Kristin Vrona

Curriculum Vitae

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EDUCATION

Ph.D.	Economics, Northern Illinois University (NIU) 202	
	Degree specializations: econometrics, labor economics	
	Secondary Fields: health economics, strategy and game theory, public policy	
M.A.	Economics, Northern Illinois University	2018
B.S.	Economics, summa cum laude, Northern Illinois University	2016

Dissertation

An Analysis of Mental Health and Workplace Absenteeism: This dissertation investigates how untreated mental illness affects employee absenteeism and the role of fringe benefit package design on the magnitude of productivity loss attributed to mental illness. Using MEPS data (2010-2014), I apply several econometric frameworks to isolate the causal impact of mental health on labor outcomes and examine the possibility of non-random selection into employment that biases the magnitude of estimates. A key innovation is a spectral approach to mental illness measurement that captures symptom variation beyond formal diagnosis. The findings support the business case for early intervention and tailored health benefits to improve productive time losses.

FIELD EXPERIENCE

Freelance Field Expert: Applied Microeconomics, Econometrics 2024 - present Currently contracted with Snorkel AI (remote)

• Designed and executed adversarial overload strategies to expose model limitations in real-world applications

Graduate Research Fellow

Institute for the Study of the Environment, Sustainability, and Energy, DeKalb, IL

- Fellowship sponsored by Illinois Department of Natural Resources (IDNR)
- Consulted IDNR on improving scoring indexes that determine funding allocations

Teaching Fellow

Department of Economics, NIU, DeKalb, IL

- Independently instructed courses for 15 38 students
- Promoted team-based learning (TBL) initiatives
- Led graduate level recitation sessions
- Acted as Undergraduate Academic Advisor, preparing students to succeed in the program and representing the Economics Department at events

Business Operations Analyst

MOL Logistics, U.S. Corporate Office, Lombard, IL

- Increased for ecasting accuracy by 5-8% in three months
- Monitored and assessed projection model performance, presented actionable insights to domestic and international executive management
- Conducted operational auditing, reallocating idle assets and cutting costs

2022 - 2024

2017 - 2022

2016 - 2017

AWARDS, HONORS, & FELLOWSHIPS

Academic

2022	${\rm Dissertation\ Fellowship,\ NIU\ Graduate\ School,\ runner-up\ position,\ awarded\ tuition}$
	waiver
2018	Outstanding Graduate Student Award, NIU Graduate School, April
2017	Outstanding Master's Student Award, Department of Economics, NIU, December
2017	Kellstadt Graduate Scholarship, DePaul University Kellstadt Graduate School of
	Business, declined in favor of offer Teaching Fellowship at NIU
2012-2016	Departmental Honors, Department of Economics; Dean's List, College of Liberal
	Arts & Sciences; Academic Excellence List, NIU
Professio	nal

Professional

2023	IL congressional session (February 28) & gubernatorial press conference (March 1).
	ESE team honored for management of \$59 million in grant funds across IL parks projects.
2017	MOL Spot Award MOL Logistics June Monetary award for streamlining data processes

MOL Spot Award, MOL Logistics, June, Monetary award for streamlining data processes 2017and developing standard operating procedures for cross-departmental implementation.

ADVANCEMENT & DEVELOPMENT

 Research Institute (EBRI), June 25 2024 EBRI & American Benefits Council: 2024 Spring Policy Forum, May 16 2024 Collaborative Institutional Training Initiative: Human Subjects Research Training, February 22 2023 IDNR & Federal Department of Natural Resources Collaborative Sessions, February 27-28 2022 The Committee on the Status of Women in the Economics Profession (CSWEP) Mentorship Seminar 2020 CSWEP Successfully Navigating Your Economics PhD, November 20 2019 Federal Reserve Bank of Chicago 12th Annual Risk Conference 2019 NIU Department of Economics ECONference, April 2017 NIU Department of Economics ECONference, April 26 	2024	Retirement Confidence Survey: Results and Insight Webinar, Employee Benefit
 2024 Collaborative Institutional Training Initiative: Human Subjects Research Training, February 22 2023 IDNR & Federal Department of Natural Resources Collaborative Sessions, February 27-28 2022 The Committee on the Status of Women in the Economics Profession (CSWEP) Mentorship Seminar 2020 CSWEP Successfully Navigating Your Economics PhD, November 20 2019 Federal Reserve Bank of Chicago 12th Annual Risk Conference 2019 NIU Department of Economics ECONference, April 		Research Institute (EBRI), June 25
 February 22 2023 IDNR & Federal Department of Natural Resources Collaborative Sessions, February 27-28 2022 The Committee on the Status of Women in the Economics Profession (CSWEP) Mentorship Seminar 2020 CSWEP Successfully Navigating Your Economics PhD, November 20 2019 Federal Reserve Bank of Chicago 12th Annual Risk Conference 2019 NIU Department of Economics ECONference, April 	2024	EBRI & American Benefits Council: 2024 Spring Policy Forum, May 16
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 27-28 2022 The Committee on the Status of Women in the Economics Profession (CSWEP) Mentorship Seminar 2020 CSWEP Successfully Navigating Your Economics PhD, November 20 2019 Federal Reserve Bank of Chicago 12th Annual Risk Conference 2019 NIU Department of Economics ECONference, April 		February 22
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Mentorship Seminar2020CSWEP Successfully Navigating Your Economics PhD, November 202019Federal Reserve Bank of Chicago 12th Annual Risk Conference2019NIU Department of Economics ECONference, April		27-28
 2020 CSWEP Successfully Navigating Your Economics PhD, November 20 2019 Federal Reserve Bank of Chicago 12th Annual Risk Conference 2019 NIU Department of Economics ECONference, April 	2022	The Committee on the Status of Women in the Economics Profession (CSWEP)
 2019 Federal Reserve Bank of Chicago 12th Annual Risk Conference 2019 NIU Department of Economics ECONference, April 		Mentorship Seminar
2019 NIU Department of Economics ECONference, April	2020	CSWEP Successfully Navigating Your Economics PhD, November 20
	2019	Federal Reserve Bank of Chicago 12th Annual Risk Conference
2017 NILL Department of Economics ECONference April 26	2019	NIU Department of Economics ECONference, April
2017 NO Department of Economics ECONference, April 20	2017	NIU Department of Economics ECONference, April 26

