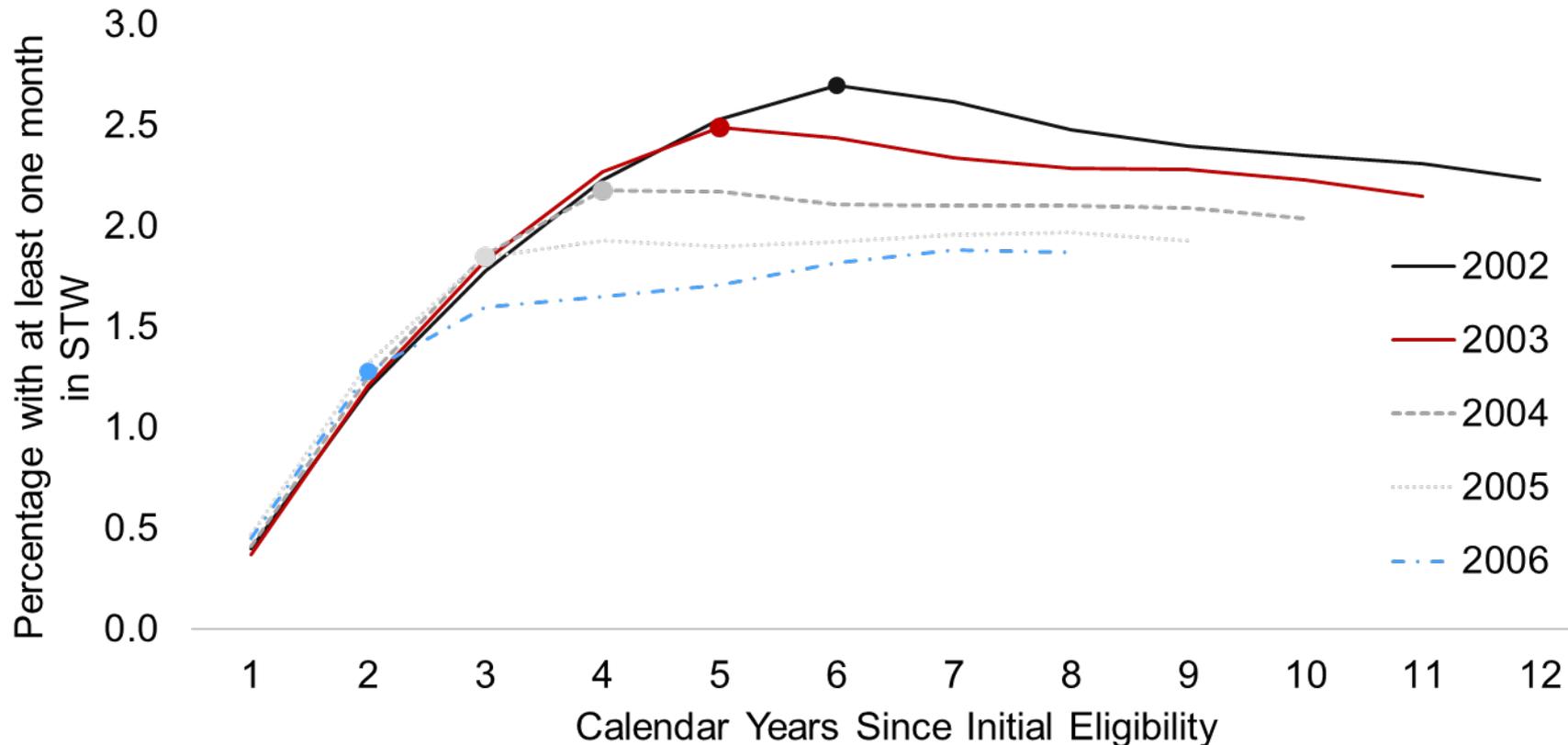
# Percent in STW, 2002 Award Cohort



Source: Authors' calculations using DAF15.

Note: Circles indicate the beginning of the Great Recession (2008). Reports the percentage of people who received a DI award in 2002 who have at least one month in STW in each successive year.

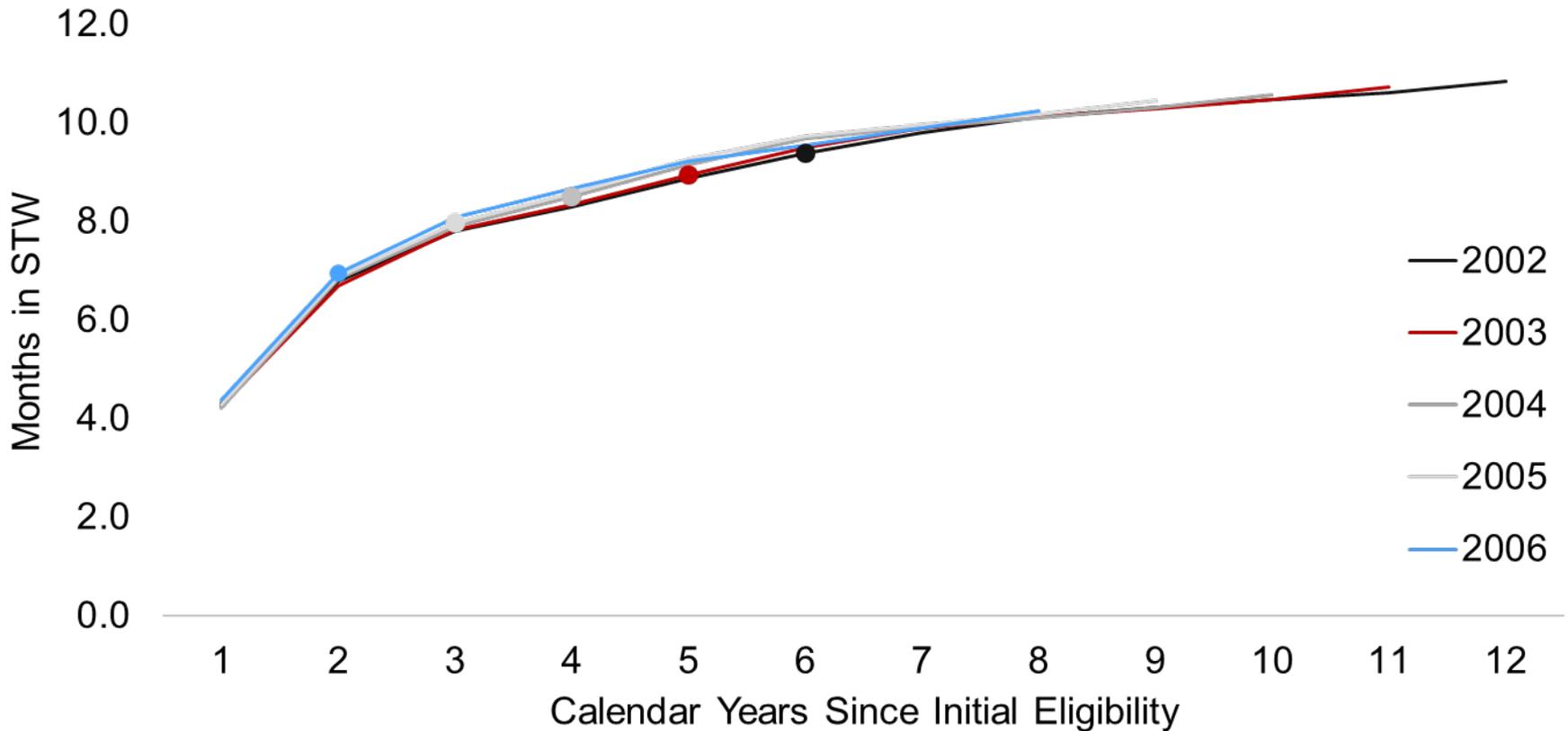
# Percent in STW by Award Cohort



Source: Authors' calculations using DAF15.

