

Mridula Duggal

CONTACT INFORMATION

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University of Glasgow
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RESEARCH INTERESTS

Macroeconomics, Monetary Economics, Behavioural Macroeconomics, Subjective Expectations

CURRENT POSITION

University of Glasgow, United Kingdom

Adam Smith Career Development Fellow, October 2023 - Present

EDUCATION

Universitat Autònoma de Barcelona & Barcelona School of Economics, Spain

Ph.D. in Economics, September 2019 - October 2023, *summa Cum Laude*

Supervisor: Albert Marcet

Title: “*Monetary Policy and Inflation Expectations*”

Committee: Joan Llull, Marek Jarociński, Emanuel Mönch

University of California, Berkeley, United States of America

Visiting Researcher, August - September 2023

Host: Yuriy Gorodnichenko

Universitat Autònoma de Barcelona & Barcelona School of Economics, Spain

MRes in Economics, 2017-2019

The University of Warwick, United Kingdom

MSc in Economics and International Financial Economics, 2014-2015

One of three Distinction Holders

The University of Warwick, United Kingdom

BSc in Economics, 2011-2014

WORKING PAPERS

Targeting Inflation Expectations? Finalist ECB Young Economist Prize 2023, *Submitted*

Optimal Disinflation with Delegation and Limited Credibility with Luis E. Rojas, Barcelona School of Economics Working Paper 1401

WORK IN PROGRESS

Evolution of Expectations with Inflation Targeting and Optimal Policy

Wage Price Spirals with Valerio Pieroni, Marta Rodriguez, and Clemente Pinilla-Torremocha

Networked Inflation Expectations: A closer look at Professional Forecasters with Gabriela Stockler

Expectations and Business Dynamism with Sisir Ramanan and Yannis Tsafos

AWARDS AND
FELLOWSHIPS

Finalist Young Economist Prize, European Central Bank, 2023
Research grant 2021 SGR 00194 from Generalitat de Catalunya, Spain, 2022-2024.
FPI Fellowship by the Ministry of Science and Innovation, Spain, 2020-2024
Barcelona GSE Severo Ochoa PhD Track Fellowship, 2017-2020

PRESENTATIONS
INCLUDING
SCHEDULED
* CO-AUTHOR

2024: 31st Annual Society for Nonlinear Dynamics and Econometrics Symposium*, Oxford - CEPR
Central Bank Communication Workshop, Scottish Economic Society Annual Conference, University
of Glasgow Macro Brown Bag, Bank of England (*Invited*)
2023: Bank of Lithuania, Universidad de Alicante, University of Sussex, 30th Annual Society for Non-
linear Dynamics and Econometrics Symposium, University of Glasgow, Applied Young Economist
Webinar, Third Catalan Economic Society Conference, PhD Economics Virtual Seminar, 13th CE-
Sifo Macroeconomics and Survey Data Conference (Poster Presentation), ECB Forum on Central
Banking, Macro Research Network (Money Macro and Finance Society), Expectations in Dynamic
Macroeconomic Models, University of California, Berkeley, Central Bank Communication RPN Sem-
inar Series, SAEe 2023, European Winter Meeting of the Econometric Society
2022: University of Mannheim, BSE Jamboree, Essex-Barcelona PhD Workshop, ENTER Jamboree,
UAB Macro Club, Central Bank Macroeconomic Modeling Workshop, 47th Simposio de la Aso-
ciación Española de Economía (SAEe 2022)
2021: ENTER Student Seminar, Barcelona, UAB Macro Club, ENTER Jamboree (Discussant)
2020: Universitat Autònoma de Barcelona Macro Club, Barcelona

TEACHING
EXPERIENCE

University of Glasgow, United Kingdom
Course Co-ordinator & Co-Lecturer, Growth and Development, 2024-25
Co-Lecturer, Growth and Development, 2023-24
MSc Economic Development

University of Glasgow, United Kingdom
Supervisor, Undergraduate Dissertation
BSc Economics, BSc Business Economics

Prague-Glasgow Summer School in Economics, Czech Republic
Lecturer, Tell me Something you know: Beliefs in Macroeconomics
MSc Economic Development, Summer 2024

University of Glasgow, United Kingdom
PhD Thesis Mentor

Universitat Autònoma de Barcelona, Spain
Teaching Assistant, Macroeconomics II (PhD)
IDEA Graduate Programme

Barcelona School of Economics, Spain
Teaching Assistant, Foundations in Equilibrium Analysis
MSc Macroeconomic Policy and Financial Markets, Autumn 2021-22

Barcelona School of Economics, Spain
Teaching Assistant, Macroeconomics
MSc Macroeconomic Policy and Financial Markets, Autumn 2021-22

RESEARCH
EXPERIENCE

Prof. Nezih Guner, Spain
Research Assistant, January 2022 - June 2022

The Economic Journal, Royal Economic Society, United Kingdom
Research Assistant, January 2020 - January 2022

Center for the Study of Organizations and Decisions in Economics (CODE), UAB, Spain
Research Assistant, September 2019 - December 2021

National Council of Applied Economic Research, India
Research Analyst, December 2016 - June 2017
Research Associate, December 2015 - December 2016

Research Assistant for Dr. Shesadri Banerjee, India
Research Assistant, December 2015 - February 2017

NON-PEER
REVIEWED
PUBLICATIONS

Pre-PhD
Policy Papers
Prices. Bornali Bhandari, Mridula Duggal. QRE, NCAER. January 2016.

Survey of Business Expectations. Bornali Bhandari, Mridula Duggal, Ajay K Sahu. BES, NCAER.
January 2016-June 2017.

