Timur Abbiasov

Columbia University Department of Economics 420 West 118th Street New York, NY 10027, USA

Phone: (646) 940-5692 Email: tabbiasov@columbia.edu Homepage: tabbiasov.me

Research Interests

Urban economics, Human mobility

Education

| Ph.D. in Economics <i>Columbia University</i> New York | 2015-2021 (expected) |
|---|-------------------------|
| B.A. in Economics <i>New Economic School and Higher School of Economics</i> Moscow, Russia | 2011-2015 |
| oh Market Paper | |

Job Market Paper

Do Urban Parks Promote Racial Diversity in Social Interactions? Evidence from New York City

Abstract: While policymakers and urban planners often praise public space for promoting racial diversity, empirically it remains unclear whether these places play a role in creating diverse social environments for the city's residents. Focusing on parks in New York City as the exemplar of modern public space, I estimate the causal relationship between access to parks and individually experienced diversity. To do so, I introduce a measure of racial diversity that captures one's level of exposure to diverse others in places visited on a daily basis, utilizing a novel dataset featuring individual GPS tracking data for more than 60 thousand Twitter users in the New York metro area. My empirical strategy relies on obtaining a time-varying measure of access to parks that incorporates information about ongoing construction and repair works across the city. The results show that additional 10 acres of parkland within the 5km radius from home increase one's experienced diversity by about 1 p.p. (or 5% of the standard deviation). I also provide evidence to suggest that park accessibility affects the diversity of white and black residents differently: the effect appears to be more pronounced for whites than blacks, suggesting that parks in majority-white neighborhoods are able to attract a broader range of visitors compared to the local parks in black neighborhoods.

> Last updated: September 28, 2020 https://tabbiasov.me/resume/

Placement Chairs:

Placement Assistant:

Don Davis, drd28@columbia.edu Suresh Naidu, sn2430@columbia.edu Amy Devine (212) 854-6881 aed2152@columbia.edu

2020

Other Working Papers

Do Local Businesses Benefit from Stadiums? The Case of Major Professional Sports Leagues Arenas

Abstract: Stadiums cost hundreds of millions of dollars to build and are often subsidized by public sources. Subsidies are partly allocated in expectation that stadiums can improve the local economy by generating spending at local businesses. How large are such local spillover effects? We provide empirical evidence using data on the stadiums of major US sports leagues' teams. The dataset consists of stadium names and game dates from sportsreference.com matched with locations and daily foot-traffic of stadiums and nearby businesses from Safegraph. We estimate fixed effects and IV specifications that capture the spillover effects of stadium visit counts on visit counts to local businesses. Spillovers are heterogeneous across sports and business sectors. While baseball and football stadiums generate substantial traffic to Food & Accommodation and Retail Trade businesses, the null hypothesis of no spillovers cannot be rejected for basketball&hockey stadiums. We use the estimated effects to compare allocated subsidies with the benefits stadiums generated for the local economy.

Work and Teaching Experience

For Prof. Christian Moser, Columbia University

Research Assistant

My task was to perform data cleaning and geocoding for about 8 million raw address lines using Python and ArcGIS API. I was also responsible for providing summary reports and creating custom maps to visualize the data.

Teaching Fellow

| Econometrics I (graduate) Instructors: Seyhan Erden; Mehmet Caner; Jushan Bai and Steven Olley | Fall, 2017-2019 |
|---|-----------------|
| Econometrics II (graduate) Instructor: Ronald Miller | Fall, 2018-2020 |
| Economics of Information Instructor: Pierre-Andre Chiappori | Spring 2017 |
| Intermediate Microeconomics Instructor: Caterina Musatti | Fall 2016 |

Research Grants and Academic Awards

Research Grants and Fellowships

| Data Grant Program for Economic Research, Columbia University. \$5,000 | 2020 |
|---|-----------|
| Dissertation Fellowship Department of Economics. Columbia University | 2020-2021 |
| Dean's Fellow (Ph.D. in Economics) Columbia University | 2015-2020 |

(with *Dmitry Sedov*) 2020

2017-2018

| Research Grant Russian Science Foundation, Grant No15-18-30081 'Optimal design of information markets', under the supervision of prof. Sergei Izmalkov | 2015 |
|--|------|
| Grant for Participants of Academic Mobility Programs Higher School of Economics, Moscow, Russia | 2013 |
| Honors and Awards | |
| Diploma cum Laude New Economic School, Moscow, Russia | 2015 |
| Laureate of the Presidential Award for the Support of Talented Youth Moscow, Russia | 2010 |
| Winner of the XV All-Russian Olympiad in Economics (among school students) Moscow, Russia | 2010 |

Personal Information

| Citizenship: Russian Federation | Born in 1993 |
|---------------------------------|--|
| Coding Skills | |
| Computation and Statistics | Python, R, Stata, Mathematica, MATLAB |
| Databases | SQL, MongoDB |
| Mapping and GIS | QGIS, ArcGIS, Mapbox, deck.gl, geopandas, GDAL |
| Full-stack, Web | JavasSript, Node.js, React, D3.js |

Languages

English (fluent), Russian (native)

References

Donald R. Davis

Professor of Economics, Columbia University President, Urban Economics Association 212.854.4037 drdavis@columbia.edu

David Weinstein

Carl S. Shoup Professor of Japanese Economy 212.854.6880 dew35@columbia.edu

Reka Juhasz

Assistant Professor, Columbia University

rjuhasz.com rj2446@columbia.edu

Teresa Esteban-Casanelles

CURRICULUM VITAE

Columbia University, Department of Economics 420 West 118th Street New York, NY 10027, USA teresa.estebancasanelles@columbia.edu teresaestebancasanelles.com +1 (917) 749-5544

| Placement Co-Chairs | | Placement Administrator |
|---------------------|---------------------|---|
| Don Davis | Suresh Naidu | Amy Devine |
| drd28@columbia.edu | sn2430@columbia.edu | aed2152@columbia.edu, +1 (212) 854-6881 |

Fields

Political Economy, Behavioral and Experimental Economics, Applied Microeconomics

References

| Andrea Prat | Alessandra Casella | Mark Dean | John Marshall |
|--|---|------------------------|---------------------|
| Professor of Economics and R. P. Richman Professor of Business | Professor of Economics and Political Science | Associate Professor | Assistant Professor |
| Columbia University | Columbia University | Columbia University | Columbia University |
| +1 (212) 854-0224 | +1 (212) 854-2459 | +1 (212) 854-3669 | +1 (212) 854-5941 |
| ap3116@gsb.columbia.edu | ac186@columbia.edu | mark.dean@columbia.edu | jm4401@columbia.edu |

EDUCATION

| Ph.D. in Economics, Columbia University | 2015-21 |
|---|------------|
| en route: M.A. in Economics (2015–16), M.Phil. in Economics (2016–18) | (expected) |
| M.Sc. in Economics, Barcelona Graduate School of Economics | 2014–15 |
| B.Sc. in Economics, Universitat Pompeu Fabra | 2010-14 |

JOB MARKET PAPER

Effects of Exposure to Electoral Propaganda: Evidence from Spain (2020)

Abstract: Parties spend a substantial amount of their budget in advertising prior to elections but does this have any effect on voting behavior? This paper uses a novel dataset on street-level ad location of national-level elections within a city in Spain, where sorting of party ads to locations is randomized, to estimate the effects of ads on vote shares, how it depends on the socio-demographic characteristics of the electorate, as well as the effect of other parties' ads on vote shares and how it interacts with party platforms. I find that overall own ads have a positive effect on vote share, ads of parties with similar platforms act as complements to own ads, and ads of parties with more distant platforms act as substitutes to own ads.

Research Papers and Presentations

Other Working Papers

The Effect of Incentives on Choices and Beliefs in Games. An Experiment (2020)

with Duarte Gonçalves

Short Abstract: The level of incentives affects gameplay and beliefs through both choice mistakes and costly attention.

Party System Change and Economic Crises: Evidence from the Great Recession in Western Europe (2020) *Short Abstract*: In regions that experienced a deeper economic downturn during the Great Recession, vote shares became less concentrated and less volatile and there was also a larger support for new parties.