Note: Circles indicate the beginning of the Great Recession (2008). Reports the percentage of people who received a DI award in a given year who have at least one month in STW in each successive year.

# Average Months in STW, by Cohort



Source: Authors' calculations using DAF15.

Note: Circles indicate the beginning of the Great Recession (2008). Reports the average months in STW among those who have at least one month in STW in each year.

# Conclusion

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- **Create compendium of statistics about beneficiary returns to work**
- **Show effects of Great Recession**
- **Workers with disabilities historically have hard time finding work during recessions (Kaye 2010; Livermore and Honeycutt 2015)**

# Contact Information

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# **Work-Related Overpayments to DI Beneficiaries: Prevalence and Work Outcomes**

**Denise Hoffman  
Mathematica Policy Research**

*Presented at the CSDP Forum on New Insights into  
Disability Beneficiaries' Pursuit of Work*

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# Work Affects DI Benefits

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- **Eligibility for DI benefits is contingent on inability to engage in SGA.**
- **Beneficiaries have 12 months to test work before going off the “benefit cliff.”**
  - **Nine-month trial work period**
  - **Three-month grace period**
- **Afterward, SSA suspends or terminates benefits for work above the SGA level.**

# Working While Receiving DI: What Should Happen

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- **Beneficiaries notify SSA immediately if they start work or increase earnings.**
- **SSA processes that information within three months and, if SGA continues, suspends benefits.**

# What Often Happens: Overpayments

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- **Beneficiaries do not report earnings to SSA timely (65 percent of overpayment dollars).**
- **SSA does not process earnings information timely (35 percent of overpayment dollars).**
- **Either scenario might lead to SSA overpaying the beneficiary.**

Source: SSA Office of the Inspector General 2018

# Definition of Overpayment

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- **SSA pays a beneficiary more than the correct payment due.**
- **In most cases, beneficiaries are required to repay the debt.**

# SSA Does Not Publish Beneficiary-Level Statistics on Overpayments

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- **SSA monitors overpayments for accounting purposes.**
- **Researchers have tried to generate statistics on DI work overpayments.**
  - **Generally, case reviews of fewer than 1,000 beneficiaries**

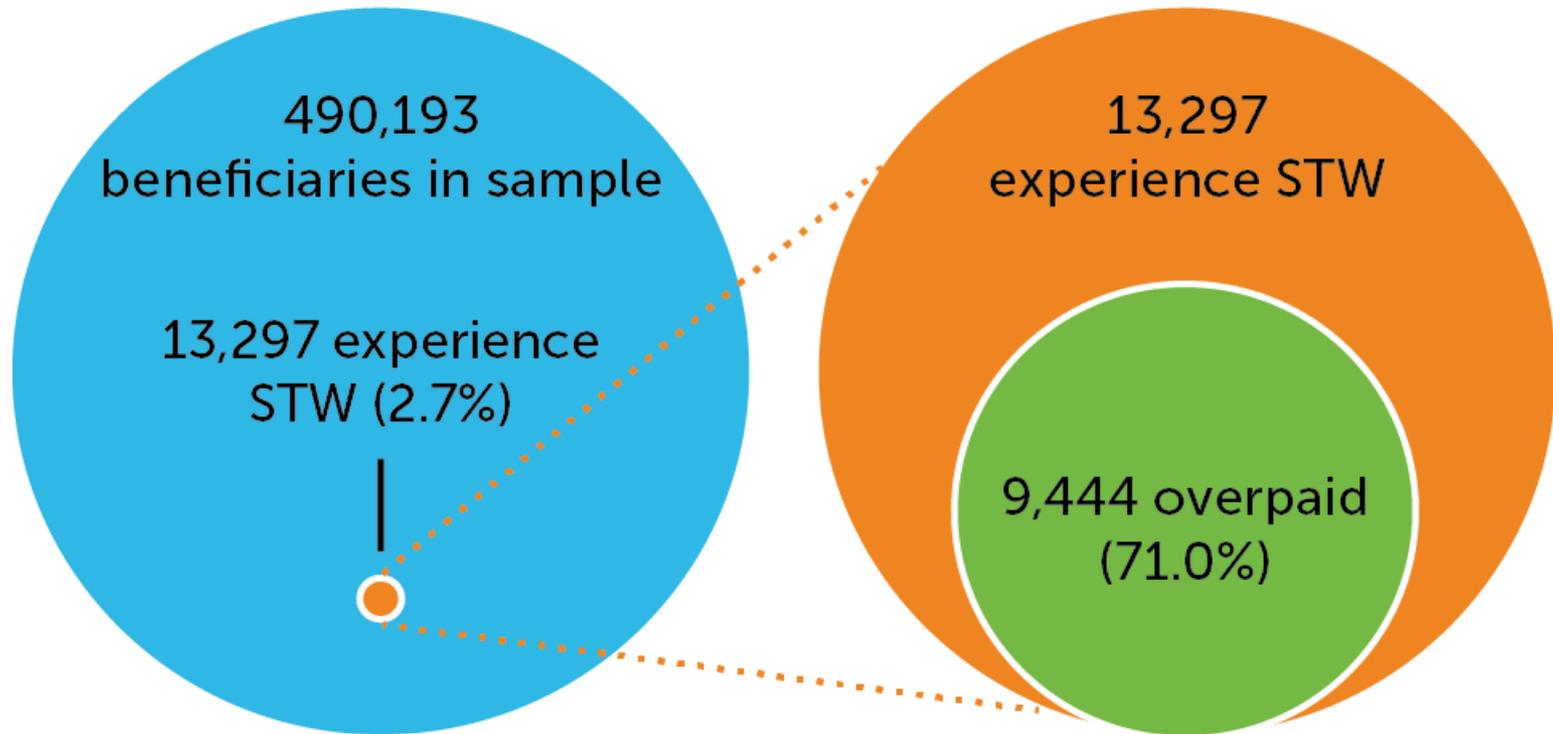
# Our Research Generates Statistics on Work-Related Overpayments

