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MIT PLACEMENT OFFICER

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**DOCTORAL
STUDIES**

Massachusetts Institute of Technology (MIT)
PhD, Economics, Expected completion June 2023
DISSERTATION: “*Essays on Public Finance and Information Economics*”

DISSERTATION COMMITTEE AND REFERENCES

Professor Robert Townsend
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Professor Iván Werning
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Professor Jonathan Gruber
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**PRIOR
EDUCATION**

Pontifícia Universidade Católica do Rio de Janeiro	2017
MSc, Economics	
Universidade de São Paulo	2014
BA, Economics	

CITIZENSHIP

Brazilian

GENDER: Male

LANGUAGES

English (fluent), Portuguese (native), Spanish (advanced), French (advanced)

FIELDS

Primary Fields: Public Finance, Macroeconomics

Secondary Fields: Contract Theory, Finance, Information Economics

MIT Economics

ANDRÉ SZTUTMAN

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TEACHING EXPERIENCE	MIT 14.471* – Public Economics I	2020/21
	Teaching Assistant to Prof. Poterba and Prof. Werning	
	MIT 14.462* – Advanced Macroeconomics II	2020
	Teaching Assistant to Prof. Townsend and Prof. Angeletos	
	MIT 14.02 – Introduction to Macroeconomics	2020
	Teaching Assistant to Prof. Beraja	
	MIT 14.41/14.410* – Public Finance	2019
	Teaching Assistant to Prof. Gruber	
	PUC-Rio Macroeconomics I *	2020
Teaching Assistant to Prof. Zilberman		
*graduate level courses		
RELEVANT POSITIONS	Research Assistant to Professor Robert Townsend	2017-19
	Research Assistant to Professor Carlos Viana de Carvalho	2017
FELLOWSHIPS, HONORS, AND AWARDS	Accenture Industry Convergence Fellowship	2021
	Clyo Castle Fellowship	2018
	Clyo Castle and Grace Koo Fellowship	2017
	Fundação Estudar Leadership Program	2017
	Faperj Bolsa Nota 10	2016
	CNPq scholarship	2015
	1 st place exam of Brazilian Assoc. of Economics Grad. Programs	2014
	Luiz de F. Bueno Prize – best graduating student in Economics	2014
PROFESSIONAL ACTIVITIES	Referee: Journal of Economic Theory	
	Discussant:	
	NTA Annual Conference on Taxation*	2022
	Presentations:	
	European Winter Meeting of the Econometric Society	2022
	NTA Annual Conference on Taxation*	
	ACM Equity and Access in Algorithms, Mechanisms, Optimization	
	ACM Economics and Computation	
	North American Summer Meeting of the Econometric Society	
	Marketplace Innovation Workshop	
NTA Annual Conference on Taxation	2021	
European Winter Meeting of the Econometric Society		
*Suspended due to Hurricane Nicole		

RESEARCH PAPERS

“Dynamic Job Market Signaling and Optimal Taxation” (Job Market Paper)

How are optimal taxes affected by reputation building and imperfect information in labor markets? In this paper, I build a model of labor markets with incomplete and asymmetric information where job histories play a crucial role in transmitting information about workers' productivity, which allows us to better understand the efficiency and distributive consequences of imperfect monitoring and screening in labor markets, and the tradeoffs the government faces when setting taxes. Optimal taxes are described by generalized versions of standard redistributive and corrective taxation formulas, which depend crucially on labor wedges: the ratios of the marginal contribution to output over the increases in lifetime earnings that result from supplying one extra unit of labor at each period. Combining estimates from the literature and new estimates using data from the Health and Retirement Study, I find that, the corrective component of taxes is large, especially at the top of the income distribution.