Work in Progress

Welfare and Political Consequences of Public Investment in Amenities. Evidence from Spatial Data in Argentina with Pablo E. Warnes

Election Closeness and Strategic Voting

Demand for Attributes in Politicians

CONFERENCE PRESENTATIONS

2020: Spanish Economic Association Symposium (scheduled)

Research Grants & Academic Awards

Research Grants & Fellowships

| Doctoral Dissertation Research Improvement Grant # 1949395 National Science Foundation; \$28,026 | 2020 |
|--|---------|
| Research Grant Program for Economic Research, Columbia University; \$17,044 | 2020 |
| Dissertation Fellowship Department of Economics, Columbia University | 2020 |
| CELSS Dissertation Grant Columbia University Experimental Laboratory for Social Sciences; \$3,000 | 2019 |
| CELSS Research Grant Columbia University Experimental Laboratory for Social Sciences; \$1,000 | 2019 |
| Awards & Honours | |
| Stewart Glanz Fellowship (Ph.D. in Economics) Columbia University | 2017–18 |

| Dean's Fellow (Ph.D. in Economics) Columbia University | 2015-20 |
|---|---------|
| Scholarship for Postgraduate Studies (declined) Fundación Ramón Areces | 2015 |
| Scholarship for Masters in Economics (BGSE) La Pedrera Foundation | 2014–15 |
| Top Ten Academic Transcripts in Economics Universitat Pompeu Fabra | 2014 |

Work & Teaching Experience

Research Assistant

| Columbia University | |
|---|---|
| Charles Angelucci and Andrea Prat | June 2017 – May 2019 |
| Charles Angelucci | Sept. 2017 – Jan. 2018 |
| Universitat Pompeu Fabra | |
| Alessandro Tarozzi | July 2013 |
| Universitat Autònoma de Barcelona | |
| Caterina Calsamiglia and Maia Güell | July 2012 |
| Teaching Fellow | |
| Columbia University | |
| Political Economy (Undergraduate) | Fall 2019 |
| Instructors: John Marshall | |
| Game Theory (Undergraduate) | Spring 2018 |
| Instructors: Wouter Vergote | I model and the second s |
| Economic Policy Analysis (Masters) | Fall 2018 |
| Instructors: Lena Edlund and Brendan O'Flaherty | 1411 2010 |
| | Spring 2010 |
| Game Theory (Undergraduate) Instructors: Benjamin Ho | Spring 2018 |
| | |
| Game Theory (Undergraduate) | Fall 2017 |
| Instructors: Benjamin Ho | |
| Principles of Economics (Undergraduate) | Spring 2017 |
| Instructor: Brendan O'Flaherty | |
| Principles of Economics (Undergraduate) | Fall 2016 |
| Instructor: Prajit K. Dutta | |

Personal Information

Full name: Teresa Esteban Casanelles

Citizenship: Spanish

Birth Year: 1992

Languages

Spanish (Native) English (Fluent) Catalan (Native) Portuguese (Good) French (Bilingual)

PROGRAMMING SKILLS

Python, QGIS, Stata, MATLAB, R, Wolfram Mathematica

Christopher D. Gibson

October 2020

| Department of Economics | Office: Economics 110C |
|-------------------------------------|-----------------------------------|
| University of California, San Diego | Phone: (917) 861-3434 |
| 9500 Gilman Drive | cdg2131@columbia.edu |
| La Jolla, CA 92093-0508 | http://www.christopher-gibson.com |
| | |

Education:

| Columbia University | |
|-----------------------------------|------|
| Ph.D in Economics | 2019 |
| M.Phil. in Economics | 2015 |
| M.A. in Economics | 2014 |
| | |
| Northwestern University | |
| B.A. in Economics | 2007 |
| B.A. in Mathematics (Dual Degree) | 2007 |

Fields of Specialization:

| Primary Field: | Behavioral Finance |
|------------------|----------------------|
| Secondary Field: | Microeconomic Theory |

Current Appointment:

Lecturer, University of California, San Diego Principles of Microeconomics (Econ 1): Fall 2019 Principles of Macroeconomics (Econ 3): Fall 2019, Spring 2020, Fall 2020 Financial Markets (Econ 173A): Winter 2020, Spring 2020

Previous Appointments:

Instructor, Columbia University Economics, Entrepreneurship, and Social Justice: Summer 2018

Teaching Assistant, Columbia University
Principles of Economics: Summer 2013, Fall 2013, Summer 2014, Spring 2015, Fall 2015, Spring 2016
Intermediate Microeconomics: Fall 2016, Spring 2017
Economics of Uncertainty and Information (P.A. Chiappori): Spring 2014

Microeconomic Analysis I (PhD; Q. Liu and P. Siconolfi): Fall 2014

Job Market Paper: The role of confidence over timing of investment information

Abstract: I present an investment environment wherein investors demand an asset based on perfectly informative signals, but face uncertainty about the timing of their information acquisition. I show that this reduces the demand and price for every period but that in the limit price as number of periods increases price converges to the true value of the asset. By introducing a concept of confidence over the time in which they receive a signal, I show that the impact of uncertainty can be exaggerated in either a negative or positive direction, with the limit price reflecting the true value of the asset depending on the type of confidence under consideration.

Working Papers:

Stackelberg oligopoly with positional uncertainty

Abstract: In a Stackelberg oligopoly setting, two firms set quantity without knowing whether they are the first or second in the market. I find that with a common prior, positional uncertainty always leads to a more competitive level of quantity. This finding is exacerbated when firms do not share a common prior and the sum of their prior beliefs of moving first exceeds unity. Even in the presence of a common prior and many identical firms as the number of firms increases, the equilibrium quantity in the presence of positional uncertainty can exceed that of perfect competition.

Social learning with limited histories

Abstract: I adapt the standard observational learning environment and introduce a limited history of observation. When agents can only observe the action of the previous agent, complete learning still occurs but with a loss of welfare. When a limited history is coupled with uncertainty over position in the queue of actors, welfare further drops - increasing in uncertainty - but complete learning still occurs in the limit. These results are illustrated with a canonical linear model but learning holds in a more general setting satisfying the usual social learning assumptions.

Research and Work Experience:

| 2011 | Research Associate | Board of Governors of the Federal Reserve |
|-----------|---------------------|---|
| 2009-2011 | Research Associate | International Monetary Fund |
| 2007-2008 | Associate Economist | Federal Reserve Bank of Chicago |
| ~ | | |

Skills:

Computer:LaTeX, Microsoft Word, Excel, PowerPoint, Adobe PhotoshopProgramming:SAS, Stata, Matlab, R, Microsoft Visual Basic, UNIX

Personal:

Languages: Citizenship: English (native), Spanish (proficient) United States

References:

Qingmin Liu Associate Professor Department of Economics Columbia University (212) 854-2512 qingmin.liu@columbia.edu Pietro Ortoleva Professor Department of Economics and Woodrow Wilson School Princeton University (609) 986-6895 pietro.ortoleva@princeton.edu Paolo Siconolfi Professor Columbia Graduate School of Business Columbia University (212) 854-3474 ps17@gsb.columbia.edu

Leonard Goff

Department of Economics, Columbia University 420 W. 118th Street, New York, NY 10027 *Last updated:* October 16, 2020

Placement chairs: Don Davis, drd28@columbia.edu Suresh Naidu, sn2430@columbia.edu Email: leonard.goff@columbia.edu Phone: (+1) 301-221-5565 Website: http://www.columbia.edu/~ltg2111/

Placement administrator:

Amy Devine aed2152@columbia.edu, (+1) 212-854-6881

Research Fields

Primary: Applied Econometrics, Labor Economics Secondary: Environmental Economics, Public Finance

Education

Ph.D. Economics, 2021 (expected), Columbia University

M.A. Economics, 2012, University of British Columbia

M.Sc Physics, 2011, University of British Columbia

B.S. Physics and B.A. Philosophy, 2008, University of Maryland, College Park (summa cum laude)

Job Market Paper

"Treatment Effects in Bunching Designs: The Impact of the Federal Overtime Rule on Hours"

The Fair Labor Standards Act (FLSA) mandates overtime premium pay for most U.S. workers, yet a lack of clean variation in the rule has made it difficult to assess its impacts on the hours they work. I use bunching observed at 40 hours in an administrative dataset of weekly paychecks to estimate this effect. To do so, I develop a general framework in which bunching at a kink point is informative about reduced form causal effects, nesting existing approaches and abstracting them from underlying structural models. Under a non-parametric shape constraint on the distribution of hours and flexible assumptions on choice, a local average treatment effect among bunchers is partially identified. The bounds are informative in the overtime context and suggest that affected workers in the U.S. work an average of at least half an hour less as a result of the FLSA mandate, in weeks that they do work at least 40 hours. Overtime policy may thus have positive employment effects, though a scale effect could dominate.