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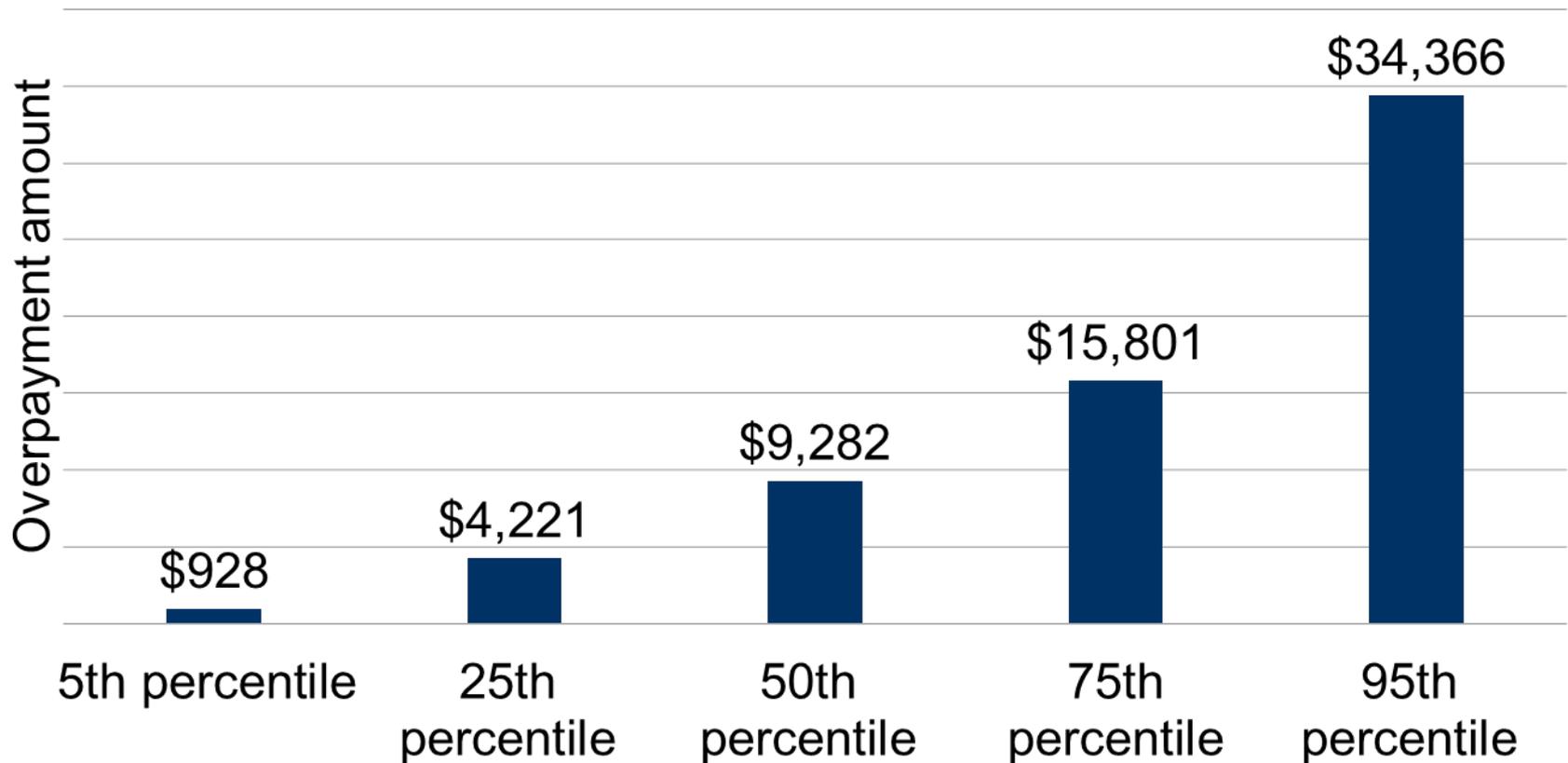
- Randomly selected a representative sample of nearly 500,000 DI beneficiaries
- Used SSA administrative data to identify overpayments in 2010 to 2012
  - Identify months in which benefits were paid but recent SSA data indicates STW
  - SSA conducted case reviews to vet the algorithm

# Overpayments Are Prevalent Among DI Beneficiaries STW in 2010–2012

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# The Median Overpayment Was for More Than \$9,000



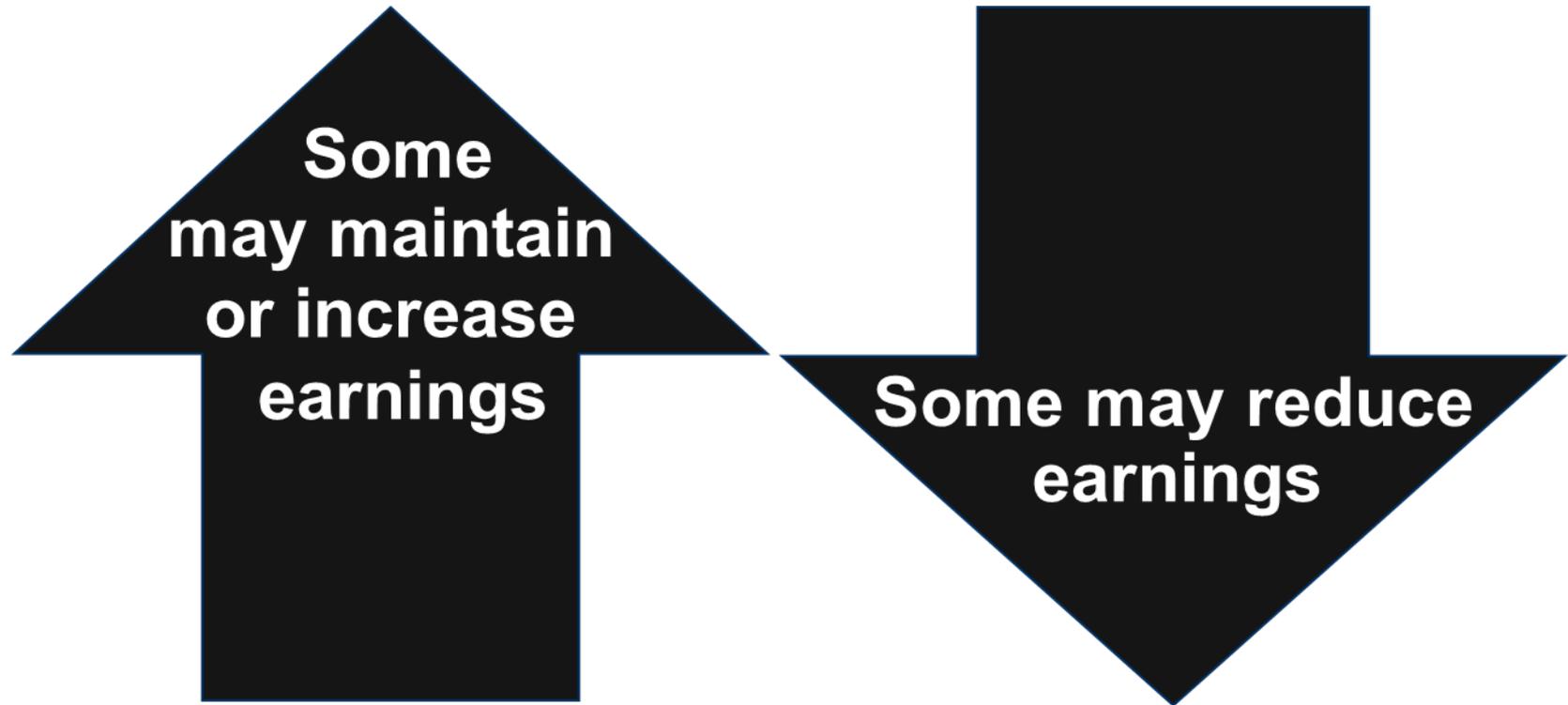
# Overpayments Do Not Occur Uniformly Across Working Beneficiaries

