



# Welcome

- Thank you for joining our webcast, “Disability and Employment: Research, Policy, & Practice.”
- If you are experiencing technical difficulties, please refer to tips below (on web page) or call 603-228-2085 x52.
- If you have content questions, please use the live chat feature.
- We will begin promptly at 2:00pm Eastern.





# Disability and Employment: Research, Policy, & Practice

University of New Hampshire

Webcast

April 28, 2015





# Welcome

- Sponsored by: Rehabilitation Research and Training Center on Employment Policy and Measurement (EPM-RRTC) at UNH.
- Funded by the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR).
- Moderator: Debra Brucker, Ph.D.
- Speaker 1: Andrew J. Houtenville, Ph.D.
- Speaker 2: Vidya Sundar, Ph.D., OTR





# EPM-RRTC

Presented by the Rehabilitation Research and Training Center on Employment Policy and Measurement (EPM-RRTC), a five-year, \$4.25 million project funded by the U.S. Department of Education, National Institute for Disability, Independent Living and Rehabilitation Research (NIDILRR), under grant H133B100030.



Burton Blatt Institute  
SYRACUSE UNIVERSITY



Center for Studying  
DISABILITY POLICY

Mathematica Policy Research, Inc.



# Motivation for the Center

- Disparities: Despite advances in programs, policies, and technology, there are persistent and far-reaching employment gaps between people with and without disabilities!
- Adverse Program Interactions: Disability policy is spread across multiple agencies and jurisdictions. There is a concern that the lack of a coordinated policies may mean they have conflicting goals.
- Measurement: Current measures and statistics relating to employment outcomes, accommodations, program participation, and services do not provide sufficient detail.



# Resources

<http://www.researchondisability.org/epm-rrtc>

News articles

Peer reviewed publications

Webinars

Presentations

Reports



*Continued*



# Resources

Examples of news articles:

Kessler/UNH Monthly National Trends in Disability Employment

national Trends In Disability Employment:  
Comparison of People With and Without Disabilities  
(October 2013 and October 2014)



OCTOBER 2014	Labor Force Participation Rate		Employment-Population Ratio		Percent Looking	
	Oct '13	Oct '14	Oct '13	Oct '14	Oct '13	Oct '14
		31.3	30.9	26.9	27.1	4.4
	% change ↓ 1.3		% change ↑ 0.7		% change ↓ 13.6	
	75.9	76.5	70.7	72.4	5.2	4.1
	% change ↑ 0.8		% change ↑ 2.4		% change ↓ 20.8	

Source: Kessler Foundation/University of New Hampshire Institute on Disability

\* PWD – People with disabilities; PWOD – People without disabilities



Continued



# Resources

Examples of peer reviewed publications:

*IZA Journal of Labor Policy*, 2014, 3:15  
(<http://www.izajolp.com/series/SSDB>)

The relationship between timely delivery of vocational rehabilitation services and subsequent federal disability benefit application and receipt. (Hyde, Honeycutt & Stapleton)

Finding alternatives to disability benefit receipt.  
(Livermore, Wittenburg, & Neumark)

*Continued*







# Resources

Examples of :

- Webinars: Annual Research-to-Policy Roundtable  
<http://www.disabilitycompendium.org/event>
- Presentations: Living on the edge: Estimating the potential impact of reductions in Social Security Disability Insurance and Supplemental Security Income benefits on beneficiaries (Brucker & Houtenville)
- Reports: Creating change with incremental steps: Enhancing opportunities for early work experience (Morris & Goodman)





# Today's focus

- The Distribution of the Returns to Education for People with Early Onset Disabilities

- Presented by: [Andrew J. Houtenville, Ph.D.](#)



- Design of the National Employment Survey on the Status of Americans with Disabilities for the Kessler Foundation

- Presented by: [Vidya Sundar, Ph.D.](#)





## Some Logistics about Q&A

- Asking Questions: Please use the chat function to submit questions.
- Answering Questions: We will review and consolidate questions and then hand them over to the speakers.
- Unanswered Questions: Please submit to us at [disability.statistics@unh.edu](mailto:disability.statistics@unh.edu).



# The Distribution of “Returns to Education” for People with Early-Onset Disabilities

Andrew J. Houtenville, Ph.D.  
Associate Professor of Economics  
University of New Hampshire

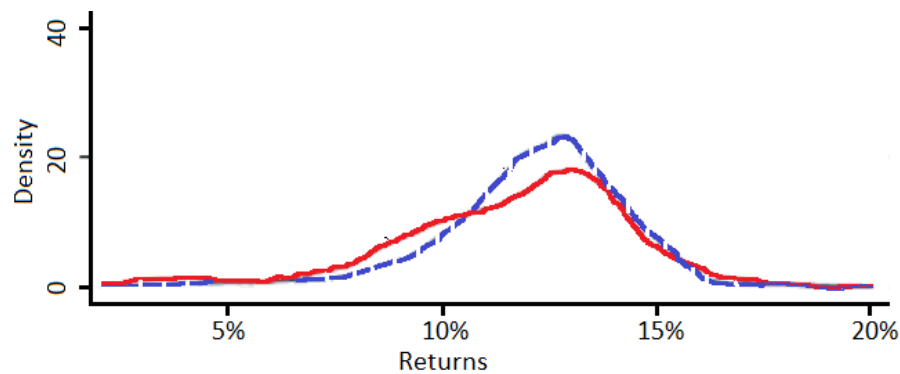
Le Wang, Ph.D.  
Assistant Professor of Economics  
University of Alabama





# Overview

- Returns to Education = the change in salary resulting from an additional year of education.
- Research Question: are the returns to education of people with disabilities similar to the returns to education of people without disabilities?
  - Not just at the “mean” but the shape of the distribution.
- Results: Suggest that the distributions are quite similar.





