

# MARTSELLA DAVITAYA

## CONTACT INFORMATION

School of International and Public Affairs  
Columbia University  
420 West 118th Street  
New York, NY 10027

Office: IAB 932  
Email: [md3590@columbia.edu](mailto:md3590@columbia.edu)  
Website: <https://martselladavitaya.com>

## 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

*A Farewell to Equality: Monetary Policy Implications of Heterogeneous Mortgage Refinancing* with A. Burya

We show that credit score heterogeneity dampens monetary policy transmission through fixed-rate mortgages (FRMs). Using Fannie Mae Single-Family Loan-Level historical data, we show that a one-percentage-point reduction in the mortgage rate increases the refinancing probability for borrowers with excellent credit scores twice as much as it does for borrowers with good credit scores. We then develop a refinancing model and find that credit score heterogeneity dampens consumption response to monetary policy through the FRM channel by one-third and results in a 50% higher wealth increase for excellent borrowers compared to good ones in the long run. 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 smaller consumption and wealth responses.

*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**

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 <sup>th</sup> 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**

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

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

<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

<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

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, AYEWE (Applied Young Economist Webinar)	2023
AREUEA (The American Real Estate and Urban Economics) National Conference	2022

## WORK EXPERIENCE

### Columbia Business School

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

### Promsvyazbank

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

## SKILLS

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

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