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- **The following characteristics were significant predictors of overpayment among DI beneficiaries who experience STW:**
  - Black, Hispanic
  - Less than a high school education
  - DI benefit amount of less than \$1,000
  - DI-only—not concurrently entitled to Supplemental Security income (SSI)

# There Is No Consensus on How Overpayments Affect Earnings

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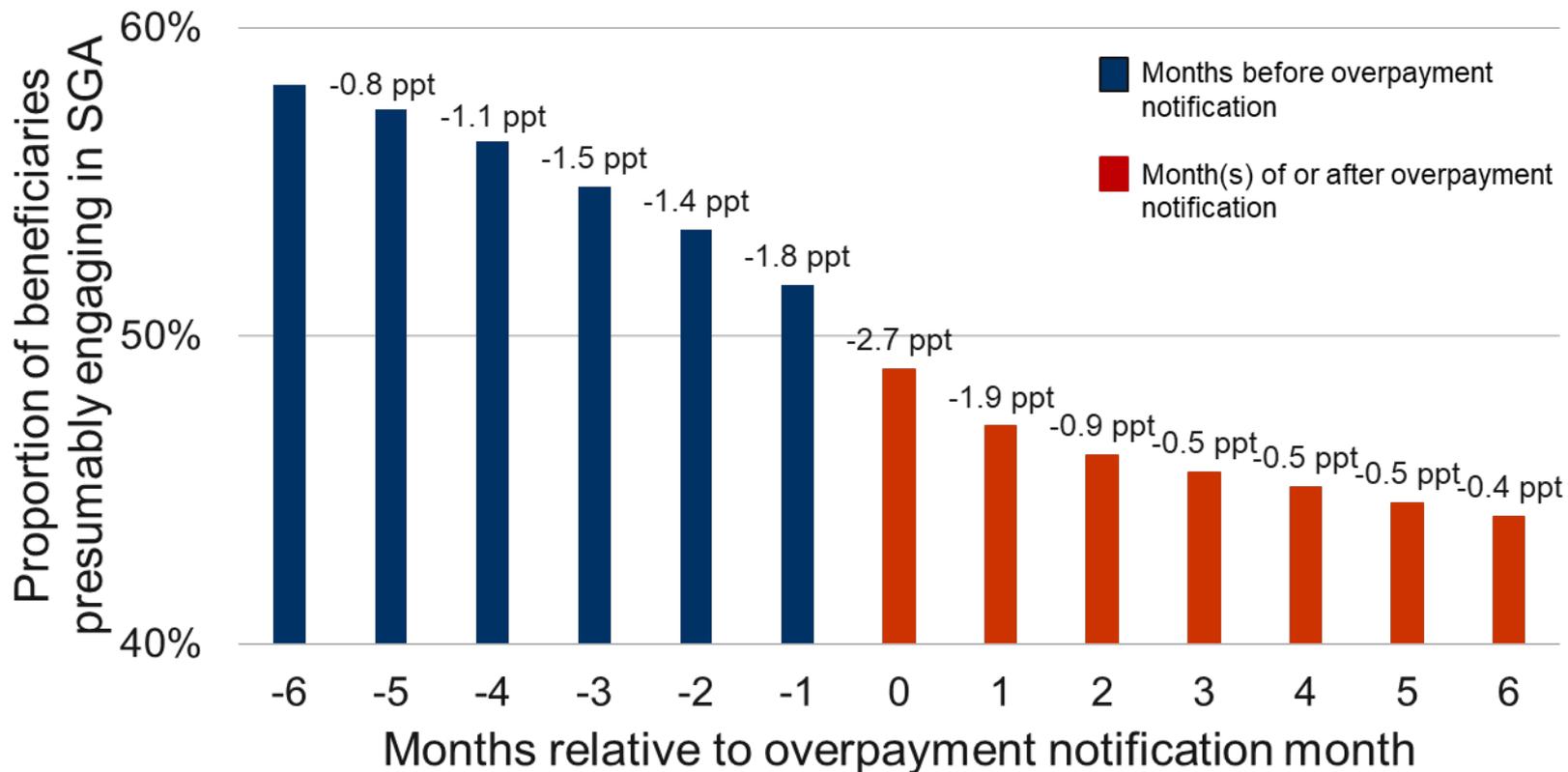


# We Are Undertaking an Analysis to Quantify Overpayment Effects

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- **Work-related overpayments SSA identified between 2007 and 2014**
- **Analysis of within-person changes before and after overpayment notification**
- **We plan to estimate the causal effect of overpayments on SGA-level earnings**

# Association Between Overpayment Notification and SGA Decline



# Discussion

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- **Overpayments are standard for the majority of beneficiaries who engage in SGA, and for many, the overpayments are sizable.**
- **Preventing overpayments is important for beneficiary well-being, program integrity, and, potentially, for ongoing SGA.**
- **SSA is addressing some sources of work-related overpayments.**

# Contact Information

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# **Great Expectations but Poorer Outcomes: Declining Employment Among a Growing Group of Work- Oriented Beneficiaries 2005–2015**

**Gina Livermore, Purvi Sevak, and Marisa Shenk  
Mathematica Policy Research**

***Presented at the CSDP Forum on New Insights into  
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# Study Purpose

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- **Examine how employment experiences of working-age SSI and DI beneficiaries changed from 2005 to 2015**
- **A decade with many noteworthy changes**
  - Large growth in the federal disability programs
  - Changing composition of people on the disability rolls
  - Numerous policy, labor market, and other changes affecting the employment of people with disabilities

# Factors Potentially Affecting Beneficiary Employment 2005–2015

## Hypothesized effect on employment

### Positive

- Ticket to Work Act
- Federal grants to states for disability initiatives
- Centers for Medicare & Medicaid Services guidance on use of waivers for employment supports
- Employment First
- 7% target for federal contractors
- Affordable Care Act
- Higher average levels of education
- Medical and technological advances
- Attitudinal changes around work and disability

### Unknown

- Changes in SSA disability determination or other processes

### Negative

- Aging of the population
- Recession of 2007–2009
- Decline in work opportunities that match skills and abilities
- Rising health care costs and decline in employer-sponsored health insurance

# Study Methods and Data

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- **Research questions**
  - How did the characteristics and health of beneficiaries change from 2005 to 2015?
  - How did beneficiary work expectations change?
  - Among those with work expectations, how did employment-related experiences change?
    - Service use, unmet service needs, **employment**, job characteristics, barriers to work, and awareness of SSA work supports
  - Are the differences observed significant after controlling for changes in personal characteristics and health?