Newspaper Articles
Digital Payment Adoption by Firms. Bornali Bhandari, Mridula Duggal, Ajay K Sahu. Business
Standard. November 2017.

ACADEMIC
ACTIVITIES

Referee: Review of Development Economics, Young Economists' Symposium

Conference Organisation: 1st BSE PhD Expectations Workshop (October 2022), BSE Summer
Forum (June 2022, 2023), European Winter Meetings of the Econometric Society (December 2021),
Barcelona SE PhD Jamboree (October 2021)

Mentoring: Econisers (Co-founder, September 2020 - July 2022)

COURSES,
WORKSHOPS
ATTENDED

2021: Subjective Beliefs in Macroeconomics and Household Finance
2020: Dynare Course - Identification analysis and global sensitivity analysis for Macroeconomic
Models, CSWEP Mentoring Workshop

SKILLS

Computer
STATA, MATLAB, PYTHON, DYNARE, L^AT_EX, Microsoft Office, Photoshop

Languages
English (Native), Hindi (Native), French (Basic), Spanish (Basic)

REFERENCES

- | | |
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| Luis Rojas
MOVE, UAB & BSE
IDEA Graduate Programme
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ABSTRACTS

Targeting Inflation Expectations?

This paper investigates the response of agents' inflation expectations to changes in monetary policy, with a focus on the adoption of Inflation Targeting. Using a New Keynesian model with rational expectations and trend inflation, I find that inflation expectations exhibit an immediate decline following policy announcements. I extend this analysis with an empirical investigation, using data from a survey of professional forecasters across 32 Inflation Targeting countries. Applying a constant-gain learning model and an event study framework, I estimate the effect of regime changes on expectations. The results suggest that realized inflation, rather than expectations, adjusts in response to the regime shift, implying that inflation dynamics lead expectations. This leads agents to over-predict inflation in the aftermath of policy shifts, highlighting the importance of concrete inflation outcomes in shaping beliefs. These findings suggest that central banks can build credibility over time by providing tangible evidence that reinforces their policy objectives.

Optimal Disinflation with Delegation and Limited Credibility

We examine the challenge faced by a government aiming to implement a gradual reduction in inflation by entrusting monetary policy to an independent central bank with limited credibility. Expanding upon the framework established by Barro and Gordon (1983b), we demonstrate that an optimal policy for minimizing the sacrifice ratio of disinflation involves a gradual disinflationary process coupled with the announcement of intermediate targets. The speed at which disinflation occurs strikes a balance between the objective of enhancing credibility and the associated costs of unexpected inflation. Our theoretical framework provides an explanation for the disinflationary experiences observed in Chile and Colombia during the 1990s, wherein these countries established new monetary institutions and steadily achieved single-digit inflation levels through the annual announcement of decreasing inflation targets. We argue that the use of intermediate targets played a pivotal role in their design, facilitating the establishment of credibility with lower output costs.

Evolution of Expectations with Inflation Targeting and Optimal Policy

The paper investigates the responsiveness of agents' expectation variance to shifts in monetary policy, utilising subjective expectations to ascertain the speed of learning before and after the implementation of Inflation Targeting. The analysis quantifies the Kalman Gain and the weight agents assign to the inflation target. The findings indicate a sluggish adjustment of agents' expectations to monetary policy changes, suggesting a reliance on an extended inflation history for expectation formation. Additionally, a minor emphasis on the inflation target by agents is observed. Incorporating these insights into an optimal policy model reveals that, regardless of learning speed, a stronger weight placed on the inflation target by agents diminishes the necessity for aggressive central bank responses during high inflation periods. Furthermore, the central bank's response aligns more closely with the rational expectations equilibrium when agents allocate a weight of 10% to the inflation target relative to their beliefs.

Wage Price Spirals (Work in Progress)

This paper investigates the absence of wage-price spirals during the recent inflationary episode following the COVID-19 pandemic. We introduce an adaptive learning framework for households and firms within an economy characterized by sticky wages and prices. Our core hypothesis posits a threshold level of inflation beyond which wage-price spirals emerge, contingent on agents' responsiveness to new information. Below this threshold, wage-price spirals are less likely, potentially explaining their absence in the current inflationary environment. While existing literature often emphasizes bargaining dynamics and conflict between households and firms, our study centers on beliefs and expectations.

Networked Inflation Expectations: A Closer Look at Professional Forecasters (Work in Progress)

Under the assumption of a homogeneous information set, there should be no disagreement amongst forecasters. However, disagreement is a well documented fact of survey expectations. This paper attempts at reconciling the presence of disagreement through a theory of networks among professional forecasters. The paper uses data from the Wall Street Journal Survey of Professional forecasters to document that firms which participate in every period of the survey disagree less than and adjust expectations faster than those who don't. We further attempt to uncover a network amongst the forecasters. We then develop a model of strategic interaction given a fixed network and private information sharing.

Expectations and Business Dynamism (Work in Progress)

This study investigates the accelerating pace of firm exits and the observed decline in business dynamism among UK firms, questioning why corporate mortality has risen and how the innovative potential of firms compares to the past. We propose that learning and experience are central to firm dynamics, where firms form beliefs about underlying productivity through observed output. Defining experience through a constant gain learning framework, we hypothesize that heterogeneity in learning speeds among firms drives entry and exit patterns, potentially accounting for firm failures. Our findings aim to contribute a plausible explanation for the UK's productivity puzzle—specifically, why output continues to grow while productivity stagnates—rooted in the role of firms' expectations and experiential learning.