Carolyn C. Tsao

Placement Director Gianluca Violante violante@princeton.edu 609-258-4003

Graduate Administrator Laura Hedden lhedden@princeton.edu 609-258-4006

EDUCATION

Princeton University

2018-present

Ph.D. Candidate in Economics

Expected Completion Date: June 2025

University of Toronto

2015-2016

M.A. in Economics

University of Victoria

2011-2015

B.Sc. Honours in Economics, with Distinction Combined Major, Mathematics and Statistics

FIELDS

Labor Economics, Personnel Economics, Economics of Education

References

Alexandre MasDavid LeeIlyana KuziemkoHaas School of BusinessDepartment of EconomicsDepartment of EconomicsUniversity of California, BerkeleyPrinceton UniversityPrinceton Universityamas@berkeley.edudavidlee@princeton.edukuziemko@princeton.edu

Job Market Paper

"It's Not (Just) About the Money: Pay and the Value of Working Conditions in Teaching." 2024.

This paper quantifies the extent to which teachers earn rents, explicitly taking both pay and non-wage job attributes into account. Using quasi-experimental designs, novel administrative data, and a survey experiment, I estimate the pay gap and the gap in the value of working conditions between teaching and teachers' next-best jobs, and sum the gaps to obtain an estimate of the

teaching rent. Employing a fuzzy regression kink design that leverages variation in who becomes certified to teach in Kentucky, I show that teaching pays a premium of \$18–21,000/yr (33–40% of the teaching salary) more than teachers' next-best options. A similar pay gap arises from event studies around teacher exits. Importantly however, I also find that working conditions in teaching are relatively poor. Fielding a stated preference experiment to Kentucky teachers, I estimate that teachers are willing to pay 29–35% of their salary to switch to their next-best job, solely for better working conditions. My results indicate that teaching offers negligible rents; instead, teaching pays a large premium that mostly functions as a compensating differential, consistent with reports of teacher shortages today. Extending my point estimates to other states suggests that over \$145 billion is being spent annually to compensate teachers for poor working conditions in the US, consistent with reports of teacher shortages today.

WORKING PAPERS

- 1. "Managers in Public Schools." 2024.
- 2. "The Effects of Prohibiting Marriage Bars: The Case of U.S. Teachers." With Amy Kim. 2024. Submitted.

Work in Progress

 "Manager Feedback Style and Worker Productivity." With Calvin Jahnke and Gábor Nyéki. 2024.

Non-Economics Publications

- 1. "Do dehydroepiandrosterone, progesterone, and testosterone influence women's depression and anxiety levels? Evidence from hair-based hormonal measures of 2105 rural Indian women." With Andreas Walther, Rohini Pande, Clemens Kirschbaum, Erica Field, and Lisa Berkman. *Psychoneuroendocrinology*. 2019.
- "Assessing conformance with Benford's law: Goodness-of-fit tests and simultaneous confidence intervals." With Mary Lesperance, W.J. Reed, M.A. Stephens, and Bree Wilson. PLoS ONE. 2016.

Research Assistance

Prof. Adam Kapor (Princeton)

Prof. Rohini Pande (Yale) and Prof. Erica Field (Duke)

Prof. Philip Oreopoulos (University of Toronto)

Prof. Michael Baker (University of Toronto) and Prof. Janet Currie (Princeton)

2016

2016

2016

Teaching

ECO981 Junior Independent Work (TA/Coordinator, Fall-Spring 2024-25), Princeton

ECO100 Introduction to Microeconomics (TA, Spring 2021), Princeton

ECO220 Quantitative Economics (TA, Spring 2016), University of Toronto

ECO220 Quantitative Economics (TA, Fall 2015), University of Toronto

MATH447 Mathematical Modelling (TA, Spring 2014), University of Victoria

PRESENTATIONS AND SEMINARS

2024 CESifo/ifo Junior Workshop on the Economics of Education (Munich, Germany)

2023 KYSTATS Data Conference (Louisville, KY)

2018 Canadian Economics Association Conference (Montreal, QC, Canada)

Honors, Scholarships, Fellowships, and Grants

Richard A. Lester Fellowship (Industrial Relations Section, Princeton University)	2023-2024
Prize Fellowship of SPIA Scholars	2021-2023
Social Sciences and Humanities Research Council (SSHRC) Doctoral Fellowship	2021-2023
Graduate Economics Fellowship	2018-2024
SSHRC Canada Graduate Scholarship – Master's	2015-2016
University of Toronto Fellowship	2015-2016
University of Victoria Jubilee Medal in Social Sciences	2015
University of Victoria Excellence Scholarship	2011-2015
Natural Science and Engineering Research Council (NSERC) Undergraduate Student Research Award, Applied Math	2014
Stephen A. Jennings Memorial Scholarship, Math and Statistics	2014
Jamie Cassels Undergraduate Research Award, Economics	2014
NSERC Undergraduate Student Research Award, Statistics	2013
Jamie Cassels Undergraduate Research Award, Math and Statistics	2013
Excellence in Math Scholarship	2013

Personal

Citizenship Canadian