# Study Methods and Data (2)

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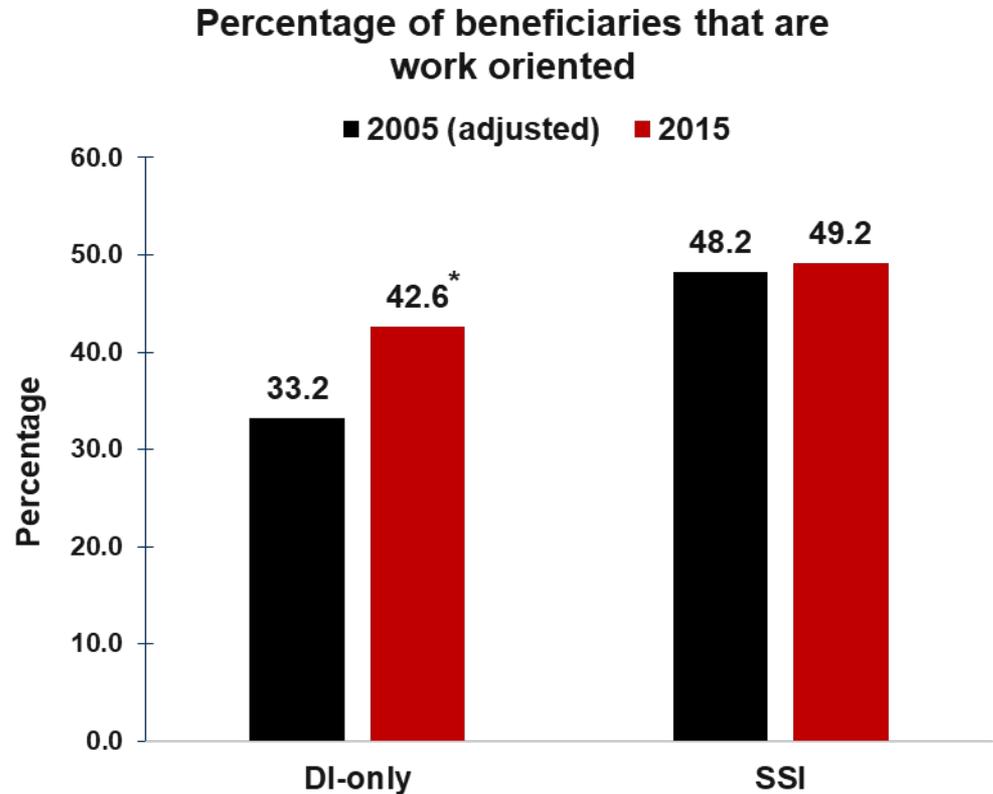
- **Data from the 2005 and 2015 National Beneficiary Surveys**
  - Nationally representative survey of working-age beneficiaries
  - N = 4,864 (2005) and 4,062 (2015)
- **Unadjusted estimates of characteristics and employment-related experiences**
- **Adjusted estimates of selected employment-related outcomes**
  - Regression-based adjustments (overall and by program) that hold 2005 characteristics constant at 2015 levels
    - Age, race, sex, education, marital status, time on the disability rolls, general mental and physical health, and activity limitations
- **Findings represent snapshots at particular points in time**

# Changes in Beneficiary Characteristics

	Increased	No change	Decreased
<b>Demo-graphic</b>	<ul style="list-style-type: none"> <li>• Age</li> <li>• Education</li> </ul>	<ul style="list-style-type: none"> <li>• Race</li> <li>• Sex</li> <li>• Living arrangements</li> </ul>	<ul style="list-style-type: none"> <li>• Marriage</li> <li>• Having children under age 18</li> </ul>
<b>Health</b>	<ul style="list-style-type: none"> <li>• Musculoskeletal conditions</li> <li>• Obesity</li> <li>• Difficulty getting around outside the home</li> </ul>	<ul style="list-style-type: none"> <li>• Mental health conditions</li> <li>• General physical and mental health</li> <li>• Difficulty with most activities of daily living</li> </ul>	<ul style="list-style-type: none"> <li>• Childhood disability onset</li> <li>• Sensory and intellectual disabilities</li> <li>• Difficulties shopping for personal items</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>• DI-only</li> <li>• New beneficiaries (1 to 5 years)</li> </ul>		

# Changes in Work Expectations

- **Work-oriented beneficiaries**
  - Personal goals include work
  - See themselves working in the next five years
- **Change from 2005 to 2015**
  - Large increase for DI-only
  - No change for SSI



\* Significantly different from 2005 value at the 0.05 level.

# Changes in the Characteristics of Work-Oriented Beneficiaries

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- **Some changes in the characteristics of work-oriented beneficiaries were more dramatic than for the beneficiary population as a whole:**
  - A larger share was older than age 55.
  - More were in poorer physical health.

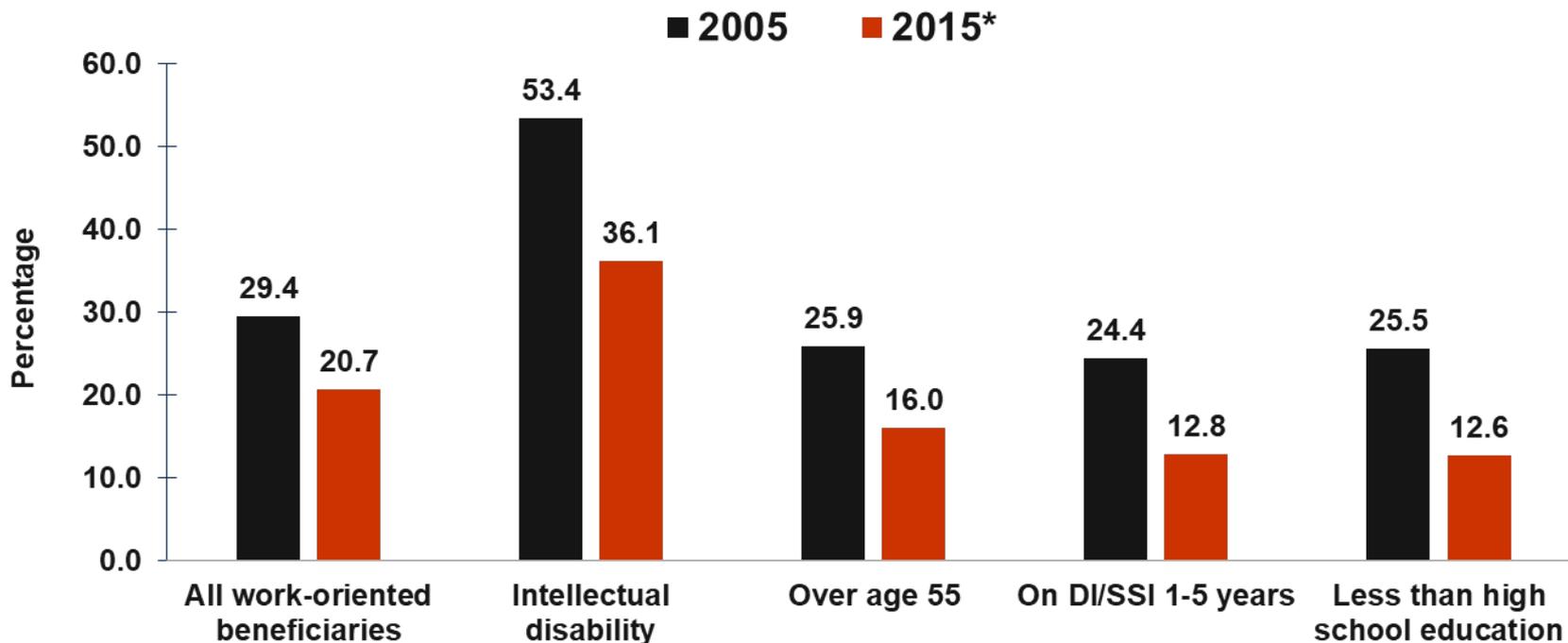
# Changes in Employment Among Work-Oriented Beneficiaries