Certifications

CITI Program Human Subjects Research Training Certification (February 2024 - February 2029)

DEPARTMENTAL & UNIVERSITY SERVICE

2019	Academic Advisor, Department of Economics, NIU Transfer Student Open House
	Days, October 18 & November 11
2019	Department Representative, Department Organizer, Department of Economics, NIU
	Major and Minors Fair, September 18
2018	Academic Advisor, Department of Economics, NIU Transfer Student Open House
	Days, October 8 & November 12
2018	Academic Advisor, Department of Economics, NIU Transfer Student Open House
	Days, March 30
2018	Department Representative, Co-organizer, Department of Economics, NIU Spring
	Internship and Job Fair, February 20
2017	Assistant Undergraduate Academic Advisor, Department of Economics, Fall 2017.
	Created and updated NIU Department of Economics pamphlets and posters

SERVICE TO PROFESSION

2022-2023 *Primary Grant Reviewer*, IDNR Open Space Land Acquisition and Development Program

CAMPUS & DEPARTMENTAL TALKS

2022 "Labor Productivity and Health", ECON 700: Labor Economics I, NIU Department of Economics, November 27
2021 "Moderate to Severe Diagnosed Mental Disorders and Absenteeism", NIU Department of Economics Graduate Colloquium Seminar, March 24
2018 "Mental Health & Labor Supply", NIU Department of Economics Graduate Colloquium Seminar, November 23

Conference Presentations

2025 "An Analysis of Mental Health and Workplace Absenteeism" (dissertation), NIU Annual ECONference, April

TEACHING EXPERIENCE

Northern Illinois University (NIU)

Principles of Macroeconomics, undergraduate, <i>Instructor of Record</i>	SU22, SU21, SP21, F20
Intermediate Macroeconomics, undergraduate	SP22
Econometric Analysis, undergraduate	F21
Public Sector Economics, graduate	F20
Microeconomic Analysis, graduate	SP20, F18

TECHNICAL SKILLS

Programming Languages

- Proficient in R, SAS, VBA, IAT_EX
- Intermediate experience with Python, GitHub, STATA

Operational Database & Public Fund Management

• SQL, BI software, ODS management, STARNET (contract management & auditing), AmpliFund (public grant management software)

Econometric Methods

- Time-Series Analysis, Instrumental Variables, Panel Methods, Regression Discontinuity, Duration & Survival Analysis, Simultaneous Regression
- Matching, Simulation, Bias Reduction & Re-Sampling Techniques (Bootstrap, Jackknife), Sensitivity Analysis

SELECTED RESEARCH ABSTRACTS

Job Market Paper

Labor Supply Dynamics Among Employed Workers with Mental Illness

Abstract: In this article, the impact of diagnosed mental illness on workplace productivity is examined, focusing on variations between levels of psychological distress and perceived physical health. I also explore the influence that comorbidity of chronic physical and mental illnesses imposes on absenteeism using the Medical Expenditure Panel Survey (MEPS). For both genders, I find that the impact of mental illness is eventually overshadowed by distress-related symptomatology, highlighting the significant role of undiagnosed mental illness in productivity losses.

Manuscript in Preparation

Mental Health and Absenteeism: the Role of Fringe Benefits as Moderators

Abstract: This study examines the impact of mental illness on health-related labor supply decisions, using data from the Medical Expenditure Panel Survey (MEPS) for employed adults in the United States. The analysis explores the effects of both diagnosed mental illness and self-reported mental wellbeing on health-induced absenteeism, while investigating how job characteristics may amplify or mitigate these effects. Employer-sponsored health benefits, while generally associated with higher absenteeism due to labor substitution for health-related needs, are found to mitigate the impact of mental illness on absenteeism.

Additional Paper

The Role of Individual Health Patterns and Endogenous Employment on Absenteeism

Abstract: This paper examines the question often present in behavioral models of health - the bias that can persist across estimates when unobserved factors drive behavior. In the context of this study, individuals may select into employment non-randomly. For instance, ability to balance health issues while being productive. When these possibilities are ignored, the magnitude of the effect that mental illness has on absenteeism is likely underestimated. A classic Heckman selection model, supported by strong exclusion restrictions, suggests the presence of endogenous sample selection that is validated by a semi-parametric copula-based selection model that accommodates the discrete and overdispersed nature of absence data.

Dissertation Committee & References

Virginia Wilcox, <i>chair</i>	Maria Ponomareva	Anna Klis
Department of Economics	Department of Economics	Department of Economics
Northern Illinois University	Northern Illinois University	Northern Illinois University
DeKalb, IL 60115	DeKalb, IL 60115	DeKalb, IL 60115
Email: <u>vlw@niu.edu</u>	Email: <u>mponomareva@niu.edu</u>	Email: <u>aklis@niu.edu</u>