Working Papers

"A Vector Monotonicity Assumption for Multiple Instruments" (September 2020)

When a researcher wishes to use multiple instrumental variables for a single binary treatment, the familiar LATE monotonicity assumption can become restrictive: it requires that all units share a common direction of response even when different instruments are shifted in opposing directions. What I call *vector monotonicity*, by contrast, simply restricts treatment status to be monotonic in each instrument separately. This is a natural assumption in many contexts, capturing the intuitive notion of "no defiers" for each instrument. I show that in a setting with a binary treatment and multiple discrete instruments, a class of causal parameters is point identified under vector monotonicity, including the average treatment effect among units that are responsive to any particular subset of the instruments. I propose a simple "2SLS-like" estimator for the family of identified treatment effect parameters. An empirical application revisits the labor market returns to college education.

Work in Progress

"How Pure-Chance Matching Compares to a Labor Market: Norway's Shift away from Random Serial Dictatorship for Doctors Choosing First Jobs" with Ashna Arora and Jonas Hjort.

• Selected for American Economic Association Papers & Proceedings, 2021.

"Do Firms Fully Exploit Their Labor Market Power in Setting Wages? Evidence from Canada" with Matthew Mazewski

Publications

"Inequality of Subjective Well-Being as a Comprehensive Measure of Inequality" (with John Helliwell and Guy Mayraz). *Economic Inquiry*, Vol. 56, No. 4, pp. 2177-2194, October 2018.

"Does Forest Certification Stem Tropical Deforestation? Forest Stewardship Council Certification in Mexico" (with Allen Blackman and Marisol Rivera Planter). *Journal of Environmental Economics and Management*, Vol. 89, pp. 306-333, May 2018.

"Should We Treat Data as Labor? Moving Beyond 'Free' " (with Imanol Arrieta Ibarra, Diego Jiménez Hernández, Jaron Lanier and Glen Weyl). American Economic Association Papers & Proceedings, Vol. 108, pp. 38-42, May 2018.

Outside of economics:

"The Forest Conservation Targeting Tool: Accessible Spatial Prioritization for Latin America and the Dominican Republic" (with Allen Blackman, Jessica Chu, and Juha Siikamäki). SoftwareX, Vol. 10, July-December 2019.

"Classical Simulation of Measurement Based Quantum Computation on Higher Genus Surface Code States" (with Robert Raussendorf). *Physical Review A*, Vol. 86, 042301, October 2012.

"Correlation Between Particle Motion and Voronoi-Cell-Shape Fluctuations During the Compaction of Granular Matter" (with Stevie Slotterback, Masahiro Toiya, Jack F. Douglas, and Wolfgang Losert). *Physical Review Letters*, Vol. 101, 258001, December 2008.

Teaching and Employment

Teaching Fellow, Columbia University:

- Data methods (senior undergraduate, instructor Michael Best): 2019
- Second year Ph.D. micro-econometrics (instructors Joshua Angrist and Simon Lee): 2018
- Undergraduate econometrics (for Jushan Bai, Seyhan Erden and Miikka Rokkanen): 2016-2017
- First year Ph.D. econometrics (instructor Christoph Rothe): 2016
- CORE-Teagle Fellow: 2019

Intern, Microsoft Research, Cambridge, MA. Summer 2017

Research Assistant, Resources for the Future, Washington, DC. 2013-2015

Nonresident Research Intern, Brookings Institution, Washington, DC. 2014-2015

Funding and Fellowships

McMaster University Productivity Partnership Data Grant: \$10,000 CAD, 2020

Columbia University Program for Economic Research Data Grant: \$3,754 USD, 2020

Dissertation Fellowship, Department of Economics, Columbia University, 2019-2020

Columbia University Program for Economic Research Summer Fellow, 2019

The Dhrymes Econometrics Award, 2018

Natural Sciences and Engineering Research Council Alexander Graham Bell Canada Graduate Scholarship, 2010-2011

Banneker/Key full academic scholarship to University of Maryland, College Park, 2004-2008

Other Contributions

rdbounds function in Stata and R for manipulation-robust bounds in regression discontinuity designs: https://github.com/leonardgoff/rdbounds

Coding for SERVIR (NASA/USAID) Forest Conservation Targeting Tool: http://fctt.servirglobal.net

Referee service: Journal of Environmental Economics and Management, Empirical Economics

Conference presentations: Young Economists Symposium (2019), Empirics and Methods in Economics Conference (2019), Joint Statistical Meetings (2015), Southern Economics Association (2014)

Personal

Citizenship: U.S. and Canada

Languages: English (native), Spanish (basic)

References

Sokbae (Simon) Lee Professor of Economics, Columbia University Research Staff, Cemmap, Institute for Fiscal Studies sl3841@columbia.edu

Bernard Salanié Professor of Economics, Columbia University bs2237@columbia.edu Suresh Naidu Professor of Economics, Columbia University Professor of International and Public Affairs, Columbia University sn2430@columbia.edu

Duarte Gonçalves

CURRICULUM VITAE

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PLACEMENT CO-CHAIRS
Don DavisSureshdrd28@columbia.edusn2430

Suresh Naidu sn2430@columbia.edu duarte.goncalves@columbia.edu duartegoncalves.com +1 917-254-2109

PLACEMENT ADMINISTRATOR Amy Devine aed2152@columbia.edu, +1 212-854-6881

RESEARCH INTERESTS

Microeconomic Theory, Behavioral and Experimental Economics, Information Economics

REFERENCES

| Yeon-Koo Che | Navin Kartik | Mark Dean |
|---|----------------------|------------------------|
| Kelvin J. Lancaster Professor of Economic Theory | Professor | Associate Professor |
| Columbia University | Columbia University | Columbia University |
| +1 212-854-8276 | +1 212-854-3926 | +1 212-854-3669 |
| yc2271@columbia.edu | nkartik@columbia.edu | mark.dean@columbia.edu |

EDUCATION

| Ph.D. in Economics, Columbia University en route: M.A. in Economics (2016-17), M.Phil. in Economics (2017-19) | 2016-21 (expected) |
|--|-----------------------|
| M.Sc. in Economics, ISCTE - University Institute of Lisbon | 2014-16 |
| B.Sc. in Economics, ISCTE - University Institute of Lisbon | 2011-14 |
| Dipl. Adv. Studies in Moral and Political Philosophy, NOVA University of Lisbon | 2012-13 |
| B.Sc. in History, NOVA University of Lisbon | 2008-11 |

JOB MARKET PAPER

Sequential Sampling and Equilibrium (2020)

Abstract: I propose an equilibrium solution concept in which players sequentially sample to resolve strategic uncertainty over their opponents' distribution of actions. Bayesian players sample from their opponents' distribution of actions at a cost and make optimal choices given their posterior beliefs. The solution concept makes predictions on the joint distribution of players' choices, beliefs, and decision times, and generates stochastic choice through the randomness inherent to sampling, without relying on indifference or choice mistakes. It rationalizes well-known deviations from Nash equilibrium such as the own-payoff effect and I show its novel predictions relating choices, beliefs, and decision times are supported by existing data.

RESEARCH PAPERS AND PRESENTATIONS

OTHER WORKING PAPERS

Statistical Mechanism Design: Robust Pricing and Reliable Projections (2020)

with Bruno Furtado

Short Abstract: A mechanism designer with a sample of consumers' types can conduct valid inference on profit and regret and use our toolkit to compare mechanisms.

The Effect of Incentives on Choices and Beliefs in Games. An Experiment (2020)

with Teresa Esteban-Casanelles

Short Abstract: The level of incentives affects gameplay and beliefs through both choice mistakes and costly attention.