Employment outcome	Unadjusted 2005	Unadjusted 2015	Adjusted difference (2015–2005)
Work-oriented DI-only beneficiaries (%)			
<b>Ever worked for pay</b>	<b>98.3</b>	<b>94.0</b>	<b>-4.2*</b>
Working at interview	21.7	18.3	-1.5
<b>Worked in year before interview</b>	<b>31.6</b>	<b>22.7</b>	<b>-8.1*</b>
Work-oriented SSI recipients (%)			
<b>Ever worked for pay</b>	<b>87.4</b>	<b>73.8</b>	<b>-15.0*</b>
Working at interview	18.5	14.7	-2.4
<b>Worked in year before interview</b>	<b>27.2</b>	<b>18.5</b>	<b>-8.0*</b>

\* Difference is significant at the 0.05 level.

# Work-Oriented Beneficiary Subgroups With Large Declines in Annual Employment

Percentage who worked in the previous calendar year (unadjusted)



\*All 2015 values are significantly different from the respective 2005 value at the 0.05 level.

# Conclusions

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- **What might explain the findings?**
  - **More DI-only beneficiaries want to work**
  - **Significant declines in annual employment and the likelihood of past work**

# Possible Contributors to More DI-Only Beneficiaries Wanting to Work

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- **Changing attitudes and state and federal initiatives**
  - Changing attitudes about disability
  - Initiatives focused on inclusion and employment of people with disabilities
  - SSA's messaging around employment since the passage of the Ticket to Work Act
    - Greater awareness of key SSA work supports among DI-only beneficiaries (Ticket to Work, benefits counseling)
- **Recession**
  - Might have pushed some people onto the disability rolls prematurely

# Possible Contributors to Employment Declines

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- **Recession**
  - Slow recovery for people with disabilities
  - Dampened ability of young people to obtain early work experience
  - Reduced ability of state and other programs to provide employment services
- **Changing attitudes**
  - Attitudes have changed but work opportunities or employability have not improved
- **Reduced incentives to work**
  - Declining real wages in less-skilled jobs
  - More difficulty finding jobs to match skills and preferences
- **Changing characteristics of work-oriented group**
  - Older and in poorer health

# What Are the Implications For...

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- **Investments by SSA and others to help beneficiaries return to work?**
  - **Greater demand for employment support**
  - **More challenging than in the past for beneficiaries who want to work to obtain and keep jobs**
    - **SSA might need to consider more radical approaches**
  - **Many factors outside of SSA's control affect beneficiary employment**

# Contact

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# Discussant

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# Return-to-Work Expectations for SSA Beneficiaries

**Paul O'Leary**

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Employment Support**

**October 2018**

Disclaimer: The findings and conclusions presented here do not necessarily represent the views of the Social Security Administration.

# Where We Are

- The common theme of today's papers is how the environment affects beneficiary employment:
  - The potential disincentive of overpayments
  - The impact of the great recession
  - The effect of program, demographic, and social changes over time
- What we see generally is that, while various factors do sometimes matter in changing work behavior, most of those changes are relatively small
- Game-changing programs such as Ticket to Work have not led to large scale changes in work

# Suspense and Termination Have Remained Relatively Constant

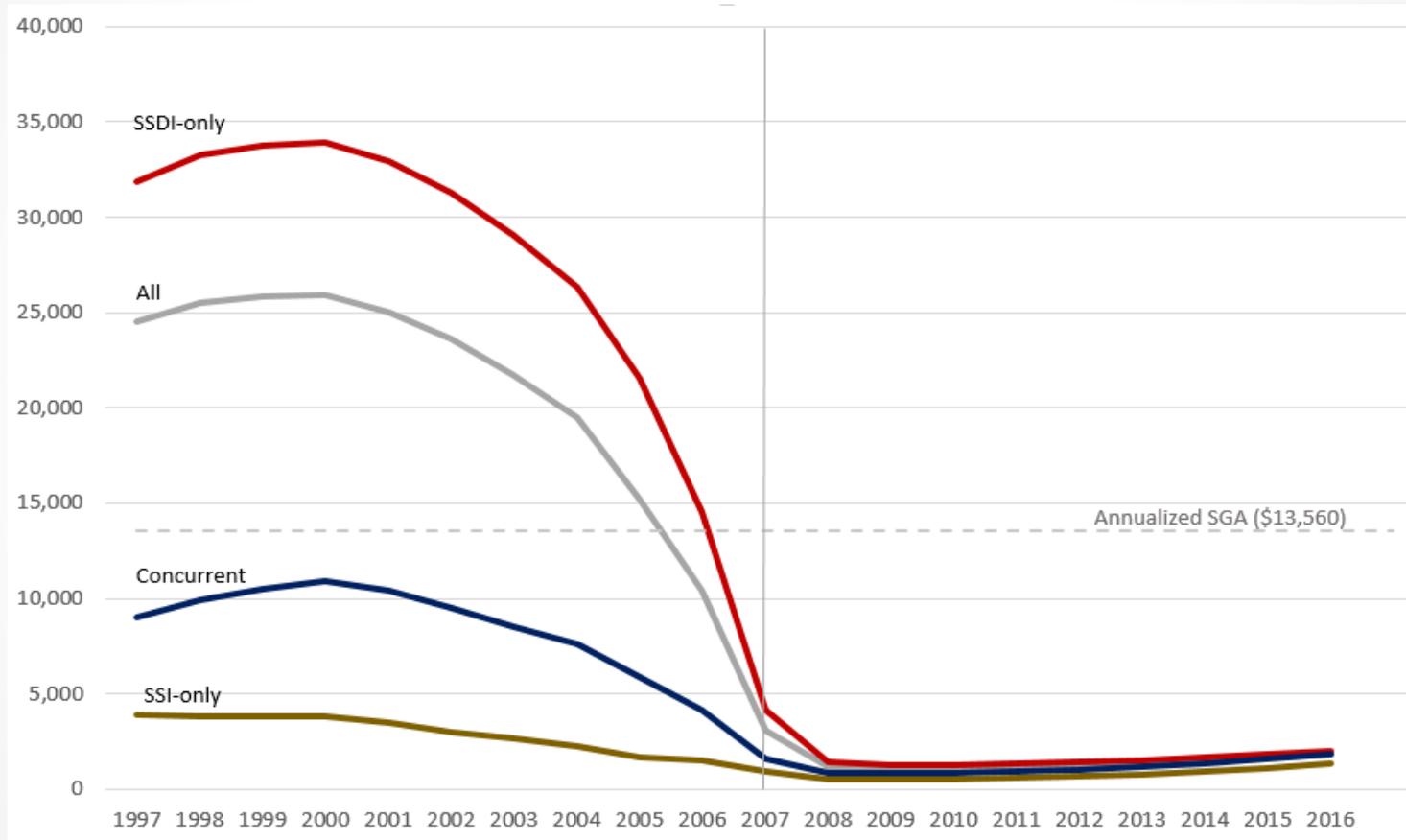
Year	Number of disabled-worker beneficiaries	Suspended because of SGA		Terminated because of SGA	
		Number	Percent	Number	Percent
2001	5,268,039	31,437	0.60	29,000	0.55
2002	5,539,597	29,501	0.53	29,165	0.53
2003	5,868,541	25,780	0.44	27,926	0.48
2004	6,197,385	23,709	0.38	28,613	0.46
2005	6,519,001	27,713	0.43	36,263	0.56
2006	6,806,918	33,613	0.49	36,242	0.53
2007	7,098,723	37,701	0.53	33,381	0.47
2008	7,426,691	38,209	0.51	37,711	0.51
2009	7,788,013	35,244	0.45	32,445	0.42
2010	8,203,951	28,540	0.35	40,959	0.50
2011	8,575,544	27,962	0.33	39,813	0.46
2012	8,826,591	30,979	0.35	38,228	0.43
2013	8,940,950	34,497	0.39	31,591	0.35
2014	8,954,518	36,916	0.41	35,846	0.40
2015	8,909,430	39,103	0.44	39,652	0.45
2016	8,808,736	44,998	0.51	47,887	0.54