## Important Up-Front Comments

- Investigating the returns to education is ... ..
  - ... not the same as investigating disparities in the level of education (which do exist),
  - ... not the same as investigating the value of a specific degree, but rather the value of an additional year.



# Why Care about the Returns to Education?

- Vocational Rehabilitation programs: spend about 50% their budgets on post-secondary education.
- School-to-Work Transition: a large majority of SSI Under 18 recipients move into the adult SSI program.
- Saving SSDI: Many reforms call for “early intervention,” which includes retraining and supporting post-secondary education.
- ***Knowing the Returns to Education for PWD will inform the potential effectiveness of reforms.***





# Source of Positive Returns to Education

- Human Capital Theory: Education is an investment (hence “returns”) that provides additional work-related productivity and thus greater wages.
- Screening Theory: Educational processes don’t add skills, but rather sort individuals by pre-existing productivity, also influence also positively influence wage.





## Other Source of Positive Returns

- Job Search and Signaling Theory: Education is an investment that expands the choice set of possible jobs and then may increase wages, by expanding a person's network and/or signaling quality.
- Spurious Correlation: Other factors (not related to productivity) that positively influence educational attainment also influence wage (i.e., family networks).



## Why Returns Would Differ for PWD?

- Substitutes in Production: Disability and education may be substitutes in production—education mitigates the impact of a disability—thus an additional year of education is more valuable to people with disabilities:
- Greater Signal: The value of the “signal” provided by additional education may be more valuable, perhaps overcoming stereotyping or signaling perseverance.



# Why Investigate the “Distribution” of Returns?

- Conditional means (regression coefficients) carry very little information.
- Variation in returns exist in other subpopulations.
- For policy:
  - Individuals in the “left-hand tail” (with low returns) reflect challenges to the efficacy of education.
  - Individuals in the “right-hand tail” represent evidence of success that could potentially be replicated with interventions.



## Data Source

- Survey of Income Program Participation (SIPP):
  - The sources of the 54 million estimate.
  - Topical Module on Disability
    - 2001 Wave 5: June 2002 - September 2002
    - 2004 Wave 5: June 2005 - September 2005
    - 2008 Wave 6: May 2010 - August 2010
  - Core surveys in corresponding waves, provide wage and demographic variables.



## Disability, Onset, and Type

- Disability: we define disability as the presence of an underlying condition/impairment.
  - As opposed to difficulty running errands due to condition/impairment.
- Disability Onset: We want look at early-onset disability (ages 0-16) because for those with late-onset disabilities the returns are more viewed as insurance than an investment.
- Disability Type: we separate into physical (which includes sensory) and mental (which includes psychiatric and intellectual) disabilities.



# Results for 2008 SIPP





# Standard Log-Wages/Salary Regression

Time Period	No disability	Early-onset disability
May 10 - Aug 10	<b>0.099***</b>	<b>0.083***</b>
Std. Errors.	(0.001)	(0.010)
Observations	19,973	322

