MIT Economics

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DOCTORAL STUDIES	Massachusetts Institute of Technology (MIT)
	PhD, Economics, Expected completion June 2025
	DISSERTATION: "Topics in Spatial Economics"

DISSERTATION COMMITTEE AND REFERENCES

Arnaud Costinot
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PRIOR EDUCATION	University of Notre Dame	2019
	BA, Mathematics, summa cum laude	

CITIZENSHIP	USA	GENDER:	Male

FIELDS	Primary Fields: Trade, Macro
	Secondary Fields: Urban

TEACHING EXPERIENCE	Labor Economics I (graduate, MIT course 14.661)	2023
	Teaching Assistant to Professors Acemoglu and Adams-Prassl	
	International Economics I (graduate, MIT course 14.581)	2023

	Teaching Assistant to Professor Costinot	
	Microeconomic Theory IV (graduate, MIT course 14.124)	2022
	Teaching Assistant to Professor Wolitzky	
	International Economics I (graduate, MIT course 14.581)	2021
	Teaching Assistant to Professors Costinot and Atkin	
	International Trade (undergraduate, MIT course 14.54)	2021
	Teaching Assistant to Professor Costinot	

FELLOWSHIPS, HONORS, AND AWARDS	Best Teaching Assistant (Department Award)	2024
	NSF Graduate Research Fellowship	2019
	The George Kolettis Award in Mathematics	2019
	Glynn Award for Academic Excellence and Exemplary Leadership	2019
	Phi Beta Kappa, Junior Inductee	2018
	Notre Dame Scholar	2015

PROFESSIONAL ACTIVITIES

Referee: *American Economic Review, Journal of European Economic Association, Journal of Political Economy*

Presentations:

17th North American Meeting of the Urban Economics Association	2023
16th North American Meeting of the Urban Economics Association	2022
Theoretical Research in Development Economics Conference	2022

Service: MIT Economics International lunch seminar organizer

Affiliations: Census Bureau Special Sworn Status

RESEARCH PAPERS

"Revitalize or Relocate: Optimal Place-based Transfers for Local Recessions" (Job Market Paper)

Many regions in the US experience depressed labor demand and high unemployment, even when the rest of the United States does not. How should the US government respond? In this paper, I characterize optimal place-based transfers in a dynamic economic geography model with nominal wage rigidity and compare them to observed government transfers. I show that transfers not only have a stimulus effect—by boosting local demand—but also a migration effect—by encouraging local residents to stay. Analytically, I provide optimal transfer formulas that capture this trade-off and show, perhaps surprisingly, that the optimal transfer to a distressed region may be a tax due to the migration effect. All else equal, transfers should be larger in the short-run and when distressed places are geographically concentrated. Quantitatively, I find that observed transfers are both too small in the short-run and too large in the medium-run, achieving just over half of the gains from the fully optimal response to idiosyncratic local shocks. I conclude by exploring how the US government could have responded to the China trade shock in the 2000s.

"The Granular Origins of Agglomeration" (with Shin Kikuchi)

A few large firms dominate many local labor markets. How does that granularity affect the geography of economic activity? And what does it mean for the efficiency of firm entry? To answer these questions, we propose a new economic geography model featuring granular firms subject to idiosyncratic shocks. We show that average wages increase in the size of the local labor market due to that granularity, and provide a sufficient statistic for the contribution of our mechanism. We further prove that too few firms enter in equilibrium. Using Japanese administrative data on manufacturing, we provide evidence consistent with our mechanism and quantify it. Our mechanism implies that markets with around 2 firms per sector have an elasticity of wages to population of 0.05 and firms capture only 85% of their contribution to production in profits. In large markets like Tokyo, the elasticity is around 0.001, and firm entry is approximately efficient. Enacting optimal place-based industrial policy would increase the number of firms in modest-sized cities by more than 30% and actually decrease the number of firms and people in Tokyo.

"Strategic (Dis)Integration" (with John Sturm Becko)

Suppose a country anticipates that it may use trade as a point of leverage in future geopolitical conflicts. How should it develop domestic industries and international trading relationships today in order to strengthen its hand tomorrow? Domestically, we show that the country abstains from peacetime capital subsidies if it can credibly threaten trade taxes as geopolitical punishments during conflict, but not otherwise. Internationally, peacetime trade policy promotes the accumulation of foreign capital that makes foreign prices more sensitive to trade during conflict, but not necessarily capital that increases foreign gains from trade. We apply these insights to quantify the US's optimal policies for building geopolitical power vis-à-vis China. The optimal policy promotes US-China trade on both the import and export margins, especially in consumption goods.

"The Stable Transformation Path" (with Francisco Buera, Joseph Kaboski, Martí Mestieri)
Revise and Resubmit at *Review of Economic Studies*

Many growth models lack balanced growth paths (BGPs). Instead, the sectoral, productivity, and capital dynamics change drastically as the economy develops. We define the Stable Transformation Path (STraP), a generalization of the BGP to non-stationary models, for a wide class of models and prove its existence and uniqueness. We use the STraP to evaluate the implications of benchmark models of structural transformation. Secular structural change can account for a quarter of growth in miracle economies, but it fails to explain the growth experience in the early industrial period.

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RESEARCH IN PROGRESS

"Optimal Carbon Taxation with Concerns for Redistribution" (with Arnaud Costinot, Joseph Shapiro, Iván Werning)

We provide a general formula for optimal carbon taxes in a second-best world where governments may have concerns for redistribution, but only have access to nonlinear income taxes. Our formula requires adding to standard estimates of the social cost of carbon an extra term that takes into account its potentially adverse consequences for inequality. Our adjustment only depends on a few sufficient statistics: marginal income tax rates, elasticities of labor supply, and elasticities of relative wages with respect to changes in carbon emissions across quantiles of the income distribution. Combining a model of the US economy with detailed administrative data, we provide estimates of these statistics and explore their implications for carbon taxation.

"Optimal Industrial Mix with Granular Shocks" (with Shin Kikuchi)

When firms are subject to granular and industry-wide shocks, regions overspecialize, leaving workers overexposed. Using German employer-employee matched data, we study the optimal industrial policy incorporating heterogeneity in occupation, industry, and region.