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## HARVARD UNIVERSITY

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### Office Contact Information

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### Undergraduate Studies:

M.A., Economics, Getulio Vargas Foundation / EPGE, 2015

B.A., Economics, Getulio Vargas Foundation / EPGE, 2012

### Graduate Studies:

Harvard University, 2015 to present

Ph.D. Candidate in Economics
Thesis Title: "Essays on Demand Estimation"

Expected Completion Date: May 2022

References:

Professor Myrto Kalouptsidi                  Professor Ariel Pakes

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Professor Elie Tamer

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**<u>Teaching and Research Fields:</u>**

   Primary fields: Econometrics and Industrial Organization

**<u>Teaching Experience:</u>**

| Fall / Spring, 2017 | Introduction to Applied Econometrics, Harvard University (Graduate), |
| --- | --- |
| | Teaching fellow for Professor Gary Chamberlain, |
| | Teaching evaluation: 4.7/5.0 and 4.7/5.0 |
| | Awards: 2 x Derek Bok Certificates of Distinction in Teaching |

**<u>Research Experience and Other Employment:</u>**

| 2018-2021 | Harvard University |
| --- | --- |
| | Research Assistant for Professor Elie Tamer and Professor David Parkes |

**<u>Job Market Paper:</u>**

"Demand Estimation with Zeros: Moving Costs in the US"

This paper develops a flexible discrete-choice demand framework for aggregate data sets that extends Berry, Levinsohn, and Pakes (1995) and the Pure Characteristics Demand Model of Berry and Pakes (2007). The framework accommodates zero demand, which is a challenge for alternative approaches. I show that zero demand generates an endogenously censored model, which leads to moment inequalities. I provide a simple, computationally tractable, asymptotically normal estimator based on two contributions: a globally-convergent algorithm to recover utilities from observed demand and a Quasi-Bayes approach that minimizes simulation variance. As an application, I study moving costs and housing policies on US internal migration data. Moving costs are high and highly variable, which implies substantial benefits from targeted housing policies.

**Working Papers:**

"Counterfactual Analysis for Structural Dynamic Discrete Choice Models"

With Myrto Kalouptsidi, Yuichi Kitamura, and Eduardo Souza-Rodrigues
*Revise and Resubmit, Review of Economic Studies*

Discrete choice data allow researchers to recover differences in utilities, but these differences may not suffice to identify policy-relevant counterfactuals of interest. This fundamental tension is important for dynamic discrete choice models because agents' behavior depends on value functions, which require utilities in levels. We propose a unified approach to investigate how much one can learn about counterfactual outcomes under mild assumptions, for a large and empirically relevant class of counterfactuals. We derive analytical properties of sharp identified sets under alternative model restrictions and develop a valid inference approach based on subsampling. To aid practitioners, we propose computationally tractable procedures that bypass model estimation and directly obtain the identified sets for the counterfactuals and the corresponding confidence sets. We illustrate in Monte Carlos, as well as an empirical exercise of firms' export decisions, the informativeness of the identified sets, and we assess the impact of (common) model restrictions on results.

"The Sub-Optimality of Optimal Labor Income Tax Schedules"

With Carlos da Costa

In a setting in which couples decide following a bargaining procedure satisfying Nash's (1950) axioms, beyond the well known channels, tax perturbations affect agents' choices through threat points. We derive optimal joint tax formulae for both the case in which taxes affect and when they do not affect threat points. We then show that filing options (similar to the one found in the US tax code) allow for threat points to be held fixed, and can also be used to improve upon any allocation implemented by a single schedule. The Taxation Principle fails because the tax schedules must play a double role: i) to define households' objective functions through their impact on threat points, and; ii) to induce the desired allocations as optimal choices for households given these objectives. We assess the consequences of eliminating filing options in the U.S. economy, taking into account the consequences on marriage market of such reform. Finally, to assess whether tax schedules supplemented with filing options are capable of implementing all constrained efficient allocations we build a framework that allows us to apply mechanism design to collective households.