SOURCES: SSA, *Annual Statistical Report on the Social Security Disability Insurance Program, 2001–2016*

# What should we expect?

- Have we not hit on the right mix of services?
- Have we missed the incentives that matter?
- Are we too late once someone is on benefits?
  - New large-scale efforts seem to have turned to early intervention
- Is our assumption that a larger proportion of beneficiaries can work their way off benefits simply wrong?
  - Is 0.5% simply a hard boundary we are unlikely to breach based on severity of SSA disability beneficiaries?

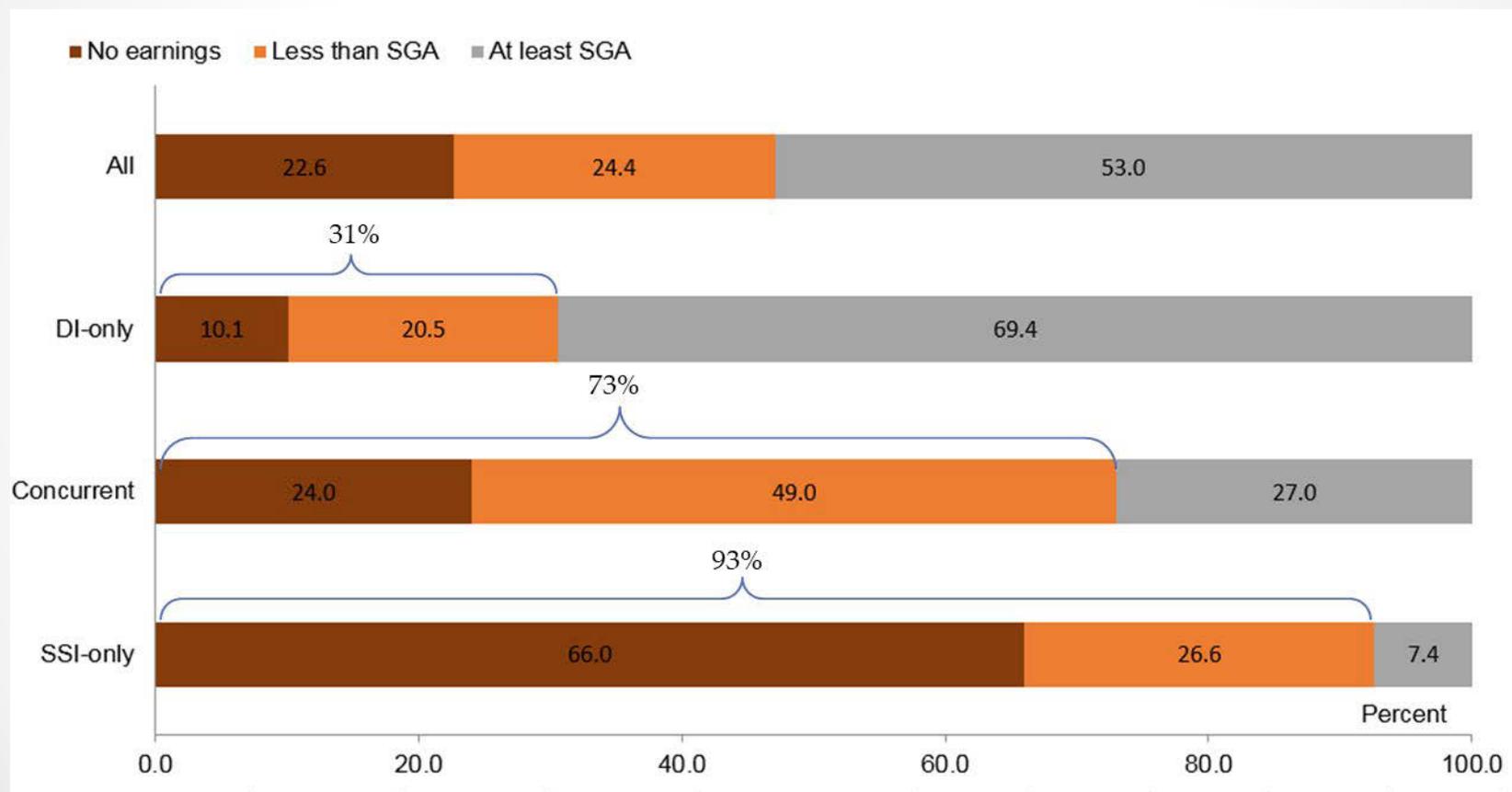
# Earnings Patterns Before and After Award by Title, 2007 Awards



SOURCES: DAF-MEF 2016 (all values adjusted to 2016 dollars).

Note: Average earnings include those with \$0 earnings (those under age 16, who had reached FRA, died, or were no longer a beneficiary for a reason other than work are excluded from calculations).

