Last Updated: April 2025

# MICHAEL BOUTROS

Office 273, Max Gluskin House 150 St. George Street

Toronto, Ontario M5S 3G7, Canada Office 3236, Kaneff Centre 1833 Inner Circle Road Mississauga, Ontario L5L 1C6, Canada

http://www.michaelboutros.com michael.boutros@utoronto.ca (905) 828 - 3864

#### **Affiliations**

07/2024 –	Assistant Professor, University of Toronto  – Department of Economics
07/2024 –	External Academic Consultant, Bank of Canada
06/2021 – 06/2024	Senior Economist, Bank of Canada – Model Development and Research Division, Financial Stability Department – Economics and Financial Research Department
Education	
2021	Ph.D. in Economics, Duke University

Thesis: Essays on Heterogeneous Households in Macroeconomics

Committee: Francesco Bianchi (chair), David Berger, Cosmin Ilut, and Andrea Lanteri

2019 M.A. in Economics, Duke University

2015 B.Sc. in Financial Economics, High Distinction, University of Toronto

# Research Areas

Household Finance, Macroeconomics, Bounded Rationality

### **Publications**

1. Monetary Policy Implementation in a Negative Rate Environment with Jonathan Witmer. Journal of Money, Credit, & Banking, 52 (2-3), March-April 2020, p. 441-470.

Abstract: To analyze monetary policy implementation in a negative rate environment, we add the option to exchange central bank reserves for cash to the standard workhorse model of monetary policy implementation (Poole 1968). Importantly, we show that monetary policy can be constrained when the target overnight rate is below the yield on cash. At this point, the overnight rate equals the yield on cash instead of the target rate. Modifications to the implementation framework, such as a reserve requirement that varies with cash withdrawals, can help restore the implementation of monetary policy such that the overnight rate equals the target rate.

2. Borrow Now, Pay Even Later: A Quantitative Analysis of Student Debt Payment Plans with Nuno Clara and Francisco Gomes. Journal of Financial Economics, 159, September 2024.

Abstract: In the U.S., student debt is currently the second largest component of consumer debt. Households are required to repay these loans early in their lifecycle, when marginal utility is particularly high. We study alternative contracts that offer partial or full payment deferral until later in life. We calibrate an economy with the current contracts, and then solve for counterfactual equilibria. The alternative contracts yield large welfare gains, which are robust to assumptions about the behavior of the lenders and borrower preferences. The gains are similar to those that could come from the debt relief program currently being considered in the U.S., but without its adverse fiscal implications.

3. The Persistence of Miscalibration with Itzhak Ben-David, John R. Graham, Campbell R. Harvey, and John Payne. Review of Financial Studies, Accepted.

Abstract: We analyze a panel of over 28,400 S&P 500 return forecasts by CFOs to examine whether the extent of CFOs' miscalibration—providing forecast confidence intervals that are too narrow—decreases over time. We find no improvement with task repetition nor evidence of learning, that is, no improvement in response to past performance. Across CFOs, miscalibration appears to be a persistent personal trait. We find some evidence that the degree of miscalibration is related to birth cohort and stock market familiarity.

4. Windfall Income Shocks with Finite Planning Horizons Journal of Financial Economics, Accepted.

Abstract: I study how the cognitive demands of financial planning shape household decisionmaking with respect to consumption out of windfall income shocks. I build a quantitative model of bounded rationality in which reoptimization is costly. Households respond to windfall income shocks by choosing a finite planning horizon over which to reoptimize, and the optimal planning horizon is increasing in wealth and the magnitude of the income shock. Calibrated to U.S. data, the model's distribution of consumption responses is consistent with three key facts: even highly liquid households have large consumption responses out of income shocks, the fraction of households with positive consumption responses with shock size, and conditional on responding, larger shocks generate smaller consumption responses.

# **Working Papers**

5. **The Value of Mortgage Choice: Payment Structure and Contract Length** with Nuno Clara and Katya Kartashova. April 2025.

Abstract: We study how households choose between three mortgage contracts with different payment structures: fixed-rate fixed-payment, variable-rate variable-payment, and a hybrid variable-rate fixed-payment mortgage where interest rate changes affect principal repayment rather than payment size. This hybrid contract, which is offered in only a few countries around the world, gives households additional flexibility to insure against payment risk while exposing them to the risk of larger future mortgage balances. We model these mortgage types simultaneously and show that welfare is substantially improved when all three contracts are available for households to choose from. Our calibrated model matches mortgage choice patterns in Canada, where all these options are offered with short terms. We demonstrate that restricting contract choice or mandating long terms, as in the U.S. system, can lead to substantial welfare losses by limiting risk management strategies and increasing mortgage pricing ex-ante.

 The Macroeconomic Implications of Coholding with Andrej Mijakovic. July 2024. Bank of Canada Staff Working Paper 2024-16.

Abstract: In the U.S., over 25% of households are coholders who simultaneously borrow on credit cards and hold cash. This generates rich marginal distributions of gross positions that underpin the distribution of net wealth often used to calibrate macroeconomic models. We show that, beyond constructing net wealth, gross positions of liquid assets and debt are important determinants of how households consume, save, and repay debt in response to income shocks. We build a model that generates aggregate distributions and household behavior in line with the data, and use it to study the implications of coholding for fiscal and monetary policy.