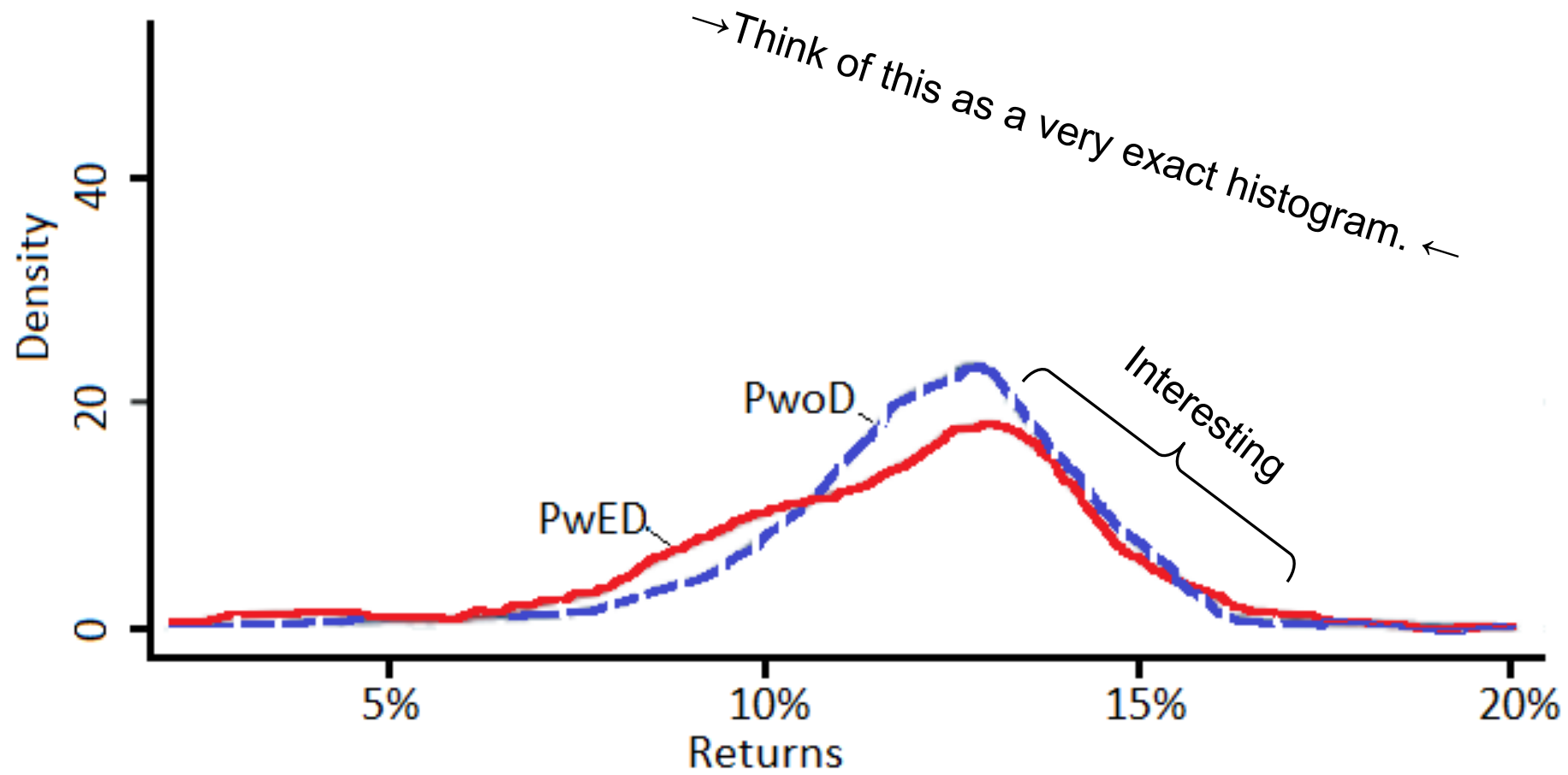
- For people without disabilities, an additional year of education is associated with a 9.9% increase in annual wage/salary (consistent with the general literature).
- For people with early-onset disabilities, an additional year of education is associated with a 8.3% increase in annual wage/salary