Diagonal Games: A Tool for Experiments and Theory (2020)

Short Abstract: Diagonal games are a useful benchmark to study cognitive limitations in strategic settings, both for exploring predictions of theoretical models and for experimental implementations.

Recommenders' Originals: Integrated Recommender Systems and Vertical Foreclosure (2020)

with Guy Aridor

Short Abstract: The ability of platforms to bias their recommendations can lead to vertical foreclosure, but separating recommendation and production is not always welfare improving.

Retractions (2020)

with Jonathan Libgober and Jack Willis

Short Abstract: The data shows retractions are typically treated as less informative compared to new information, but also lead to better accommodating new information that follows.

WORK IN PROGRESS

The Dynamics of Conflict

Short Abstract: When agents optimally commit resources over time in order to disturb the status quo, greater inequality generates greater instability.

Revising Beliefs on Belief Updating: Theory and Experimental Evidence

with Arthur Prat-Carrabin

Short Abstract: Individuals update beliefs as if sampling from memory, a model that rationalizes the observed patterns of over- and under-updating.

OTHER PUBLICATIONS

Trends in Public Finance: Insights from a New Detailed Dataset (2016)

with Debra Bloch, Jean-Marc Fournier and Álvaro Pina OECD Economics Department Working Papers 1345

Short Abstract: The OECD Public Finance Dataset is cross-country panel dataset with key variables on public finance intended to promote research on the relation between fiscal policy, inequality and long-run growth.

CONFERENCE PRESENTATIONS

| 2021: | Games | 2020 | (scheduled) |
|-------|-------|------|-------------|
|-------|-------|------|-------------|

2020: Spanish Economic Association Symposium (scheduled)

INVITED SEMINAR PRESENTATIONS

2019: NYU Microeconomics Student Lunch; SWEET-Wharton: Student Workshop in Experimental Economic Techniques

2018: PSE Summer School Bounded Rationality Workshop

TEACHING EXPERIENCE

INSTRUCTOR

| FCSH/NOVA University of Lisbon | |
|---|------------------------|
| Democracy and Collective Choice (Summer school) | Summer 2014 |
| TEACHING FELLOW | |
| Columbia University | |
| Microeconomic Analysis I (Ph.D. 1st Year course) Decision Theory, General Equilibrium and Game Theory. Instructors: Mark Dean and Evan Sadler | Fall 2019 |
| Microeconomic Analysis II (Ph.D. 1st Year course) Game Theory and Contract Theory. Instructors: Yeon-Koo Che and William Bentley MacLeod | Spring 2018 |
| Game Theory (Undergraduate) Instructor: Prajit K. Dutta | Fall 2018 |
| Principles of Economics (Undergraduate) Instructor: Sunil Gulati | Fall 2017, Spring 2018 |
| ISCTE - University Institute of Lisbon | |
| Microeconomics I (Undergraduate) Instructor: Nádia Simões | Spring 2015 |
| Microeconomics II (Undergraduate) Instructor: Henrique Monteiro | Fall 2014 |

RESEARCH GRANTS & ACADEMIC AWARDS

| Research Grants & Fellowships | |
|---|------------|
| Doctoral Dissertation Research Improvement Grant # 1949395 National Science Foundation; \$28,026 | 2020 |
| Research Grant Program for Economic Research, Columbia University; \$17,044 | 2020 |
| Dissertation Fellowship Department of Economics. Columbia University | 2020 |
| Summer Research Fellowship Program for Economic Research, Columbia University | 2019, 2020 |
| CELSS Dissertation Grant Columbia University Experimental Laboratory for Social Sciences; \$3,000 | 2019 |
| CELSS Research Grant Columbia University Experimental Laboratory for Social Sciences; \$1,000 | 2019 |
| vards & Honours | |
| Best Teaching Assistant (Ph.D.) Association of Graduate Students in Economics, Columbia University | 2020 |
| Ralph Erdman Holben Fund Fellowship (Ph.D. in Economics) Columbia University | 2019-20 |
| Caswell L. Johnson Columbia Scholarship (Ph.D. in Economics) Columbia University | 2018-19 |
| Dean's Fellow (Ph.D. in Economics) Columbia University | 2016-18 |
| Best 1st Year Student Award (M.Sc. in Economics) ISCTE - University Institute of Lisbon | 2015 |
| Bank of Portugal Best Student Award (B.Sc. in Economics) Bank of Portugal | 2015 |
| Best Student Award (B.Sc. in Economics) ISCTE - University Institute of Lisbon | 2015 |
| Academic Excellence Award (B.Sc. in Economics) ISCTE - University Institute of Lisbon | 2012 |
| Merit & Excellence Best Student Award (B.Sc. in History) FCSH/NOVA University of Lisbon | 2012 |
| Merit Student Award & Scholarship (B.Sc. in History) NOVA University of Lisbon | 2010 |
| | |

PROFESSIONAL SERVICE

Refereeing

Games and Economic Behavior

ORGANIZING

| Student Organizer. Micro Theory Colloquium. Columbia University | 2019-20 |
|---|---------|
| Organizer. Micro Theory Summer Reading Group. Columbia University | 2019 |
| Organizing Committee. Young Economists Symposium. Columbia University | 2019 |

SOFTWARE DEVELOPED

| GETDATA: Stata module to import SDMX data from several providers | 2015 |
|---|------|
| Boston College Department of Economics. Statistical Software Components S458093 | |
| XTEUROSTAT: Stata module to import data from Eurostat in panel data structure | 2015 |
| Boston College Department of Economics. Statistical Software Components S458089 | |

PERSONAL INFORMATION

Full name: Duarte Gonçalves Dias da Silva

Citizenship: Portuguese

Birth Date: August 23rd, 1990

LANGUAGES

| Portuguese (Native) | English (Fluent) | Spanish (Very Good) |
|---------------------|---------------------|---------------------|
| French (Good) | German (Elementary) | |

PROGRAMMING SKILLS

Python, MATLAB, R, Wolfram Mathematica, Stata, MS Office Excel, Eviews, SPSS

Seungki Hong

October 13, 2020

Department of Economics Columbia University 420 West 118th Street New York, NY 10027

Phone: +1 (917) 826-2439 Email: sh3454@columbia.edu Website: www.seungkihong.com

Education

Ph.D. in Economics, Columbia University, 2021 (expected)

M.Phil. in Economics, Columbia University, 2019

M.A. in Economics, Columbia University, 2017

Graduate School in Economics, Seoul National University, 2013-2015

B.S. in Mathematical Science and B.A. in Economics, summa cum laude, Seoul National University, 2013

Fields of Research Interest

Macroeconomics, International Economics

Research

Job Market Paper

"Emerging Market Business Cycles with Heterogeneous Agents"

This paper makes the first attempt to study the emerging market business cycles in a heterogeneousagent small open economy model with aggregate uncertainty. The model's two-asset environment over different degrees of liquidity is calibrated so that the marginal propensities to consume (MPC) are as high as empirical estimates from emerging market micro data, which are substantially greater than the U.S. MPC estimates. I then take the model to macro data through Bayesian estimation. I find that high-MPC households generate the stylized pattern of emerging economies that consumption is more volatile than output: this phenomenon disappears when households are counterfactually replaced with those exhibiting U.S. MPCs. High-MPC households contribute to the consumption volatility through i) their strong consumption response to resource fluctuations and ii) their significantly enhanced precautionary saving when illiquid assets becomes more illiquid. The mechanisms of conventional theories are dampened in my model because high-MPC households cannot accommodate them well.

Working Papers

"MPCs and Liquidity Constraints in Emerging Economies"

For the first time in the literature, this paper estimates the marginal propensity to consume (MPC) out of transitory income shocks using micro data for an emerging economy. To this end, I employ a nationally representative Peruvian household survey. Two striking differences emerge when the Peruvian MPC estimates are compared with U.S. MPC estimates obtained by the same method. First, the mean MPC of Peruvian income deciles (0.632) is much higher than that of U.S. deciles (0.089). Second, within-country MPC heterogeneity over the deciles is substantially stronger in Peru. Patterns in the consumption growth of the deciles and the MPCs of unconstrained top income groups delineated by an MPC homogeneity test suggest that liquidity constraints are important for explaining both the higher mean MPC and the stronger MPC heterogeneity in Peru.

