

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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**DOCTORAL
STUDIES**

Massachusetts Institute of Technology (MIT)
PhD, Economics, Expected completion June 2012
DISSERTATION: "Essays on Talent Allocation and Innovation"

DISSERTATION COMMITTEE AND REFERENCES

Professor David Autor (chair)
MIT Department of Economics
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PRIOR EDUCATION B.A., *valedictorian, summa cum laude* Colgate University 2007
High Honors in Mathematics
High Honors in Mathematical Economics

CITIZENSHIP China **GENDER** Female **YEAR OF BIRTH** 1985

LANGUAGES English (fluent), Mandarin Chinese (native)

FIELDS Primary: Labor Economics
Secondary: Economics of Innovation and Entrepreneurship; Public Finance

TEACHING EXPERIENCE Public Finance II (graduate, MIT Course 14.472), Teaching Assistant to Professors Michael Greenstone, Jonathan Gruber, and Ivan Werning 2011

	Health Economics (undergraduate, MIT Course 14.21), Teaching Assistant to Professor Jeffrey Harris	2011
	Economics of Education (undergraduate, MIT Course 14.48), Teaching Assistant to Professor Frank Levy	2010
	Public Finance I (graduate, MIT Course 14.471), Teaching Assistant to Professors James Poterba and Emmanuel Saez	2009
	Introduction to Statistical Methods in Economics (undergraduate, MIT Course 14.30), Teaching Assistant to Professor Panle Jia Barwick	2009
	Intermediate Microeconomics (undergraduate, Colgate University), Teaching Assistant to Professor Jyoti Khanna	2004-2006
RELEVANT POSITIONS	Research Assistant to Professor Peter Diamond	2009-2010
	Research Assistant to Professors David Autor, Mark Duggan, and Jonathan Gruber	2007-2009
	Research Assistant to Professor Takao Kato	2004-2006
	Research Assistant to Professor Cheryl Long	2004-2006
FELLOWSHIPS, HONORS, AND AWARDS	Ewing Marion Kauffman Dissertation Fellowship	2012
	MIT George and Obie Shultz Fund	2010
	MIT Economics Department Castle Krob Graduate Fellowship	2007-2009
	Marshall-Keynes Award for Excellence in Economics, Colgate University	2007
	Osborne Prize in Mathematics, Colgate University	2007
	Class of 1997 Award, Colgate University	2007
	Phi Beta Kappa (elected as a junior)	2006
PROFESSIONAL ACTIVITIES	Presentations: NBER Productivity Lunch (2011), Colgate University (2011), ASSA-AEA Annual Meeting (2008), Society of Labor Economists Annual Meeting (2007)	
	Referee: <i>American Economic Journal: Applied Economics</i>	
	Other: NBER Entrepreneurship Research Boot Camp (2010)	
RESEARCH PAPERS	“The Long-term Impact of Business Cycles on Innovation: Evidence from the Massachusetts Institute of Technology” (Job Market Paper)	
	<p>I explore a novel channel through which short-term economic fluctuations affect the long-run innovative output of the U.S. economy: college graduates' initial career choices. I develop a two-period Roy-style model to show that shocks to initial career choices could affect long-term patent production by changing graduates' long-term occupational affiliation or changing their acquisition of inventive human capital. Using a newly constructed data set on the patenting history of all individuals obtaining a bachelor's degree from the Massachusetts Institute of Technology (MIT) between 1980 and 2005, I find that cohorts graduating during economic booms produce significantly fewer patents over the subsequent two decades. A one percentage point decrease in the unemployment rate in the year of scheduled graduation on average decreases the future annual patent output of a cohort by around 5%, or approximately 2.5 patents per year for an average-size cohort. Economic conditions at the time of graduation do not</p>	

affect the number of graduates who patent or their characteristics. The decrease in patent output of cohorts graduating during booms is a result of lower inventive output from inventors with relatively low GPAs, and marginal patents receive fewer citations than the average and median patents. I find no evidence that initial economic conditions affect inventors' long-term occupational affiliation, suggesting that the effect on patent production is primarily due to differences in inventors' long-term level of inventive human capital.

“Asset Accumulation and Labor Force Participation of Disability Insurance Applicants”

I examine the dynamic effects of Social Security Disability Insurance (SSDI) on labor force participation using data from the Health and Retirement Study. Despite having lower earnings, rejected SSDI applicants accumulate more assets immediately prior to their SSDI application and exhibit significantly lower attachment to the labor force. These findings are consistent with the hypothesis that a disability insurance program with imperfect screening encourages workers with high disutility of work to save more in the present and plan to apply for disability insurance in the future regardless of their future disability status. My results suggest that the current SSDI screening process is effective at detecting at least some of these individuals, but it does not deter a subset of workers from dropping out of the labor force and applying for disability insurance.

“Competition, Group Identity, and Social Networks in the Workplace: Evidence from a Chinese Textile Firm” (with Takao Kato), IZA Discussion Paper (forthcoming)

Using data on team assignment and weekly output for all weavers in an urban Chinese textile firm between April 2003 and March 2004, this paper studies a) how randomly assigned teammates affect an individual worker's behavior under a tournament-style incentive scheme, and b) how such effects interact with exogenously formed social networks in the manufacturing workplace. First, we find that a worker's performance improves when the average ability of her teammates increases. Second, we exploit the exogenous variations in workers' origins and take advantage of the well-documented social divide between urban resident workers and rural migrant workers in large urban Chinese firms. We show that the coworker effects are only present if the teammates are of a different origin, suggesting that workers do not act on pecuniary incentives to outperform teammates who are from the same social network. Our results point to the important role of group identities in overcoming self-interests and facilitating altruistic behaviors.

**RESEARCH IN
PROGRESS**

“Understanding Selection into Majors and Careers: Who are the Marginal Financiers?”

With its rapid wage growth over the past 30 years, the financial industry has become a popular destination for top college graduates. I study the implications of this phenomenon for the efficiency of talent allocation. In the first part of the project, I document the growth in the proportion of undergraduate students at

Massachusetts Institute of Technology (MIT) that major in economics or management. A Oaxaca-style decomposition suggests that only a small part of the secular increase in financial employment is due to compositional changes in student demographics, while most of the effect comes from the increasing tendency of students to major in finance-related fields. In the second part of the paper, I develop an extended Roy model and fit it to data on the initial salaries and career choices of MIT graduates from 2006 to 2010 to study selection into the financial sector and its implications for talent allocation. I use the exogenous variation in graduates' initial placements stemming from the recent financial crisis to identify the characteristics of marginal financiers.