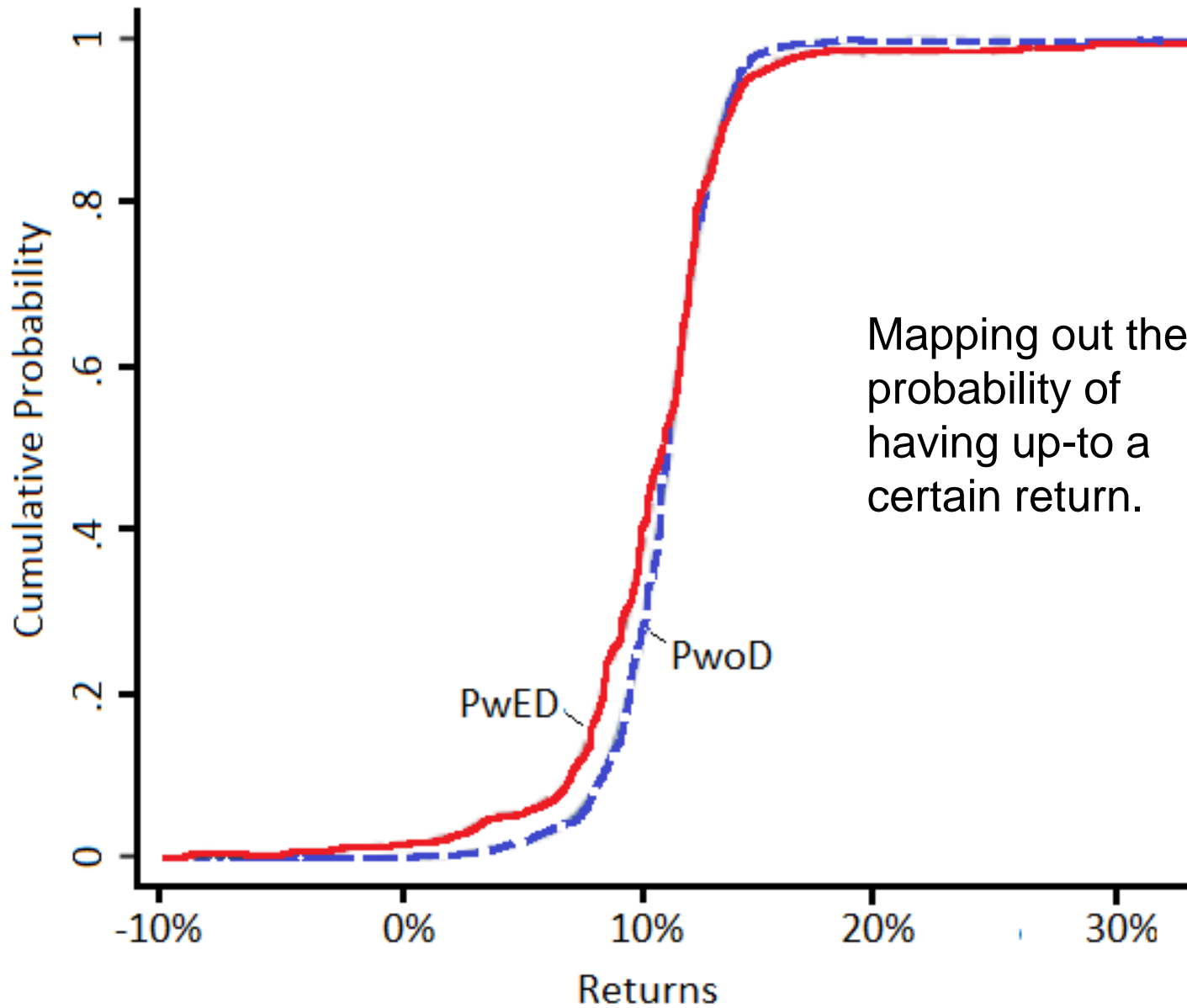


# Investigating the Distribution of Returns

- Regression coefficients are “conditional means”
  - i.e., the return for the “average” person, controlling for the other characteristics included in the regression.
- Our Approach: Use methods of Henderson, Polachek, & Wang (2011).
  - Calculate the returns for every individual in the sample with early onset-disabilities.
  - Draw the distributions of these individuals.
  - Do the same for the sample without disabilities.
  - Test if the distributions are different.