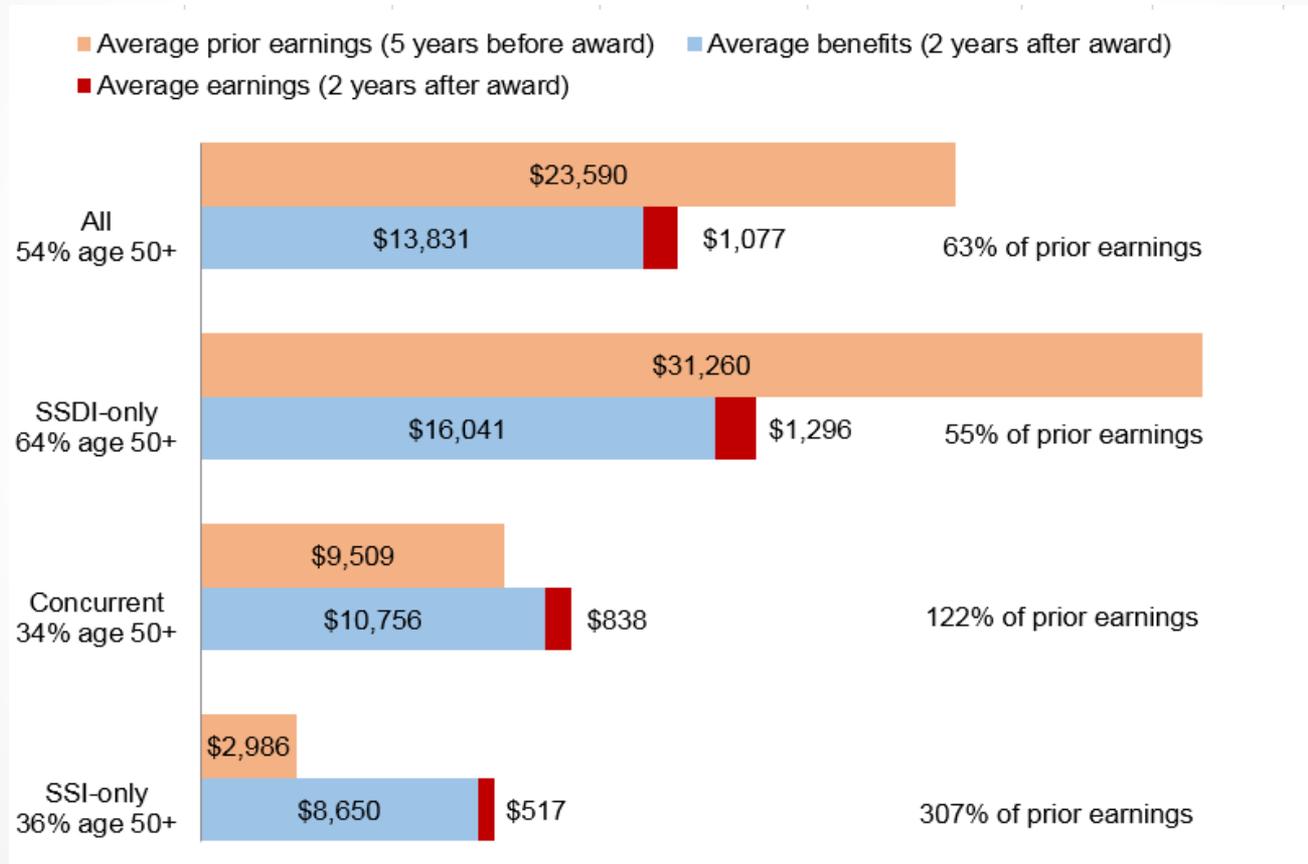
# Earnings Relative to Annualized Substantial Gainful Activity (SGA) in 2002, Five Years Before Award in 2007



Source: 2016 Disability Analysis File (DAF16).

Notes: All dollar values adjusted to 2016 dollars using the CPI-W.

# Average Benefit Amount and Earnings Two Years After Award Compared to Average Earnings Five Years Before Award by Program, 2007 Awards



Source: 2016 Disability Analysis File (DAF16).

Notes: All dollar values adjusted to 2016 dollars using the CPI-W. Average earnings include those with no earnings.

# What can we learn from denied applicants?

- **John Bound (1989):** set upper bound at 40 percent based on work activity of denied applicants. Findings:
  - Awardees assumed to be lower because assumed to be more disabled
  - Denied applicants worked less than non disabled and at lower earnings
- **Maestas, Mullen, and Strand:** used variation in examiners for applicants at the margin (25% of claims). Findings:
  - Benefits decreased employment (\$1,000/yr) by **28 percentage points** after 2 years
  - Benefits decreased **SGA** level employment by **18 percentage points** after 2 years, but this dropped to **11 percentage points** after 4 years ( $11\% \times 25\% = 2.8\%$ )
  - Marginally denied applicants had low earnings of about **\$8,000/year** 2 years after the *decision*—a *value less than the annualized SGA*.
- **About 30% die or retire within five years of starting benefits**
  - Unlikely to work their way off of benefits

Implied overall upper bound on SGA work			
Proportion of beneficiaries	Upper bound SGA work	Total	Overall upper bound on SGA work??
25%	11.0%	2.8%	5.2%
45%	5.5%	2.5%	
30%	0.0%	0.0%	

# What level of work actually leads to benefit exit?

Annual earnings by beneficiaries in 2006 who were subsequently in full year suspense or termination due to work (2007-2016)

In suspense or termination for all months of:	Number	Average earnings in that year (\$)	Earnings as a multiple of SGA	Earnings above BFW* in that year	Percent of cohort
2007	37,006	33,542.99	3.11	19,333.12	0.3%
2011	93,346	32,770.79	2.73	17,932.07	0.8%
2016	121,324	33,879.32	2.50	19,233.93	1.0%

Source: Authors' calculations using DAF16 data, including earnings data from the Master Earnings File.

\*BFW is benefits foregone for work—the amount of cash benefits given up because of the suspension/termination for work.

† This represents the annual benefit amount the suspended beneficiary gave up because of their work activity.

# Earnings Quantiles for Those in Full Year Suspense or Termination

Annual earnings by SSI and SSDI beneficiaries in 2006 who were subsequently in full year suspense or termination due to work (2007)

Earnings quantiles in 2007 and earnings quantiles relative to SGA*		
LEVEL	Earnings (\$)	Earnings as a multiple of SGA
95%	67,402	6.2
90%	53,394	4.9
75% Q3	37,621	3.5
50% MEDIAN	25,498	2.4
25% Q1	17,455	1.6
10%	12,513	1.2
5%	6,405	0.6
1%	0	0
0% MIN	0	0

Source: DAF16 and DAF-MEF 2016.

\* The annualized SGA in 2007 was \$10,800.

# Summary

- Despite numerous initiatives over the last 20 years, the proportion of beneficiaries who leave benefits for work seems stuck at about 0.5%
- New services and new incentives have not had much impact
- There seems to be some possibility of additional exits (maybe as high as 5%)
- Simply getting beneficiaries to SGA seems insufficient under current program rules.

Suggests (at least) two implications:

- We will not see a large change unless a new program can substantially increase earnings, OR
- Program rules would need to change to make exits with lower levels of earnings more attractive

# Audience Q&A

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