University of Minnesota - Twin Cities

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Curriculum Vitae Fall 2020

VITORIA RABELLO DE CASTRO

Personal Data

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Citizenship: Brazil (F-1 Visa)

Major Fields of Concentration

Industrial Organization, Applied Microeconomics

Education

Degree	Field	Institution	Year
PhD	Economics	University of Minnesota (expected)	2021
MA	Economics	Pontificia Universidade Católica, Rio de Janeiro (PUC-Rio)	2014
BA	Economics	Pontificia Universidade Católica, Rio de Janeiro (PUC-Rio)	2012

Dissertation

Title: "Value Creation and Competition in New Markets"

Dissertation Advisor: Professor Amil Petrin Expected Completion: Summer 2021

References

Professor Amil Petrin	(612) 625-0145 petrin@umn.edu	Department of Economics University of Minnesota 4-101 Hanson Hall
Professor Thomas Holmes	(612) 625-6353 holmes@umn.edu	1925 Fourth Street South Minneapolis, MN 55455
Professor Joel Waldfogel	(612) 626-7128 jwaldfog@umn.edu	Department of Strategic Management/Organization Carlson School of Management 321 19 th Avenue South Minneapolis, MN 55455

Honors and Awards

2019 - 2020	Doctoral Dissertation Fellowship, University of Minnesota, Minneapolis, Minnesota	
2016 - 2018	Distinguished Teaching Assistant, Department of Economics, University of Minnesota, Minneapolis,	
	Minnesota. Received the award three times.	
2018	Thank a Teacher Certificate for Outstanding Teaching, Center for Educational Innovation, University of	
	Minnesota, Minneapolis, Minnesota	
2016 - 2017	Estudiar con Esperanza Fellowship, University of Minnesota, Minneapolis, Minnesota	
2015 - 2016	Leonid Hurwicz Fellowship, Department of Economics, University of Minnesota, Minnesota	
2014 - 2015	Fellowship, Climate Policy Initiative (CPI/NAPC), Climate Policy Institute, Rio de Janeiro, Brazil	
2013 - 2014	Scholarship for Master's Studies, Brazilian Coordination Office for the Improvement of Graduate Personnel	
	(CAPES), Pontificia Universidade Católica, Rio de Janeiro (PUC-Rio), Brazil	
2012	Top Ranked Candidate, ANPEC - Brazilian National Selection Exam for graduate economics programs	

Teaching Experience

<i>Instructor</i> , Department of Economics, University of Minnesota, Minnesota, Minnesota.
Taught International Trade Writing Intensive.
Instructor, Department of Economics, University of Minnesota, Minneapolis, Minnesota.
Taught Principles of Microeconomics, Economy of Latin America, and Writing Intensive International
Finance.
Teaching Assistant, Department of Economics, University of Minnesota, Minnesota, Minnesota. Led
recitation sections for Principles of Microeconomics, Principles of Macroeconomics, Intermediate
Microeconomics, and Introduction to Microeconomics.

Research Experience

2018	Research Assistant, Carlson School of Management, University of Minnesota, Minneapolis, Minnesota.
	Research Assistant to Professor Joel Waldfogel.
2014	Research Assistant, Pontificia Universidade Católica, Rio de Janeiro (PUC-Rio), Brazil.
	Research assistant to Professor Juliano J. Assunção for the "Ownership Matters: The Geographical Dynamics
	of BAAC and Commercial Banks in Thailand" project.
2014	Research Assistant, Climate Policy Initiative (CPI/NAPC), Climate Policy Institute, Rio de Janeiro, Brazil
2010 - 2012	Research Assistant, Pontificia Universidade Católica, Rio de Janeiro (PUC-Rio), Brazil.
	Research assistant to Professor Marcelo de Paiva Abreu for the "Brazil in the International Financial Market,

Papers

"Entry Timing and the Welfare Effect of Mergers in the Same-day Grocery Delivery Marke," job market paper

1889-1930: Financial Missions and Location Foreign Loans" project.

Invited Presentations at Professional Conferences

Consumer Lock-in and Preemptive Entry: Evidence from Delivery Platforms" presented at the Louvain Economics of Digitization (LED) Young Economist Seminar (Online), December 2020 (scheduled).

"The Value of Convenience," presented at the Midwestern Economic Association Conference, Evanston, Illinois, March 2018.

"The Value of Same-Day Delivery and the Role of Offline Complements," scheduled to be presented at the Industrial Organization Society Conference, Philadelphia, PA, May 2020 (COVID - canceled); the 4th Doctoral Workshop on The Economics of Digitization, Toulouse, France, May 2020 (COVID - canceled).