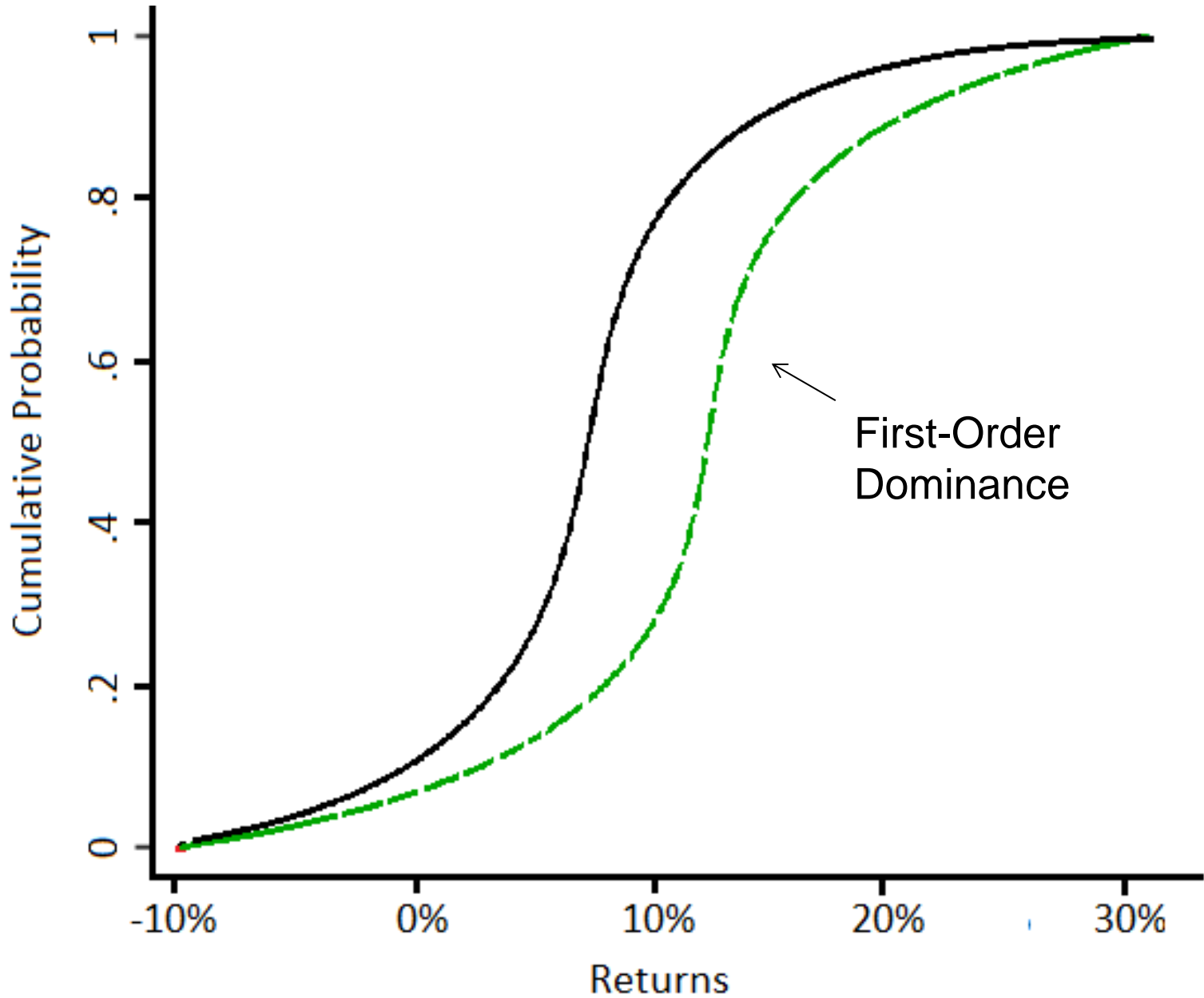


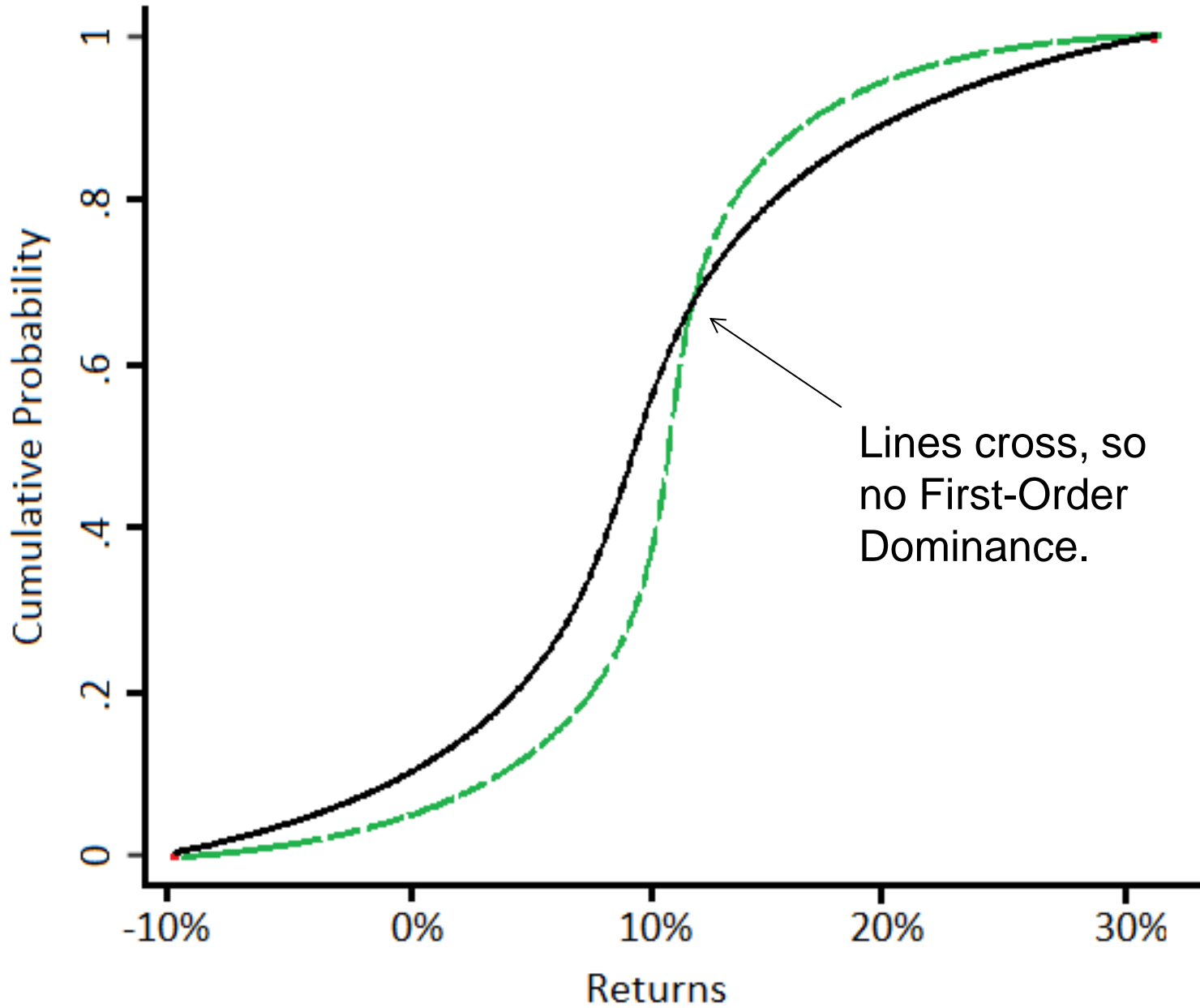


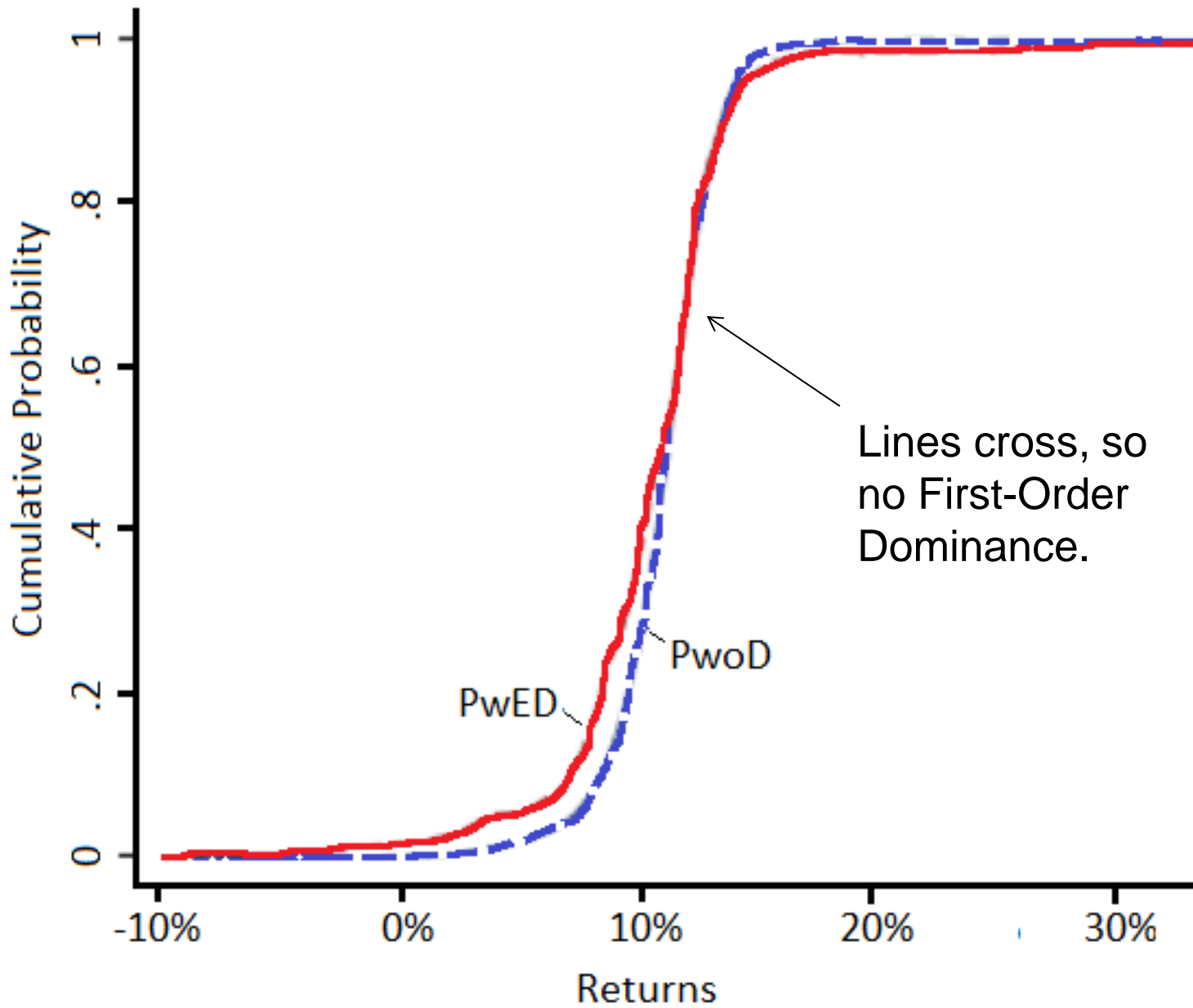


# First-Order Stochastic Dominance

- Definition: The distribution of people without disabilities would be first-order dominant, if for any given return, people without disabilities have a lower (or equivalent) probability of having up to that return.
- The cumulative probability is always lower (i.e., to the right).