“Income Taxation with Elasticity Heterogeneity”

(with John Sturm)

How should income taxes account for differences in households' tax responses? We address this question with a new test that passes if and only if there exists a utilitarian planner for whom the current tax system is locally optimal. Our test takes as inputs standard sufficient statistics, such as the average elasticity of taxable income and the shape of the income distribution, but also incorporates a novel statistic: the variance of elasticities conditional on income. Indeed, the test fails when this variance is sufficiently high. We then proceed to evaluate our test empirically using the NBER panel of tax returns and providing novel estimates of the variance of ETI by income bracket. We find that our optimality test fails, implying there are welfare-improving tax reforms.

“Optimal Credit Scores Under Adverse Selection”

(with Nicole Immorlica and Robert Townsend)

The increasing availability of data in credit markets may appear to make adverse selection concerns less relevant. However, when there is adverse selection, more information does not necessarily increase welfare. We provide tools for making better use of the data that is collected from potential borrowers, formulating and solving the optimal information disclosure problem of an intermediary with commitment that seeks to maximize the probability of successful transactions, weighted by the size of the gains of these transactions. We show that any optimal disclosure policy needs to satisfy some simple conditions in terms of local sufficient statistics. These conditions relate prices to the price elasticities of the expected value of the loans for the investors. Empirically, combining machine learning methods and information design theory, we apply our results to the data from the Townsend Thai Project, which is a long panel dataset with rich

information on credit histories, balance sheets, and income statements, to evaluate whether it can help develop the particularly thin formal rural credit markets in Thailand, finding economically meaningful gains from adopting limited information disclosure policies.

RESEARCH IN PROGRESS

“Changing Taxes for Changing Times” (with John Sturm)

How should income taxes respond to changes in technology or labor markets? Starting from a benchmark where changes in the income distribution do not affect the fiscal cost of redistribution, we emphasize three key factors: First, increased income inequality decreases the cost of redistribution. Second, uniform income growth decreases the cost of redistribution when higher income households have higher labor supply elasticities. Third, uniform income growth increases (decreases) the cost of redistribution at high (low) incomes when elasticities vary within income levels. A preliminary calibration to the U.S. between 1982 and 2008 suggests the third effect has dominated, making redistribution more expensive.

“What is the Variance of Taxable Income Elasticities? A Bagged Forest Approach” (with John Sturm)

Recent work in public finance has emphasized the role that variance in taxable income elasticities (ETIs) plays in tax design. However, estimating these variances presents a number of empirical challenges. We present a novel bagged forest method for estimating the variance of ETIs. This method combines a debiasing correction within the trees' construction, cross-fitting half-samples, and a bootstrap procedure that aims to preserve the correlation across half-samples. Our results indicate that there is substantial heterogeneity in how people respond to tax changes even within the same income brackets.

“Optimal Menus, Moral Hazard and Adverse Selection in Data-Rich Lending Markets” (with Yingju Ma and Robert Townsend)

Are rich datasets making adverse selection and moral hazard concerns less relevant? Leveraging abrupt and geographically discontinuous changes in lending policies from a major financial provider in China, we test for the presence of adverse selection and moral hazard across multiple lending markets in a scenario where detailed information from potential borrowers is available. We connect estimates for the degrees of adverse selection and moral hazard to the design of optimal menus in those markets, and evaluate the response of the financial provider to different types of informational frictions.

“Information Design for Social Insurance”

In many modern sectors of the economy, workers are exposed to a series of risks, ranging from traffic accidents to job insecurity. At the same time, many of the firms have large amounts of data. In principle, this data could be used to alleviate information asymmetries that prevent insurance markets from functioning properly. However, because the relationship between adverse selection and the amount of public information available is not monotonic, alleviating adverse selection requires the careful design of disclosure rules. In this project, I develop general principles for the design of these disclosure rules to the benefit of the firm and its workers. Using data from the Health and Retirement Study, I will evaluate whether optimal disclosure rules could remedy adverse selection in the markets for unemployment, disability and long-term care insurance, illustrating more generally how these rules could be used by data-rich firms.