"Who Bears Aggregate Fluctuations in Emerging Economies?"

This paper assesses how rich and non-rich households share aggregate consumption and income fluctuations differently between a developed economy and an emerging economy. To this end, I apply the fluctuation decomposition method devised by Parker and Vissing-Jorgensen (2009) to the U.S. and Peruvian household surveys. The U.S. bottom 80% consumption group contributes to aggregate consumption fluctuations 0.8 times as much as it does to aggregate income fluctuations, while Peruvian bottom 80% consumption group contributes to aggregate consumption fluctuations 1.7 times more than it does to aggregate income fluctuations. This result suggests that non-rich households in emerging economies could be important contributors to the phenomenon of excess consumption volatility, the stylized pattern of emerging economies that consumption is more volatile than output. The existing theories for the excess consumption volatility do not square well with this finding because these theories involve mechanisms that non-rich households in emerging economies are less able to accommodate.

Pre-Doctoral Publication

(In Korean) "The Value-Added and the Productivity of Korean Banking Industry," with Se-Jik Kim, *Economic Analysis* 21(3), 2015, 35-74.

This paper aims to evaluate the core ability of Korean banks to distinguish more productive firms from less productive ones and provide loans selectively to the former. To this end, we calculate the value-added of Korean banks from the distribution side, and then assess total factor productivity (TFP) of the banks using the financial statement data for the period 1991-2013. We find that the productivity of the Korean baking sector has not far grown from the level of the early 1990s. The banking sector productivity, which plummeted during the 1997 Korean financial crisis, rebounded in the mid-2000s but retreated again to its level of 1991 in recent years. We also discover that major declines in the Korean banking sector productivity can be largely attributed to tremendous losses from huge bad loans. These findings suggest that Korean banks may not have fully developed their capacity to select high-productivity firms and reduce bad loans for the last two decades.

Fellowships, Honors, and Awards

Graduate School of Arts and Sciences (GSAS) Fellowship, Columbia University, 2015 - 2021

David C.F. Hsiung '34 M.A. and Vivian S.Y.W. Hsiung Fellowship (supporting part of GSAS Fellowship), Columbia University, 2019 - 2020

The Korean Government Scholarship (for Ph.D. studies), National Institute for International Education in Korea, 2015 - 2017

National Science and Engineering Scholarship for Undergraduate Studies (merit-based), Korea Student Aid Foundation, 2006 - 2013

Silver Prize in the Field of Mathematics, the Mathematics and Science Competition for High School Students, Seoul Metropolitan Office of Education, 2005

Research Assistantship

Martin Uribe and Stephanie Schmitt-Grohe, Columbia University, 2017 - 2018

Se-Jik Kim, Seoul National University, 2013 - 2014

Teaching Assistantship

Macroeconomic Analysis II (1st Year Ph.D.), Martin Uribe and Michael Woodford, Columbia University, Spring 2019

Intermediate Macroeconomics (Undergraduate), Ronald Miller, Columbia University, Fall 2018

Money and Finance (Undergraduate), Se-Jik Kim, , Seoul National University, Fall 2014

Dynamic Macroeconomics (Undergraduate), Se-Jik Kim, Seoul National University, Spring 2014

Conference Presentations

Midwest Macro Meetings (Fall 2019)

Other Information

Programming: Matlab, Python, Stata

Language: Korean (Native), English

Other Activities:

- Student Coordinator of the Economic Fluctuations Colloquium Organized by Stephanie Schmitt-Grohe and Martin Uribe (Spring 2018) and Andres Drenik (Fall 2018)
- Military Service, Sergeant, Riot Police, 2008-2009

References

Martin Uribe

Professor of Economics Department of Economics Columbia University mu2166@columbia.edu +1 (212) 851-4008 Stephanie Schmitt-Grohe Professor of Economics Department of Economics Columbia University ss3501@columbia.edu +1 (212) 851-4010

Andres Drenik

Professor of Economics Department of Economics Columbia University ad3376@columbia.edu +1 (650) 888-8349



Nathaniel D. Mark PhD Candidate Columbia University

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|------------------------|---|--|--|
| Research Interests | Health Economics, Indus | trial Organization, Applied Econometrics | |
| EDUCATION | Columbia University, New York, NY | | |
| | Ph.D., Economics, Exp David C.F. Hsiung '34 | ected May 2021 M.A. and Vivian S.Y.W. Hsiung Fellow | |
| | | May 2017as: Industrial Organization and Econometricstherine Ho, Prof. Bernard Salanie, Prof. Ashley Swanson | |
| | | Math Methods for Economists, Macroeconomic Analysis pnomic Analysis I&II, Intro to Econometrics I&II, Perspec- mics | |
| | tion, Industrial | Industrial Organization I, Empirical Industrial Organiza- Organization III, Microeconometrics, Macroeconometrics, ometrics, Topics in Health Economics | |
| | London School of Econor | nics, London, UK | |
| | M.Sc., Economics, with | h Merit, July 2015 | |
| | • Specialization: Indi | ustrial Organization | |
| | The Johns Hopkins Unive | ersity, Baltimore, MD | |
| | B.A., Economics, with | Departmental and General Honors, May 2014 | |
| | • Major: <i>Economics</i> | | |
| | • Minors: <i>History</i> , M | athematics, and Applied Mathematics and Statistics | |
| Job Market Paper | • "Access to Care in Equ | ilibrium" (Job Market Paper) | |
| | ket without prices. I estim with physicians, using data model, the market is cleare | ies access to care as an equilibrium outcome of a mar- nate an empirical matching model where patients match a from the Northern Ontario primary care market. In the ed by a non-price mechanism: the effort it takes to find a patients. I find that access to care is lower in rural areas | |



than urban or suburban areas. This is not caused by lower physician-to-population ratios in rural areas, but the distances patients must travel. Young adults in urban and suburban areas also face low access to care, caused by difficulties in finding physicians who are accepting patients. Two policies are analyzed. Alternative payment systems are found to increase access to care by incentivizing larger patient panels. Grants to attract physicians to areas with low access to care are found to be inefficient, because they are allocated according to imprecise measures of access to care.

- WORKING PAPERS "Market Segmentation and Competition in Health Insurance" (with Kate Ho and Michael Dickstein)
 - "NHSC Policy and Health Care Personnel Distributions in the US"

TEACHING EXPERIENCE

Columbia University, New York, NY

Teaching Assistant, Undergraduate Courses

- Introduction to Econometrics (Fall 2016, Spring 2017, Fall 2018)
- Industrial Organization (Fall 2017)
- Time Series Econometrics [BA/MA](Spring 2018, Spring 2019)
- Intermediate Microeconomics (Fall 2020)

Teaching Assistant, Graduate Courses

• Mathematics for Economists [Ph.D] (Summer 2017)

Awards

• Wueller Teaching Award [for best teaching of a core undergraduate economics course] (Fall 2016/Spring 2017)

| Committee | Columbia University, New York, NY |
|----------------|---|
| Memberships | • Industrial Organization Colloquium, Student Organizer (Fall 2018, Spring 2018) |
| AND ADVISING | • Industrial Organization Reading Group, Organizer (Summer 2018, Summer 2019) |
| Positions | • ISERP Interdisciplinary Graduate Student Seminar, Founding Organizer (Fall 2017 - Spring 2019) |
| | • Association for Graduate Economics Students, Treasurer (Fall 2016 - Fall 2018) |
| | • Economics Department, Undergraduate Advisor (Spring 2018) |
| | The Johns Hopkins University, Baltimore, MD |
| | • Career Center, Peer Advisor (Spring 2011- Spring 2012) |
| Research | Columbia University, New York, NY |
| ASSISTANTSHIPS | • Research Assistant, Prof. Katherine Ho, Economics Department (Feb 2017 - Aug 2018) |
| | The Johns Hopkins University, Baltimore, MD |
| | • Research Assistant, Prof. Louis Galambos, Institute for Applied Economics, Global |

Health, and the Study of Business Enterprise (Jan 2014 - June 2015)



- Research Assistant, Prof. Nicholas Papageorge, Economics Department (Sep 2013 Aug 2014)
- Research Assistant, Prof. Steve Hanke, Institute for Applied Economics, Global Health, and the Study of Business Enterprise (June 2012 Sep 2013)
- Research Assistant, Jessica Holzer, Bloomberg School of Public Health (Jan 2012 - Apr 2012)