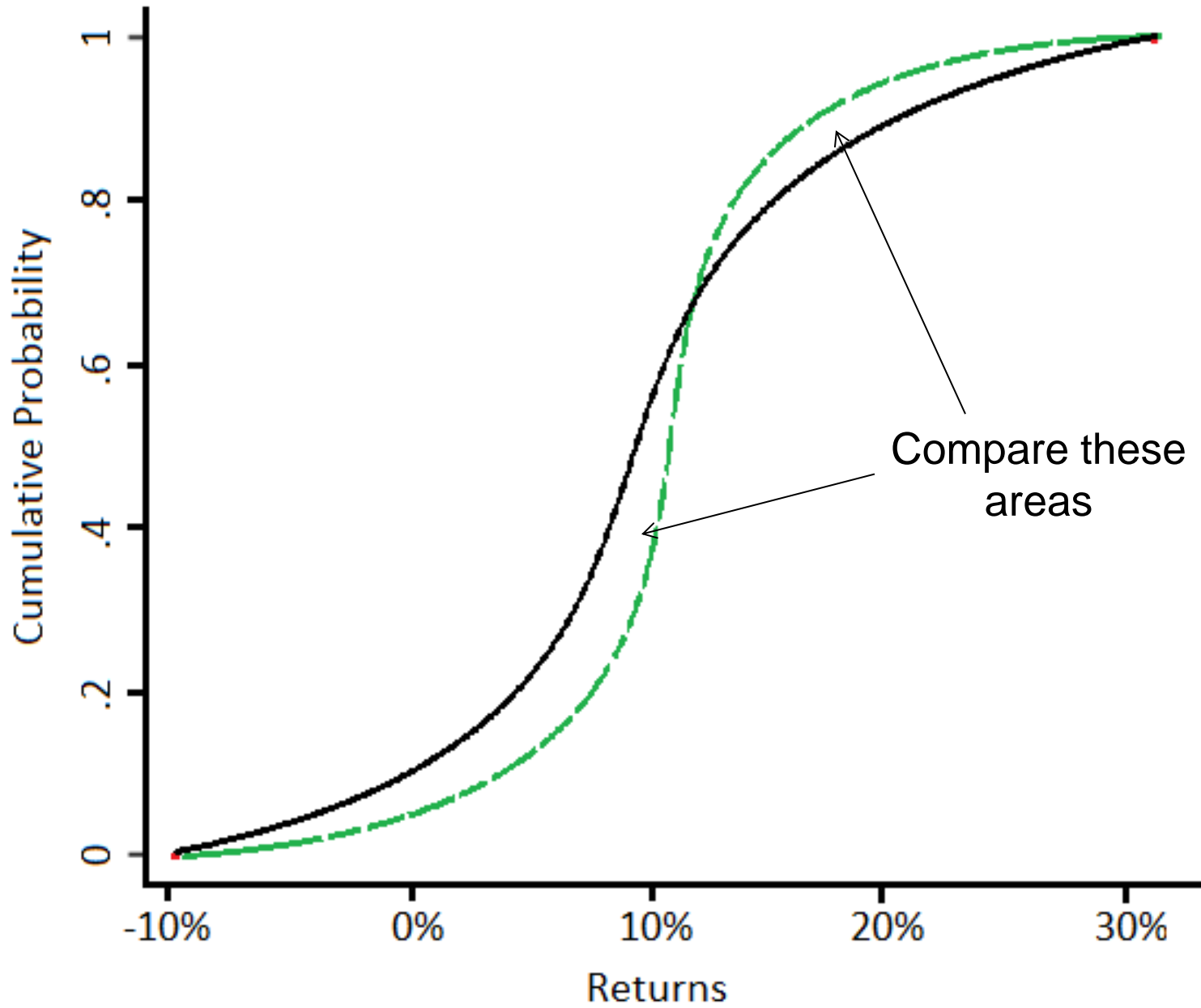




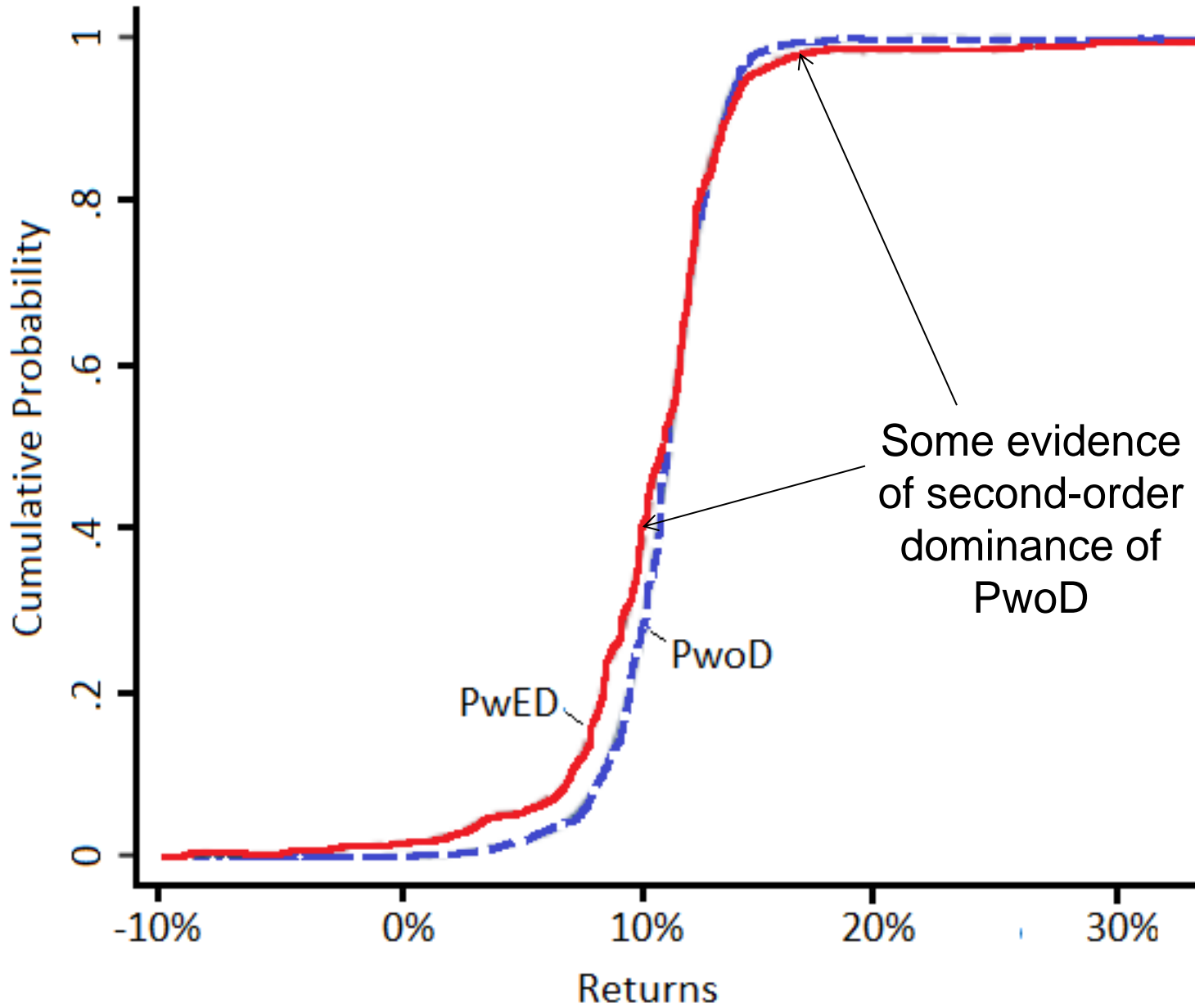


## Second-Order Dominance

- Definition: The sum of cumulative probabilities (the area under curve) is less for the dominant distribution.
  - Curves cross at least once.
  - Compare the areas underneath the CDFs.
  - It is like a horse race to see who is likely to have higher returns over all possible returns.









