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Education

PhD in Economics, University College London	2021 - Present
MRes in Economics, University College London	2020 - 2021
MSc in Economics, University College London	2019 - 2020
BSc in Economics, University College London	2016 - 2019

References

Wei Cui	Franck Portier	Lukasz Rachel
Professor of Economics	Professor of Economics	Associate Professor
University College London	University College London	University College London
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Research Interests

Macroeconomics, Financial Intermediation, Technological Changes

Working Papers

Bank Market Power and Interest Rate Risk (Job Market Paper)

What determines banks' earnings exposure to interest rate risk? We propose a novel mechanism linking optimal exposure to relative market power in funding and lending. Two stylised facts motivate the analysis: banks partially match income and expense sensitivities but retain heterogeneous exposures to interest rate changes, while loan pricing suggests stronger market power over fixed-rate than variable-rate contracts. In our model, risk-averse banks adjust their loan portfolios to balance earnings stability against exploiting pricing power over fixed-rate lending. Relative market power determines whether earnings rise or fall when rates increase. A calibrated extension shows that stronger deposit competition shifts banks' exposure while leaving fixed-rate lending nearly unchanged. In this calibration, greater interest rate uncertainty raises borrowers' demand for protection, expanding fixed-rate lending and making earnings vulnerable to rate increases. These findings connect competition on both sides of banks' balance sheets to the allocation of interest rate risk, with implications for competition policy and supervision.

Technological Innovations and Worker Skills

With Matthew Nibloe, Peter Nunez and Joern Onken

This paper studies how workers respond to skill-specific technological innovations through investment in training. We construct a novel measure of technological exposure by combining patent texts with O*NET skill descriptors using natural language processing. Linking this measure to UK longitudinal worker data, we find that greater technological exposure increases hourly wages, particularly among highly educated workers and those in non-routine occupations. Exposure also raises participation in training, especially training for future employment opportunities, and increases voluntary employer mobility. We develop a model of multidimensional skill investment under uncertain future skill returns. Higher skill returns provide more resources to pay for training, and allowing training to respond amplifies the output gains from technological change. Greater uncertainty about future skill returns, such as due to the unpredictable labour-market effects of AI, encourages workers to acquire a more balanced set of skills, giving them more flexibility to respond as skill returns change. These findings highlight workers' proactive investment in skills and pursuit of new employment opportunities as important margins of adjustment to technological innovation.

Work in Progress

Public Debt, Bank Liquidity and Credit Supply

Teaching Experience

ECON0016: BSc Macroeconomics (UCL) 2021-2026

ECON0107: MRes Macroeconomics(UCL) 2022-2026
Departmental Award: Best MRes TA 2024

Professional Experience

Bank of England London, England
Intern, Stress Testing Strategy Division 2018

Technical and Language Skills

Technical: Python, MATLAB, Stata, MS Office.
Languages: English (fluent), Chinese (native).