Invited Workshops and Student Meetings

The National Bureau of Economic Research (NBER) Economics of Digitization Workshop, Stanford University, Stanford, California, 2018;Quantitative Marketing and Structural Econometrics Workshop, Kellogg School of Management, Evanston, Illinois, 2019.

Computer Skills

Matlab, R, Python, STATA, LaTeX

Languages

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

[&]quot;The Value of Grocery Delivery and the Role of Offline Complements," SSRN working paper

[&]quot;Crop Rotation and the Impact of Biodiesel Mandates on Deforestation," working paper

[&]quot;Global versus Local Capital Patterns in Video Platforms," with Joel Waldfogel, in progress

Abstracts

"Entry Timing and the Welfare Effect of Mergers in the Same-day Grocery Delivery Marke," job market paper

This paper proposes a framework to measure the welfare created by an innovation when consumer lock-in shapes firms' entry timing. I apply it to the evaluation of actual and potential mergers in the grocery delivery market to show how timing competition benefits consumers by accelerating entry of a new service across geographical markets. The two largest delivery platforms both offer subscriptions and, in the data, consumers that have access to both services rarely switch between them. I find that, switching costs significantly affect platform choice, generating consumer lock-in. Firms then have the incentive to chase a first-mover advantage, entering markets early to build a customer base. My model is a dynamic game between two platforms. Entry timing affects the firms' customer base growth, governed by the demand model. I find that entry costs fall over time for both firms, leading to significant costs of early entry. The first counterfactual analyses an actual merger between one of the platforms and a brick-and-mortar grocery chain which reduced this platform's entry cost across many markets. I find that, due to lock-in, it raised the stakes of early entry for the competitor, accelerating entry across new markets by more than two years. The second is a potential merger between the two platforms, resulting in a monopoly. I show the monopolist delays entry significantly and, due to lock-in, has an incentive to raise prices in the future. My welfare analysis of these mergers shows that strategic competition plays an important role in generating benefits to consumers through entry timing.

"The Value of Grocery Delivery and the Role of Offline Complements," SSRN working paper

The growth of the online economy can either reinforce or attenuate disparities in access to retail depending on the nature of its interaction with consumers' offline vicinity. This paper measures the welfare value of new online grocery services and identifies the channels through which consumers benefit from this innovation. I construct a new dataset with the roll-out of two grocery delivery platforms to show how their different delivery logistics affect consumers. I combine this geographic entry information with scanner data to estimate a demand model where consumers choose over bundles of products and retailers. I find the new services to be worth on average \$120/year to users. If delivery logistics rely on partnerships with local stores, households that live close to multiple retail stores are the most likely to gain access to the new technology. This complementarity between the delivery service and the consumer's geographic location benefits high income zip codes 34% more than low income zip codes due to differences in the supply of offline retail. On the other hand, distance to brick-and-mortar retail makes delivery a more valuable substitute to the offline economy. The value creation through this channel is 26% larger in low income zip codes compared to high income ones.

"Crop Rotation and the Impact of Biodiesel Mandates on Deforestation," working paper

In this paper, I evaluate the impact of Biodiesel mandates on land use and crop supply. Crop rotation is incorporated into a structural model of crop choice that allows for dynamic complementarity in production between soybeans and corn. As this production function ties the current crop choice to previous planting decisions, the farmer solves a single-agent dynamic program. Parameters of the farmer's profit function are estimated using a standard technique for dynamic games with data from the 30 largest grain-producing municipalities in Brazil. Unlike static models of crop choice, the dynamic model produces positive long-run cross-price elasticities for the fraction of the land cultivated with each crop. I use a large positive permanent shock in the expected long-run price for soybeans to simulate the effects of Biodiesel policies. Farmers' response to an increase in biodiesel mandates involves reallocation of cropland area between crops that are dynamic complements, increasing corn supply indirectly in the long-run.

"Global versus Local Capital Patterns in Video Platforms," with Joel Waldfogel, in progress

Over the past decade or so, markets of music and movies have moved from a la carte sales of individual products to subscription sales of bundles through platforms such as Netflix, Hulu, HBO, Amazon Prime, Spotify and Apple Music. So far, competition and firm strategies have unfolded very differently in the markets for music and video (movies and television). In music, the different platforms carry essentially identical catalogs, ad with rare exceptions the platforms do not own any content outright. In video, by contrast, platforms increasingly maintain differentiated catalogs, own much of their programming outright, and are competing on differentiated exclusive content. Major players in music, such as Spotify and Apple Music, operate in many countries around the world, as do many of the major players in video. On the one hand, an important dimension of catalog differentiation in Video is how content varies by country allowing each platform to curate a "local capital" of content targeted to local tastes. On the other hand, the increasing amount of content produced by the platforms themselves contributes to the growth of a "global capital" shared across countries. In this paper, we describe these trends in the video industry and model the platform's choice of different forms of content capital.