## Discussion

- Looking at the whole distribution and dominance: is a more powerful measure than difference in conditional mean.
- Policy Levers: Identifying who is in the lower and upper tails help identify policy levers (challenges and opportunities).



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# Kessler National Employment Survey



In partnership with the University of New  
Hampshire, Durham, NH





# Presentation Overview

- Purpose
- Project Partners
- Sample Size
- Survey Design
- Data Collection
- Data Analysis
- Dissemination
- Anticipated findings



## Why Another Survey?

- Persistent employment gaps
- Employment still discouraged
- Link between disability and poverty
- Insufficient information from national surveys (Current Population Survey (CPS), American Community Survey (ACS) etc)
- Changes since 2010



# Collaborative Partnerships

- Kessler Foundation - Lead Organization



- Partners
  - University of New Hampshire, Institute on Disability
  - University of New Hampshire Survey Center
  - PennState Survey Center



# Guiding Principles

- Striving to work
- Overcoming barriers
- Opportunities to achieve employment
- Ultimate Objective: Inform ways in which we can reduce the long-standing employment disparities between people with and without disabilities





# Overall Survey Design

- Telephone survey
- Dual (landline and cell) frame random digit dial (RDD) sample
- Approximately 50 questions
- 15-17 minutes
- Sample
  - 3000 adults (age 18-64) with disabilities
  - Community living



# Questionnaire Design

- **Mail-in Screen**
  - Age of Individuals in the household
  - Disability or Health condition
- **Disability Screen**
  - CPS six question series (vision, hearing, cognition, ambulatory, self-care and independent living difficulty)
  - CPS work limitation question
  - Additional questions on physical, cognitive, mental/emotional disabilities



*Continued*



# Questionnaire Design

- Proxy screen
  - Employment status
    - Currently employed
    - Previously employed
    - Never employed
- Looking for work  
vs.  
not looking for work



# Questionnaire Design

- **Content**
  - Screening for disability, proxy and employment status
  - Disability onset
  - Employment history
  - Job satisfaction
  - Challenges faced while looking for work
  - Accommodations and supports at work
  - Participation in Social Security Benefits
  - Demographics & future contact



# Survey Questions

- Individuals looking for work
  - I am going to read a list of things that people do to **prepare or qualify themselves for a job**. Have you done any of the following since the onset of your disability or health condition?
  - What do you think was the **most helpful in finding a job?**



# Survey Questions

- Barriers at work
  - “Do you believe that your disability or health conditions makes it difficult for you to change jobs or to advance at your current job?”
  - (Did you encounter)
    - Supervisors or coworkers who incorrectly thought you couldn’t do the job?
    - Family members who discouraged you from working?



*Continued*



# Survey Questions

- Accommodations and supports
  - You mentioned that you experience some vision difficulty. The following are some of the *specialized* supports and technology that others with vision difficulties may use at their workplace. Do you currently use any of the following to help see or read better at work?  
*(List of technology and supports for vision impairments)*



# Data Collection

- Data collection timeline: 6-7 months
- Measures to improve response rate
- Quality control measures
  - Random calls (20%)
  - Consistency checks





# Data Analysis

- Use of post-stratification weights
- Descriptive statistics (frequencies, proportions, means, and medians) with confidence intervals
- Hypotheses testing: Association tests and logistic regression



# Anticipated Results

- **Striving to work**
  - What percentage of individuals with disabilities strive to work?
    - Different ways in which they strive to work
    - Successful strategies
    - Challenges faced



# Anticipated Results

- **Overcoming barriers**
  - What percentage of individuals overcome barriers at work?
  - Support systems and accommodations at work
  - Role of supervisors and co-workers



## Impact on the Field

- Identify the *innovative* ways people with disabilities *strive to work* and *overcome barriers*
- Strategically complements and supplements national surveys
- Focus on unique experiences of persons with disabilities



# Dissemination Plan

- Results to be released on June 3<sup>rd</sup> 2015 at Capitol Hill, Washington, D.C.
- Executive Summary
  - Kessler Foundation website  
<http://kesslerfoundation.org/>
- Final Report
- Peer-review article(s)



# Kessler Web Survey

- Web based counterpart to the Kessler National Employment Survey
  - to reach targeted stakeholder groups

[https://unh.azure.qualtrics.com/SE/?SID=SV\\_cT1Yx7pX88qfCxn](https://unh.azure.qualtrics.com/SE/?SID=SV_cT1Yx7pX88qfCxn)





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## Conclusion

<http://www.researchondisability.org/epm-rrtc>

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