7. **Evaluating Credit Card Minimum Payment Restrictions** with Jason Allen and Benedict Guttman-Kenney. June 2024. *Bank of Canada Staff Working Paper* 2024-26.

Abstract: We study a government policy that restricts repayment choices with the aim of reducing credit card debt. The policy requires credit card minimum payments in Quebec to be at least 2% of the statement balance for cards opened before August 2019 and at least 5% for cards opened from August 2019. The rest of Canada is unaffected. We estimate this policy's effects by applying a difference-in-differences methodology to comprehensive Canadian consumer credit reporting data. The policy causes a persistent increase in minimum payments. The policy has trade-offs: reducing revolving debt comes at a cost of reducing credit access, and potentially increasing delinquency.

8. Backfiring in Bad Times: When Rent Control Keeps Rent Too High with Geneviève Vallée. April 2024.

Abstract: Rent control, intended to benefit renters by capping rent increases, may disincentivize landlords from lowering rents during temporary negative demand shocks because they are unable to quickly increase rent afterward. To test this prediction, I use a unique combination of exogenous variation in rent control policy in Toronto and a negative demand shock induced by the COVID-19 pandemic. In line with theory, rent per square foot decreased by 1.7% for rent controlled units and 4.7% for exempt units. Using a model of differentiated demand, I construct a counterfactual exercise and estimate that in the absence of rent control, rent would have decreased by 8.3% for rent-controlled units and 8.1% for exempt units.

9. Targeted vs. Timely Fiscal Stimulus Payments. March 2024.

Abstract: This paper analyzes the tradeoff between targeted versus timely fiscal stimulus payments in a quantitative two-sector HANK model. In response to a negative sectoral shock, fiscal policy is specified as

the total size of transfers, the degree of targeting towards households in the affected sector, and the length of periods until the policy can be implemented. The key trade-off in the model is that the degree of targeting is increasing in the delay until policy can be implemented. In the baseline calibration of symmetric equilibrium with one household wholly employed in each sector, the key result is that fully targeting the stimulus program to the household in the affected sector yields less total welfare than intermediate levels of targeting.

10. Evaluating the Impact of Economic Impact Payments. December 2020.

Abstract: As part of the CARES Act, the IRS distributed \$300 billion in Economic Impact Payments (EIPs) directly to US households. In the Census Bureau's Household Pulse Survey (HPS), almost 75% of households receiving an EIP reported mostly spending it. Conditioning on labor status, 63% of employed households reported mostly spending their EIPs, compared to 84% of unemployed households. Both types of households reported spending largely on consumption goods, but unemployed households tended to pay regular bills while employed households paid down debt or increased savings. The evidence suggests that in designing an untargeted stimulus program and trading off potential efficacy for timeliness, Economic Impact Payments were overall very effective in supporting consumer spending.

# **Works in Progress**

11. **Don't Lend So Close to Me: Payday Lending Spillover Effects on Formal Credit** with Sheisha Kulkarni, Nuno Paixão, Barry Scholnick.

#### **Discussions**

- 1. Fiscal Stimulus, Inter- and Intratemporal Consumption Spending: Evidence from a 5 Billion Euro Experiment. Gregor Pfeifer, Davud Rostam-Afschar, Tim Ruberg, and Lukas Treber. Workshop on Household Responses to Direct Stimulus Payments and Other Shocks. August 2022.
- 2. **Automation and Inequality in Wealth Management.** Michael Reher, Stanislav Sokolinski. *3rd CEAR-RSI Household Finance Workshop*. November 2022.
- 3. **Investor Memory and Biased Beliefs: Evidence from the Field.** Zhengyang Jiang, Hongqi Liu, Cameron Peng, and Hongjun Yan. 2023 European Winter Finance Conference. January 2023.
- 4. **How and Why do Operating Firms Participate in Swap Market?** Ayla Kayhan and Michael Rand. 2023 *Southern Finance Association Annual Meeting.* March 2023.
- 5. **Economic Policy Uncertainty and Institutional Portfolio Investment.** Andi Li. 2023 Southern Finance Association Annual Meeting. March 2023.
- 6. **Income-Driven Repayment Plans for Student Loans.** Nadia Karamcheva, Jeffrey Perry, and Constantine Yannelis. 2023 *Midwestern Finance Association Conference*. March 2023.
- 7. **Salient Attributes and Household Demand for Security Designs.** Petra Vokata. 2023 Northern Finance Association Annual Meeting. September 2023.
- 8. **Risky College Savings, College Attendance, and Student Debt.** Alexey Vasilenko. 2023 Financial Management Association Annual Conference. October 2023.
- 9. **Identifying Housing Preferences in Regulated Markets: Evidence From Waiting Lists.** Hans Koster, Jos van Ommeren, and Zhiling Wang. 2023 *Urban Economics Association North American Meeting*. October 2023.
- Unemployment Insurance and Macro-Financial (In)stability. Yavuz Arslan, Ahmet Degerli, Bulent Guler, Gazi Kabas, and Burhan Kuruscu. 2023 Canadian Macroeconomics Study Group. November 2023.
- 11. **Skills, Education and Wealth Inequality: the Financial Investments Channel.** Elisa Castagno, Raffaele Corvino, and Francesco Ruggiero. *4th CEAR-RSI Household Finance Workshop.* November 2023.
- 12. **Stimulus through Insurance: the Marginal Propensity to Repay Debt.** Gizem Kosar, Davide Melcangi, Laura Pilossoph, and David Wiczer. 2024 *Vienna Global Macro Workshop*. March 2024.
- 13. **Insurance versus Moral Hazard in Income-Contingent Student Loan Repayment.** Tim de Silva. 2024 SFS Cavalcade. May 2024.