United States Patent and Trademark Office, Alexandria, VA

• Trainee (Economist), Office of the Chief Financial Officer (June 2012 - Jan 2013)

| TECHNICAL Experience | Course Experience: R, Stata, Matlab, Python, Bash Work/Research Experience: R, Stata, LATEX, Excel, ArcGIS, SAS |
|-------------------------|--|
| Personal Information | Native Language: English Citizenship: USA Marital Status: Single |
| References | • Kate Ho (kate.ho@princeton.edu) |

- Bernard Salanie (bs2237@columbia.edu)
- Ashley Swanson (ats2180@gsb.columbia.edu)

LORENZO PESSINA

Department of Economics Columbia University 420 West 118th Street New York, NY 10027 September 2020 Email: l.pessina@columbia.edu Website: lorenzopessina.com Phone: (+1) 646-549-4512 Citizenship: Italian

Placement Chairs: Don Davis, drd28@columbia.edu, Suresh Naidu, sn2430@columbia.edu Placement Assistant: Amy Devine, (+1) 212-854-6881, aed2152@columbia.edu

EDUCATION

| Columbia University | |
|---|-----------------|
| Ph.D. in Economics | (expected) 2021 |
| M.Phil. in Economics | 2018 |
| M.A. in Economics | 2017 |
| Bocconi University, Milan | |
| M.Sc. in Economics and Social Sciences, summa cum laude | 2015 |
| B.A. in International Economics, Management, and Finance, $summa\ cum\ laude$ | 2012 |

RESEARCH FIELDS

Public Finance, Migration, Economic Inequality, Applied Micro

RESEARCH PAPERS

Who Writes the Check to the Government Does Matter: Evidence from Firm-to-Firm Links (Job Market Paper)

This paper quantifies the behavioral response of firms to a reform to the collection of Value Added Tax (VAT). Combining administrative data on firm-to-firm links from Italy and a quasi-experimental design, I find that the reform had limited impact in improving compliance, yet it distorted firm operations and market outcomes along two main dimensions. First, business transactions affected by the reform are 2.5pp more likely to become inactive. Second, firms are not able to completely substitute these transactions with new ones. As a result, firms more exposed to the reform report lower business sales and a lower survival probability.

Importing Inequality: Migration, Mobility, and the Top 1 percent (joint with Arun Advani, Felix Koenig, and Andy Summers)

In this paper we study the contribution of migrants to the rise in UK top incomes. Using administrative data on the universe of UK taxpayers we show migrants are concentrated at the top of the income distribution, with migrants twice as prevalent in the top 0.1 percent as anywhere in the bottom 96 percent. These high incomes are predominantly from labour, rather than capital, and migrants are concentrated in only a handful of industries, predominantly finance. Almost all (85%) of the growth in the UK top 1% income share over the past 20 years can be attributed to migration.

RESEARCH PAPERS IN PROGRESS

Taxation and International Relocation of Top Earners: Estimates from UK Tax Records (joint with Arun Advani, Felix Koenig, and Andy Summers)

The Saved and the Probate: The Trade-off between Control and Inheritance Tax Minimization (joint with Cameron LaPoint)

RESEARCH GRANTS

| NSF Doctoral Dissertation Research Improvement Grant, SES-1919322, \$19,877 | 2019-2021 |
|---|-----------|
| Data Purchase Support, Program for Economics Research, Columbia University, \$5,000 | 2019 |
| Student Research Travel Grant, CDEP, Columbia University, \$600 | 2017 |

FELLOWSHIPS & AWARDS

| Dissertation Fellowship, Department of Economics, Columbia University | 2020-2021 |
|---|-----------|
| Wueller Pre-Dissertation Award (runner-up), Columbia University | 2018 |
| Vickrey Prize for Best Third Year paper, Columbia University | 2018 |
| Wueller Teaching Award (runner-up), Columbia University | 2017 |
| Dean's Fellowship, Columbia University | 2015-2020 |
| Graduate Merit Award, Bocconi University | 2012-2015 |

TEACHING EXPERIENCE

| Summer 2018 |
|-----------------------|
| |
| Fall 2016, 2017, 2019 |
| |
| Fall 2018 |
| Fall 2018 |
| |

RESEARCH EXPERIENCE

| PhD Student Affiliate, CAGE, University of Warwick | 2019 - present |
|---|----------------|
| Research Assistant for Francois Gerard, Columbia University | 2017 |

2014-15

PROFESSIONAL EXPERIENCE

Research Intern, Global Investment Research, Goldman Sachs, London UK

CONFERENCE PRESENTATIONS

2020: National Tax Association Annual Conference (NTA, $\times 2$), CEMIR Junior Economist Workshop on Migration Research (CESifo Munich), Agenzia delle Entrate (Rome), LMU Munich, Economic Statistics Centre of Excellence (ESCoE), Annual MannheimTaxation Conference (ZEW Mannheim), Econometric Society World Congress, Young Economist Symposium, IIPF Annual Congress*, APPAM DC Regional Student Conference (canceled due to Covid-19), LSE*, UCL*

2019: National Tax Association Annual Conference (NTA, poster session)
2018: Young Economist Symposium
*presented by co-authors.

PROFESSIONAL ACTIVITIES

Invited Attendance: NBER Business Tax Graduate Workshop and Meeting Referee for the Young Economist Symposium Co-organizer of reading group: Public Economics and Taxation Student Organizer: Lunch with the Applied Micro Speaker

PERSONAL

Citizenship: Italy US status: F-1 Visa Languages: English (fluent), Italian (native), French (basic)

REFERENCES

Wojciech Kopczuk

Professor of Economics and Professor of International and Public Affairs Columbia University (+1) 212-854-2519 wk2110@columbia.edu

Eric Verhoogen

Professor of Economics and Professor of International and Public Affairs Columbia University (+1) 212-854-4428 eric.verhoogen@columbia.edu

Michael Best

Assistant Professor of Economics Columbia University (+1) 415-316-5006 michael.best@columbia.edu

Arun Advani

Assistant Professor of Economics Warwick University +44-24-765-23056 a.advani.1@warwick.ac.uk

2018 2018-2020 Summer 2018 2018-2020

Dilip Ravindran

October 2020

Department of Economics Columbia University New York, NY 10027

drr2130@columbia.edu https://sites.google.com/view/dilip-ravindran +1-510-928-3649

Placement Chairs

Don Davis: drd28@columbia.edu Suresh Naidu: <u>sn2430@columbia.edu</u>

Research Interests

Microeconomic Theory, Behavioral and Experimental Economics, Political Economy, Information Economics

References

| Navin Kartik | Mark Dean | Alessandra Casella |
|----------------------|------------------------|---------------------|
| Professor | Associate Professor | Professor |
| Columbia University | Columbia University | Columbia University |
| nkartik@columbia.edu | mark.dean@columbia.edu | ac186@columbia.edu |
| +1-212-854-3926 | +1-212-854-3669 | +1-212-854-2459 |

Education

| Ph.D. in Economics, Columbia University | 2015-21 (expected) |
|---|--------------------|
| M. Phil. in Economics, Columbia University | 2015-18 |
| M.A. in Economics, Columbia University | 2015-17 |
| B.A. University of California, Berkeley Majors: Applied Mathematics, Economics; Minor: Physics | 2011-2015 |

Job Market Paper

Competing Persuaders in Zero-Sum Games (with Zhihan Cui, 2020)

Abstract: We study a Bayesian Persuasion game with multiple senders employing conditionally independent experiments. Senders have zero-sum preferences over what information is revealed. We characterize when a set of states cannot be pooled in any equilibrium, and in particular, when the state is (fully) revealed in every equilibrium. The state must be fully revealed in every equilibrium if and only if sender utility functions are sufficiently nonlinear. In the binary-state case, the state is fully revealed in every equilibrium if and only if some sender has nontrivial preferences. Our takeaway is that `most' zero-sum sender preferences result in full revelation.

