Mitchell Watt

PERSONAL DETAILS

Department of Economics
Stanford University
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current CV

EDUCATION

Doctor of Philosophy in Economics *in progress*
Stanford University
Primary advisor: Professor Paul Milgrom

Master in Public Policy May 2018
Harvard University, John F. Kennedy School of Government
Concentration: Business and Government Policy
Thesis (PAE): *Trust mechanisms and online platforms: a regulatory response*
Advisor: Professor Jason Furman

Bachelor of Science (Hons) November 2011
Graduate Diploma of Economics November 2012
University of Queensland
Major: Mathematics
Honours Thesis: *Morse Theory: Smooth and Discrete*
Advisor: Professor Stephan Tillmann

RESEARCH INTERESTS

Microeconomic theory, market design and industrial organization

WORKING PAPERS

Linear Pricing Mechanisms without Convexity with Paul Milgrom
We introduce two new linear pricing mechanisms that lead to feasible, budget-balanced and approximately efficient outcomes even when preferences or production sets are not convex and Walrasian equilibrium does not exist. One mechanism permits different prices for buyers and sellers; the other uses a single price vector but permits some agents to be rationed. In these mechanisms, both the inefficiency-to-value ratio and the maximum benefit any single agent can gain from false reporting tend quickly to zero as the numbers of producers and consumers increase.

Strong monotonicity and perturbation-proofness of Walrasian equilibrium
We study the price impact of small perturbations to Walrasian equilibrium, as might be caused by changes in the supply vector, changes in the set of participants, or misreports by an agent. A (nested) sequence of markets is perturbation-proof if, given any supply vector, the price impact of any bounded perturbation is inversely proportional to the number of agents. Perturbation-proofness implies good incentive properties of Walrasian equilibrium in large markets and robustness of prices to small misspecifications. Replica economies are perturbation-proof if and only if the base economy's demand correspondence is strongly monotone. When buyers' preferences are drawn identically and independently from a type distribution with a strongly monotone expected demand correspondence, the resulting sequence of economies is perturbation-proof with high probability. We argue that strong monotonicity of the expected demand correspondence is a realistic assumption in economic models with indivisibilities, reflecting variety in the set of possible preferences and uncertainty about reservation prices associated with demand changes.

Concavity and convexity of order statistics in sample size
We show that the expectation of the kth order statistic of an i.i.d. sample of size n from a monotone reverse hazard rate (MRHR) distribution is convex in n and that the expectation of the $(n\text{-}k\text{+}1)$th order statistic from a monotone hazard rate (MHR) distribution is concave in n for $n \geq k$. We apply this result to the analysis of independent private value auctions in which the auctioneer faces a convex cost of attracting bidders.

WORK IN PROGRESS

A bandit model of trade with two-sided learning with Yunus Aybas

Congestion in labor markets: Evidence from an online platform with Shoshana Vasserman and John J. Horton

ACADEMIC PUBLICATIONS	***Risk aversion and auction design: Theoretical and empirical evidence*** with Shoshana Vasserman, *International Journal of Industrial Organization*, Volume 79, 2021
OTHER PUBLISHED WORK	*Commentary on Effective Allocation of Affordable Housing by Nick Arnosti and Peng Shi* with Paul Milgrom, *Management Science Blog*, 2020.
	Trust mechanisms and online platforms: A regulatory response with Hubert Wu, *Harvard Mossavar-Rahmani Center for Business and Governance, Associate Working Paper Series,* No. 97, 2018.
	Labor should fight for economic mobility with Jim Chalmers, *Chifley Research Centre Blog*, 2013.

TEACHING EXPERIENCE	*Stanford University, Department of Economics* Teaching Assistant for ECON 202 Graduate Microeconomics I (2020), ECON 136 Market Design (2021)
	Harvard University, John F. Kennedy School of Government Teaching Fellow for API-303 Game Theory and Strategic Behavior (2017), API-101D Markets and Market Failure (2017), API-102I Economic Analysis of Public Policy (2018)
	University of Queensland, Department of Economics Tutor for ECON7010 Consumer and Firm Behaviour (2013), ECON7040 Macroeconomic Analysis (2013)
	University of Queensland, Department of Mathematics Tutor for MATH1051 Calculus and Linear Algebra I (2009), MATH1052 Multivariable Calculus and ODEs (2009-2013), MATH2000 Calculus and Linear Algebra II (2011-13), MATH3402 Funtional Analysis (2013) and MATH3500 Problems and Applications in Modern Mathematics (2012-13)

HONORS AND AWARDS		
	The Koret Fellowship, Stanford University	2021-2023
	Ric Weiland Graduate Fellowship, Stanford University	2021-2023
	Centennial Teaching Award, Stanford University	2021
	Department of Economics Outstanding TA Award, Stanford University	2020, 2021
	Dean's Award for Excellence in Student Teaching, Harvard Kennedy School	2018
	John F. Kennedy Fellowship, Harvard Kennedy School	2016-2018
	Graduate of the Year, University of Queensland	2012
	University Medal, University of Queensland	2011
	Harriet Marks Bursary, University of Queensland	2011
	Madalen Kitty Ravenhill Hulbert Memorial Prize, University of Queensland	2009
	John Black Prize, University of Queensland	2009
	Dean's Excellence and Equity Scholarship, University of Queensland	2008-10
	UQ Excellence Schoarship, University of Queensland	2008-10

INVITED TALKS	NBER Market Design Working Group, Fall Meeting	2021

ACADEMIC SERVICE	Member of the Economics Graduate Student Committee, Stanford University
	Member, WE RISE: Women's Empowerment and Rational Inclusion at Stanford Economics
	Volunteer for Graduate Student Admissions, Stanford University
	Social Chair, Department of Economics, Stanford University

OTHER EXPERIENCE

AlphaBeta Advisors
Graduate Intern   May - August 2017
Strategic economic analysis and advice for a number of public sector clients on policy design, including labour market economics and industry policy.

Parliament of Australia, Office of Dr Jim Chalmers MP
Adviser   October 2013 - July 2016
Advised on policy issues for the (then) Shadow Minister for Financial Services and Superannuation, Shadow Minister for Sport, Shadow Assistant Minister for Trade, Resources and Productivity. Policy and legislative advice, speech-writing, support for parliamentary duties.

Australian Labor Party
Secretary, Australian Young Labor   April 2014-September 2015
President, Queensland Young Labor   May 2013-May 2014
Campaign organizing, event management and administrative management of youth wing of party.

The Pyjama Foundation
Volunteer and IT Assistant   April 2013-November 2013
Assisted the charity (which provides tutoring and support for foster children) with database development and maintenance, training for new volunteers, and general office administration.