- 14. **Heterogeneity in MPC Beyond Liquidity Constraints: The Role of Permanent Earnings.** Jeanne Commault. 2nd Arne Ryde Workshop: Micro Data Meet Macro Models. August 2024.
- 15. **Exploring Climate Risk, Risk Retention, and CMBS: Understanding their Interplay.** Yildiray Yildirim, and Bing Zhu. 2024 ICBFS. September 2024.
- 16. **Student Loans and Labor Supply Incentives.** Gustavo Manso, Alejandro Rivera, Hui Wang, and Han Xia. 2024 *Colorado Finance Summit.* December 2024.
- 17. **The Financial Consequences of Wanting to Own a Home.** Caitlin Gorback and Gregor Schubert. *Online Spatial & Urban Seminar (Panelist)*. March 2025.
- 18. **Student Loan Forgiveness.** Michael Dinerstein, Dmitri Koustas, Constantine Yannelis, and Samuel Earnest. 2025 BFI Education Finance Conference. May 2025 (Scheduled).
- 19. **Green Mortgages.** Joao F. Cocco, Bernardo Mendes, and S. Lakshmi Naaraayanan. 2025 FIRS. May 2025 (Scheduled).
- 20. **Rent Guarantee Insurance.** Boaz Abramson and Stijn Van Nieuwerburgh. 2025 Western Finance Association Conference. June 2025 (Scheduled).

## **Research Presentations at Conferences and Seminars**

Research Presentations at Conferences and Seminars	
2025	ASSA Annual Meeting, ITAM Finance Conference, *Eastern Finance Association Annual Meeting, †FRB Chicago Workshop on Barriers to Homeownership, Land Use, and Urban Dynamics, †2025 Vienna Global Macro Cafe, †*Boulder Summer Conference on Consumer Financial Decision Making, †University of Guelph
2024	University of Toronto, McMaster University (DeGroote School of Business), Toronto Metropolitan University, Bank of Canada (Internal), Georgia Tech–Atlanta Fed Household Finance Conference, *SFS Cavalcade, FIRS, North American Summer Meeting of the Econometric Society, *Oslo Macro Conference, Arne Ryde Workshop: Micro Data Meet Macro Models, Lisbon Macro Workshop, ICBFS, CEPR Household Finance Conference, University of Cyprus, *Fuqua (Internal), Financial Consumer Agency of Canada, Federal Reserve Bank of St. Louis, CEPR Household Finance Seminar Series, University of Toronto Financial Economics Conference (Co-Organizer), CEAR-RSI Household Finance Workshop, Rotman (Internal)
2023	Southwestern Finance Association, Midwest Finance Association, Biennial Consumer Finance and Macroeconomics Conference, Bank of Canada (Internal), Canadian Economics Association Annual Meeting, Financial Consumer Agency of Canada, North American Summer Meeting of the Econometric Society, Bank of Canada & BIS Workshop on Granular Data, University of Oregon Summer Finance Conference, *European Finance Association, Urban Economics Association, Australian National University, OzMac Workshop, University of Sydney, Reserve Bank of Australia
2022	Society for Nonlinear Dynamics & Econometrics, McMaster University, International Conference on Applied Theory, Macro and Empirical Finance, Theories and Methods in Macroeconomics, Bank of Canada (Internal), Canadian Economic Association Annual Meeting, *Fuqua (Internal), Canadian Macro Study Group
2021	Bank of Canada, University of British Columbia, University of Guelph, NuCamp Virtual PhD Workshop, European Winter Meeting of the Econometric Society
2020	ITAM Finance Conference, VMACS Junior Conference
2019	*Miami Behavioral Finance Conference
2018	*BFI Conference on Developing and Using Business Expectations Data
2017	ECB Workshop on Money Markets, Monetary Policy Implementation and Central Bank Balance Sheets

<sup>\*</sup>Presentation by coauthor. †Scheduled.

# **Professional Service**

Referee

American Economic Journal: Macroeconomics, American Economic Review, American Economic Review: Insights, Economic Inquiry, Economics Letters, The Economic Journal, Journal of Banking and Finance, Macroeconomic Dynamics, Quarterly Review of Economics and Finance, Regional Science and Urban Economics, Review of Financial Studies

Program Committee Reviewer 2024 NFA