

MARTSELLA DAVITAYA

CONTACT INFORMATION

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ACADEMIC POSITIONS

Columbia University

Lecturer, School of International and Public Affairs (SIPA) 2023 –

EDUCATION

Ph.D., Economics, Columbia University 2023

Dissertation: "Essays in Macroeconomics"

B.Sc., Economics, with Honors, National Research University Higher School of Economics 2017

B.Sc., Economics and Finance, First-Class Honors, University of London 2017

RESEARCH

Monetary Policy Implications of Heterogeneous Mortgage Refinancing with A. Burya

We show that credit score heterogeneity dampens monetary policy transmission through fixed-rate mortgages. Using Fannie Mae Single-Family Loan-Level historical data, we show that a 1 percentage point decrease in mortgage rate increases the refinancing probability for borrowers with a FICO credit score of 800 twice as much as that for borrowers with a FICO score of 700. We then develop a refinancing model and find that credit score heterogeneity dampens consumption response to monetary policy by 11%, compared to a standard model with only mortgage rate heterogeneity. Borrowers with lower credit scores have higher marginal propensities to consume and benefit from refinancing more than borrowers with higher credit scores, but refinance less often, resulting in a smaller consumption response.

Anchored or De-anchored? Inflation Compensation and Monetary Policy with A. Burya and S. Mishra

If inflation expectations are well-anchored, then the Fed has a higher capacity to support aggregate employment without destabilizing inflation. We construct a proxy of the change in the Fed's aggressiveness to inflation and develop an empirical test for inflation expectations anchoring. The proxy for the Fed's aggressiveness is equal to changes in expectations of future policy rates that are unexplained by the information in the inflation news release. The empirical test examines the sensitivity of inflation expectations to monetary policy shocks conditional on that proxy. We then use a measure of inflation expectations adjusted for inflation and liquidity risk premia to demonstrate that bond yield data in the U.S. is consistent with the anchoring of the long-term inflation expectations.

Recessions, Social Security, and Retirement

The main difficulty in studying the effect of retirement income on labor supply is that factors that affect retirement income correlate with the labor force participation rate. Using the Health and Retirement Study and Social Security Administration income data, I overcome this difficulty by utilizing the fact that the Social Security benefit is a function of the economic conditions when the worker turns 60. My estimates suggest that the labor supply elasticity of older workers is -0.19 at the extensive margin and -0.57 at the intensive margin. This estimate is relevant for studying effects of macroeconomic shocks on the employment of older workers, optimization of public and fiscal policies, and calibration of life-cycle models.

Games of Cheating with Kosmas Marinakis

We develop a model of risky information transmission between a higher and a lower ability agent, which closely resembles academic cheating behavior. Assuming no synergy effects between agents or correlation of outputs, we derive a substitution and a strategic effect, both of which dictate the behavior of agents when information transmission is feasible. We show that the higher ability agent may find it strategically useful to moderate her effort to limit the supply of information and curb her risk. We also find that the use of a relative compensation scheme may cause cheating activity to increase when the coefficient of relative incentives is not sufficiently high. Even when relative incentives are powerful enough to mitigate cheating, this seriously distorts the incentives, causing high-ability agents to further cut down on effort. We conclude that performance in the group is higher when similar ability agents are matched, and that the only cost-free way to deter cheating is to match agents of similar abilities together, since the risk of transmitting information will offset its benefit. We also extend the model to include the case where the higher ability agent can choose the level of her cheating supply.

AWARDS, FELLOWSHIPS & GRANTS

Awards

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| Wueller Teaching Award, best teaching assistant in M.A. courses (Columbia University) | 2021 – 2022 |
| Wueller Teaching Award, runner-up for best teaching assistant in M.A. courses, online format (Columbia University) | 2020 – 2021 |
| Wueller Teaching Award, runner-up for best teaching assistant in M.A. courses (Columbia University) | 2019 – 2020 |
| Prize for Academic Achievement (University of London) | 2017 |
| Academic Excellence Award (University of London) | 2017 |
| Top 8 th in Econometrics Universiade (Moscow State University) | 2017 |
| Top 15% High-Quality Award in Sanofi Health Guardians Business Consulting Case Competition (1,380 competitors) | 2016 |

Fellowships

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| Ralph Erdman Holben Fellowship (Columbia University) | 2022 – 2023 |
| Dean's Fellowship (Columbia University) | 2017 – 2023 |
| Dissertation Fellowship (Columbia University) | 2022 |
| Wueller Fellowship (Columbia University) | 2017 – 2022 |
| Merit-based scholarship covering 75% of tuition fees (Higher School of Economics) | 2014 – 2017 |
| Merit-based scholarship covering 60% of tuition fees (Higher School of Economics) | 2013 – 2014 |

Grants

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| GSAS Matching Travel Grant (Graduate School of Arts and Sciences, Columbia University) | 2022 |
| Economics Fluctuations Colloquium Travel Grant (Department of Economics, Columbia University) | 2022 |
| The Program for Economic Research (PER) Travel Grant (Columbia University) | 2022 |

TEACHING EXPERIENCE & TRAINING

Columbia University

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|---|-------------|
| <i>Teaching Assistant</i> in Macroeconomic Analysis II (Graduate) for Professor Irasema Alonso | Spring 2023 |
| <i>Teaching Development Program (Foundational Track)</i> at the Center for Teaching and Learning | Fall 2022 |
| <i>Teaching Assistant</i> in Introduction to Econometrics I (Graduate) for Professor Seyhan Erden | Fall 2021 |
| <i>Junior Instructor</i> in Introduction to Business, Finance, and Economics (Programs for High School Students) for Professor Raheem A. Haji | Summer 2021 |
| <i>Teaching Assistant</i> in Advanced Macroeconomics (Undergraduate) for Professor Irasema Alonso | Spring 2021 |
| <i>Teaching Assistant</i> in Introduction to Econometrics I (Graduate) for Professor Seyhan Erden | Fall 2020 |
| <i>Teaching Assistant</i> in Financial Economics (Graduate) for Professor Steven Wei Ho | Spring 2020 |
| <i>Teaching Assistant</i> in Introduction to Econometrics I (Graduate) for Professor Seyhan Erden | Fall 2019 |
| <i>Teaching Assistant</i> in Intermediate Microeconomics (Undergraduate) for Professor Steven Olley | Spring 2019 |
| <i>Teaching Assistant</i> in Principles of Economics (Undergraduate) for Professor Caterina Musatti | Fall 2018 |

National Research University - Higher School of Economics

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| <i>Teaching Assistant</i> at the Department of Economics (Undergraduate) for Professor Lubov Schukina | 2015 – 2016 |
| <i>Lecturer and Class Teacher</i> at the ICEF Evening School (Programs for High School Students) | 2015 – 2016 |

CONFERENCES & PRESENTATIONS

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| <i>NBER Summer Institute, Columbia SIPA, Bank of Canada, Williams College, Corvinus University of Budapest, Duke Fuqua School of Business, Nazarbayev University Graduate School of Business, AYEW (Applied Young Economist Webinar)</i> | 2023 |
| <i>AREUEA (The American Real Estate and Urban Economics) National Conference</i> | 2022 |

WORK EXPERIENCE

Columbia Business School

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|---|-------------|
| <i>Research Assistant</i> for Professor Steven Zeldes | 2019 – 2020 |
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Promsvyazbank

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| <i>Summer Intern</i> at the Department of Corporate Business Development | 2015 |
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SKILLS

Technical: MATLAB, STATA, R, EViews, SAS, VBA Excel

Languages: Russian (Native), Georgian (Native), English (Fluent), Spanish (Intermediate)