

EDUCATION

London School of Economics, PhD Economics, 2018-present

London School of Economics, MRes Economics *with Distinction*, 2016-2018

University College London, MSc Economics *with Distinction*, 2013-2014

University of Cambridge, MA Economics *First Class*, 2010-2013

PROFESSIONAL

Academic Visitor, Bank of England, 2016-present

Economist, Bank of England, 2014-2016

TEACHING EXPERIENCE

Firms & Markets (postgraduate), for Kristóf Madarász & Rocco Macchiavello, LSE

Microeconomics (undergraduate), for Margaret Bray & Eric Eyster, LSE

TEACHING & RESEARCH FIELDS

Financial economics, industrial organisation

HONOURS & SCHOLARSHIPS

Paul Woolley Centre Scholarship, 2020-2022

Economic and Social Research Council PhD Scholarship, 2016-2020

Prize for Best Overall Performance, UCL MSc Economics, 2013-2014

Harcourt Prize & John B. Lansdell Prize, Trinity Hall, Cambridge, 2011-2013

COMPLETED PAPERS

A structural model of liquidity in over-the-counter markets (Job Market Paper)
with Patrick Coen.

Coming soon.

A structural model of interbank network formation and contagion
with Patrick Coen.

The interbank network, in which banks compete with each other to supply and demand financial products, creates surplus but may also result in risk propagation. We examine this trade-off by setting out a model in which banks form interbank network links endogenously, taking into account the effect of links on default risk. We estimate this model based on novel, granular data on aggregate exposures between banks. We find that the decentralised interbank market is not efficient, primarily because banks do not fully internalise a network externality in which their interbank links affect the default risk of other banks. A social planner would be able to increase surplus on the interbank market by 13% without increasing mean bank default risk or decrease mean bank default risk by 4% without decreasing interbank surplus. We propose two novel regulatory interventions (caps on aggregate exposures and pairwise capital requirements) that result in efficiency gains.

Price discrimination and mortgage choice
with Anil Kashyap & May Rostom.

We characterise the large number of mortgage offers for which people qualify. Almost no one picks the cheapest option, nonetheless the one selected is not usually much more expensive. A

few borrowers make very expensive choices. These big mistakes are most common when the menu they face has many expensive options, and are most likely for high loan to value and loan to income borrowers. Young people and first-time buyers are more mistake-prone. The dispersion in the mortgage menu is consistent with banks attempting to price discriminate for some borrowers who might pick poorly while competing for others who might shop more effectively.

Taking regulation seriously: fire sales under solvency and liquidity constraints
with Caterina Lepore & Eric Schaanning.

We build a framework to study how solvency and liquidity risks can drive fire sales. Banks choose which assets to sell in order to minimise liquidation losses, accounting for other banks' sales. The optimal liquidation strategies trade off losses from an asset sale's price impact against its regulatory weights. The framework gives rise to a game with both strategic complementarity, in terms of banks' aggregate sales, and substitutability, in terms of which assets banks sell. Calibrating the model to the UK banking system we show which shocks, which assets and which constraints matter for fire sales. We find that funding shocks have the potential to generate larger losses than solvency shocks, whilst accounting for the interaction between solvency and liquidity amplifies losses further. Thus models focusing exclusively on solvency risk may significantly underestimate the extent of contagion via fire sales.

PRE-PHD PUBLICATIONS

"The determinants of UK credit union failure", with Bill Francis & May Rostom, *International Journal of Central Banking*, Vol. 15(4), 2019, pp 207-240.

"Simulating stress across the financial system: the resilience of corporate bond markets and the role of investment funds", with Yuliya Baranova, Pippa Lowe, Joe Noss & Laura Silvestri, *Bank of England Financial Stability Paper*, 2017.

PRESENTATIONS

Oxford-Indiana Macro Policy Conference (2018); Columbia/The Clearing House Conference on Liquidity Regulation (2018); Bank of England (2018, 2019, 2020, 2021); RES Annual Conference (2021).

REFERENCES

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