Placement Assistant Amy Devine: aed2152@columbia.edu, +1-212-854-6881

Working Papers

Information Aggregation in Liquid Democracy (2020)

Work in Progress

A Better Test of Choice Overload with Mark Dean and Jörg Stoye

Competition for Choice Overloaded Consumers

Learning to Ignore Non-rationalizable Actions with Evan Friedman and Jeremy Ward

Teaching and Research Experience

Teaching Fellowships

| Intermediate Microeconomics (Undergraduate) Instructor: Ingmar Nyman | Spring 2020 |
|--|--------------------------|
| Intermediate Microeconomics (Undergraduate) Instructor: Caterina Musatti | Spring 2019 |
| Microeconomic Analysis I (Ph.D. 1st Year Course) Decision Theory, General Equilibrium, and Game Theory. Instructors: Mark Dean and Evan Sadler | Fall 2018 |
| Microeconomic Analysis II (Ph.D. 1st Year Course) Game Theory and Contract Theory. Instructors: Navin Kartik and William Bentley Mcleod | Spring 2018 |
| Principles of Economics (Undergraduate) Instructor: Caterina Musatti | Fall 2016, Spring 2017 |
| Research Assistanceships | |
| Research Assistant for Mark Dean (Columbia University, Economics) (Hourly RA work) | Spring 2019, Spring 2018 |
| Research Fellow for Navin Kartik (Columbia University, Economics) | Summer and Fall 2017 |
| Research Assistant for Francois Gerard (Columbia University, Economics) (Hourly RA work) | Summer and Fall 2016 |
| Research Assistant | Spring 2014- Summer 15 |

| for Heather Haveman (Haas School of Business, UC Berkeley) | |
|---|-------------|
| Research Assistant for Steven Fish (UC Berkeley, Political Science) | Spring 2013 |
| Technology for Emerging Markets Intern (Microsoft Research India) | Summer 2012 |

Research Grants, Fellowships, and Awards

| Dissertation Fellowship (Department of Economics, Columbia University) | Fall 2019, Fall 2020 |
|---|----------------------|
| CELSS Research Grant (Columbia University Experimental Lab for Social Science Research); \$1000 | 2018 |
| Runner-up, Vickery Prize for Best 3rd Year Paper (Department of Economics, Columbia University) | 2018 |
| Summer Research Fellowship (Program for Economic Research, Columbia University) | 2017 |
| Wueller Fellowship (Department of Economics, Columbia University) | 2015-20 |
| Dean's Fellowship (GSAS, Columbia University) | 2015-16 |

Invited Seminar Presentations

2019: NYU Microeconomics Student Lunch

Personal

Citizenship: United States

Languages: English (native)

PABLO E. WARNES

Updated on 09/29/2020

PERSONAL INFORMATION

Nationality: Argentine and Italian E-mail address: pew2116@columbia.edu Website: pewarnes.github.io Fields of Specialization: Urban Economics, International Trade, Development Economics

EDUCATION

| Columbia University PhD in Economics | 2015-2021 (expected) |
|---|----------------------|
| Columbia University Master of Philosophy in Economics | 2015-2018 |
| Columbia University Master of Arts in Economics | 2015-2017 |
| Universidad de San Andrés Master in Economics | 2012 |
| Universidad de San Andrés Licenciado en Economía Magna cum laude | 2008-2012 |

JOB MARKET PAPER

Transport Infrastructure Improvements, Intra-City Migration, and Spatial Sorting: Evidence from a BRT system in Buenos Aires

How do improvements in the urban transport infrastructure affect spatial sorting between high- and low-skilled workers? In this paper, I leverage individual level panel data on the addresses of more than two million individuals in order to study the effect of the construction of a bus rapid transit system (BRT) in the city of Buenos Aires, Argentina, on the spatial reorganization of residents within the city. I then develop a dynamic quantitative spatial equilibrium model of the city in order to quantify the heterogenous welfare effects of this BRT system, as well as to study the effect of different counterfactual scenarios on the spatial sorting of workers within the city. My findings suggest that the effects of increasing market access on the share of high-skilled residents is increasing in the initial highskill share of the neighborhood. For census tracts in neighborhoods with the lowest share of high-skill workers, an increase in market access reduced the share of high-skilled workers living in those census tracts. However, for census tracts with an initially high share of high-skill workers, an increase in market access resulted in an increase in the high-skill share. I show that these spatially differentiated effects led to an increase in the spatial segregation between high and low-skilled residents in the city.

PUBLICATIONS

Published Papers

[•] Intergenerational Field Transitions in Economics (with Facundo Albornoz, Antonio Cabrales, and Esther Hauk), *Economics Letters*, Volume 154, 2017.

- · **Diferencias educativas entre escuelas privadas y públicas en Argentina** [Educational Differences between Private and Public Schools in Argentina] (with Facundo Albornoz, Melina Furman, Paula Razquin and María Eugenia Podesta), *Desarrollo Económico*, Volume 56, 2016.
- Country Risk and the Cost of Equity in Emerging Markets (with Ignacio Warnes), Journal of Multinational Financial Management, Volume 28, December 2014.

Other publications

- Resultados PISA en Iberoamérica: desempeños similares, distintos contextos [Results from PISA in Ibero-America: similar outcomes, different backgrounds] (with Facundo Albornoz) in *El Estado de la Ciencia. Principales indicadores de ciencia y tecnología iberoamericanos / interamericanos*, RICyT, 2013.
- Esfuerzos en Educación en Iberoamérica y su vínculo con la investigación y el desarrollo [Educational efforts in Ibero-America and its relationship with Research and Development] (with Facundo Albornoz) in El Estado de la Ciencia. Principales indicadores de ciencia y tecnología iberoamericanos / inter-americanos, RICyT, 2012.

WORKS IN PROGRESS

- Welfare and Political Consequences of Public Investment in Amenities. Evidence from Spatial Data in Argentina (with Teresa Esteban-Casanelles), 2020.
- · The Effects of Advertising On Product Appeal: A Spatial Discontinuity Approach, 2019.

ACADEMIC EXPERIENCE

1 5

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| | Research Experience | |
|---|--|---------------------------|
| | Research Assistant for Eric Verhoogen | October 2017 - June 2018 |
| | Research Assistant for Juan Carlos Hallak | July 2014 - August 2015 |
| • | Research Assistant for Facundo Albornoz | December 2012 - July 2014 |
| | Research Assistant for Juan Carlos Hallak | April 2013 - July 2013 |
| | Research Assistant for Daniel Heymann | 2011 |
| | Teaching Experience (Columbia University) | |
| | Teaching Assistant in Economics of New York City for Don Davis | Spring 2020 |
| | Teaching Assistant in International Trade for Réka Juhász | Spring 2019, Fall 2017 |
| | Teaching Assistant in $Econometrics I$ (MA course) for Mehmet Caner | Fall 2018 |
| | Teaching Assistant in Principles of Economics for Sunil Gulati | Spring 2017 |
| • | Teaching Assistant in Intermediate Macroeconomics for Xavier Sala-i-Mart | ín Fall 2016 |
| | Teaching Experience (Universidad de San Andrés) | |
| | | |

| \cdot Teaching Assistant in <i>Monetary Economics</i> for Daniel Heymann | 2013 and 2014 |
|---|---------------|
| \cdot Instructor in Topics in Economics of Education | 2013 |
| \cdot Teaching Assistant in $\mathit{Topics}\ in\ \mathit{Macroeconomics}\ for\ Daniel$ Heymann | 2012 |
| \cdot Teaching Assistant in Introduction to Economics for Christian Ruzzier | r <i>2012</i> |

SCHOLARSHIPS, FELLOWSHIPS, AWARDS, AND GRANTS

| Institute for Latin American Studies (ILAS) Summer Field Research Grant, Columbia U | J. <i>2019</i> |
|--|----------------|
| Center for Development Economics and Policy (CDEP) Research Grant | 2019 |
| Columbia University Doctoral Dissertation Fellowship, Columbia University | 2019 - 2020 |
| Columbia University Doctoral Fellowship, Columbia University | 2015 - 2021 |
| Merit based full-tuition fellowship, Masters in Economics, Universidad de San Andrés | 2012 |
| Award for best undergraduate thesis in Economics, Universidad de San Andrés | 2012 |
| Partial-tuition scholarship for undergraduate studies, Universidad de San Andrés | 2011 |
| Merit based scholarship for Mathematical Olympiad regional finalists, undergraduate studies, Universidad de San Andrés | 2008 - 2010 |

COMPUTER SKILLS

| Computer Languages | C, Mata, Matlab, Julia, Python, R, SQL |
|--------------------|--|
| Software | ArcGIS, QGIS, Stata |

LANGUAGES

Spanish (native), English (fluent), French (intermediate), Italian (basic knowledge).

REFERENCES

David Weinstein Carl S. Shoup Professor of Japanese Economy dew35@columbia.edu 212-854-6880 **Donald Davis** Ragnar Nurkse Professor of Economics drd28@columbia.edu 212-854-4037

Réka Juhász

Assistant Professor rj2446@columbia.edu 212-854-4092

YE ZHANG

Curriculum Vitae updated Oct 2020

| Department of Econ Columbia University New York, NY 1002 | 7 | Phone: +1 (347)721-7780 Email: yz2865@columbia.ee Website: https://www.yezha | |
|---|--|--|-------------------------|
| | | Placement Administrator Amy Devine aed2152@columbia.edu | |
| EDUCATION | | | |
| Ph.D. | Department of Economics, Columbia University | | 2015 – Expected 2021 |
| B.S. | Hong Kong University of Science and Technology | | 2011 - 2015 |
| Major: Mathematics and Economics, Department of Mathematics | | | |
| Minor: Information Technology, Department of Computer Science and Engineering | | | |
| Exchange Student | Department of Economics, Northwestern University | | 2014 |

RESEARCH INTEREST

Entrepreneurial Finance, Field Experiment, Empirical Corporate Finance, Applied Microeconomics

JOB MARKET PAPER

"Discrimination in the Venture Capital Industry: Evidence from Two Randomized Controlled Trials", 2020

Abstract: This paper examines the presence of discrimination in early-stage investors using two randomized controlled trials with real venture capitalists mainly from the U.S. The first experiment invites real U.S. investors to evaluate multiple randomly generated startup profiles, which they know to be hypothetical, in order to be matched with high-quality startups from collaborative incubators. Investors can also donate money to randomly displayed startup teams to show their anonymous support during the COVID-19 pandemic. The second experiment utilizes a new email technology which tracks detailed information acquisition behaviors of global VC investors in response to hypothetical pitch emails with randomized startups' information. I find three main results: (i) Investors are biased towards female, Asian and older founders in lower-stake situations while biased against female, Asian and older founders in higher-stake situations; (ii) The source of bias comes from implicit bias, statistical discrimination, taste-based mechanisms, and attention discrimination; and (iii) I detect a temporary, stronger bias against Asian founders during the COVID-19 outbreak, which started to fade after April 2020. I also develop a consistent decision-based heterogeneous effect estimator by using within-individual level randomization.

WORKING PAPER

"How Venture Capitalists Bet: Evidence from Two Randomized Controlled Trials", 2020

Abstract: Understanding the importance of both human and non-human assets in firms' early-stage financing process is crucial to examining theories of the firm. However, it is difficult to empirically generate causal evidence due to data limitations and the lack of exogenous variations. This paper uses two randomized controlled trials with real venture capitalists mainly from the U.S.

to identify characteristics of both the project and their teams that causally affect venture capitalist funding. Specifically, I also check their relative importance on investors' decisions. I find that multiple team characteristics (i.e. founder's educational background and previous entrepreneurial experiences) and project characteristics (i.e. traction, business model, location, comparative advantages, etc.) causally affect investors' contact and investment interests by influencing their evaluation of startups' potential financial returns, risk, and loyalty. Although project traction matters the most in my experimental setting, it is fundamentally the investors' belief in the startup's profitability that matters the most. I also find the traditional correspondence test method, to an extent, inappropriate in testing the significance of project characteristics in virtue of the different ``signal-tonoise ratio" problem..

"ESG and Venture Capital Investment: Experimental Evidence", 2020

Abstract: This paper examines the effect of ESG characteristics of startups on venture capitalists' investment interest by employing a randomized controlled method. I invite real U.S. investors to evaluate multiple randomly generated startup profiles, which they know to be hypothetical, in order to be matched with high-quality startups from the collaborative incubators. I find the following three main results: (i) Aiming for environmental and social impact causally lowers investors' expectation of the startup's future profitability rather than risk. Therefore, profit-driven investors are less likely to contact or invest in ESG-related startups. (ii) Profit-driven investors have a stronger implicit belief that ESG related startups would not seek for collaboration with them. (iii) There is a positive interaction effect between ESG characteristics and the founder's educational background, indicating that a high level of education helps improve investor's expectation of the ESG startup's profitability. Experimental results challenge the traditional thesis of "doing well by doing good" and support the recent findings that investors derive non-pecuniary utility from impact investing while sacrificing their financial returns.

"The Microstructure of U.S. Housing Market: Evidence from Millions of Bargaining Interactions", 2020 with Haaris Mateen, Franklin Qian

Abstract: We study patterns of behavior in the U.S. housing market bilateral bargaining situations using a rich new data set describing bid-level housing transaction behaviors occurring in over 150,000 listings from a housing brokage platform. We compare observed behavior to predictions from the large theoretical housing literature. Model testing outcomes show that existing housing micro-structure models do not adequately explain the under-reaction behaviors in sellers' estimates of the final sales price of the house. We also provide novel micro-level evidence describing how home buyers' characteristics affect their bargaining power and surplus allocation in these bilateral bargaining process in the housing market. These observations suggest that housing transaction behaviors, which are neither incorporated nor explained by existing theories, play an important role in the U.S. housing market.

WORKING IN PROGRESS

"Who Are the Most Attractive Venture Capitalists? Evidence from Lab-in-field Experiment" *with* Junlong Feng (The pilot study is finished)

"Track the Venture Capital Investment Climate: Experimental Evidence from Global VC Industry"

"Initial Public Offerings and Expectation in the Housing Market" with Haaris Mateen, Franklin Qian

HONORS AND AWARDS

| Dissertation Fellowship, Columbia University | 2020-2021 |
|--|-----------|
| Eugene Lang Entrepreneurship Center PhD Fellowship | 2018 |
| Lead Teaching Fellowship in Economics, Columbia Center for Teaching and Learning | 2018-2019 |
| Dean's Fellowship, Columbia University | 2015-2020 |
| 10 th Epsilon Award of Mathematics Department | 2015 |
| Academic Achievement Awards, HKUST-Dean's List | 2014 |

RESEARCH FUNDING

PER Research Funding

Eugene Lang Entrepreneurship Center PhD Fellowship

CELSS Grants for Online Experiments

TEACHING

| Instructor: | Corporate Finance | Summer 2018 |
|-------------|------------------------------|--|
| TA: | Corporate Finance | Fall 2017, Spring 2018, Spring 2019, Fall 2019, Spring 2020 (evaluation) |
| | Advanced Econometrics | Fall 2018 (evaluation) |
| | Introduction of Econometrics | Fall 2016, Spring 2017 |
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LTF: Economics Lead Teaching Fellow 2018- 2019

RESEARCH AND WORK EXPERIENCE

| Economist Intern, Amazon Lending Team | Summer 2017 |
|---|-------------|
| Research Assistant for Prof. Bernard Salanie, Columbia University | Spring 2017 |
| Research Assistant for Prof. Wei Jiang, Columbia University | Summer 2016 |
| Research Assistant for Prof. Yao Amber Li, HKUST | 2014-2015 |

OTHER ACTIVITIES

| Organizer: | Global Entrepreneurship Summit (NYC) | 2018 |
|---|--|------|
| | LTF event, "Workshop: application of static and dynamic graphs in R" | 2018 |
| | LTF event, "Mentoring RAs: Challenges in GU4996/GU4995" | 2019 |
| | | |
| | Young Economist Symposium organizing committee member | 2019 |
| | | |
| | | |
| Emergency Medical Technician Certification 2 | | 2016 |
| HKUST Table Tennis Women's Single Champion and Double Champion 20 | | 2012 |

SKILLS

Programming: R, STATA, SQL, Qualtrics, Javascript Languages: Chinese, English

REFERENCES

| Professor Harrison Hong (co-sponsor) | Professor Wei Jiang | Professor Jack Willis (co-sponsor) |
|---|--------------------------|------------------------------------|
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