

# **PETER ZIMMERMAN**

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## **PROFESSIONAL EXPERIENCE**

2020–present: **Research Economist, Federal Reserve Bank of Cleveland**

2007–2014, 2019–2020: **Senior Economist, Financial Stability, Bank of England, UK**

2004–2006: **Associate, Cambridge Place Investment Management, UK**

## **EDUCATION**

2014–2019: **DPhil Financial Economics, Saïd Business School, Oxford**  
Committee: Xavier Freixas, Alan Morrison, Joel Shapiro, Mungo Wilson.

2017: **Visiting Scholar, Wharton School, University of Pennsylvania**  
Visit hosted by Itay Goldstein.

2006–2007: **MSc Economics, Trinity College, Dublin**

1999–2002: **BA (Hons) Mathematics, St John’s College, Cambridge**

## **FIELDS OF INTEREST**

Banking, cryptocurrencies, financial market infrastructure, fintech.

## **WORKING PAPERS**

- **‘A monetary model of cryptocurrency’**. I show that the unique technology behind blockchain leads to a relationship between information, trading, and price that is unique for cryptocurrencies among asset classes.
- **‘Relationship lending when banks are fragile’** (with Alan Morrison and Joel Shapiro). We identify a new channel via which banking shocks cause a credit crunch.
- **‘Flash loans: lending without collateral, trust or risk’** (with Cornelius Johnson). We explore how flash loans impact market liquidity in DeFi.

## **PUBLICATIONS IN REFEREED JOURNALS**

- **‘Uncovering retail trading in Bitcoin: the impact of COVID-19 stimulus checks’** (with Anantha Divakaruni), *Management Science*, forthcoming. Press coverage in *Bloomberg*, *The Atlantic*, *Motley Fool*, *Coindesk*.
- **‘The Lightning Network: making Bitcoin into money’** (with Anantha Divakaruni), *Finance Research Letters*, 2023. Earlier version published as a Cleveland Fed working paper. Press coverage in *Bitcoin Magazine* and *CoinGeek*.
- **‘Centralized netting in financial networks’** (with Rodney Garratt), *Journal of Banking and Finance*, 2020. Earlier version published as Federal Reserve Bank of New York staff report.
- **‘A mechanism for LIBOR’** (with Brian Coulter and Joel Shapiro), *Review of Finance*, 2018. Press coverage in *The Times*.
- **‘Identification of over and under provision of liquidity in real-time payment systems’** (with Edward Denbee and Rodney Garratt), *Journal of Financial Market Infrastructures*, 2015. Earlier versions published as Bank of England and Bank of Finland working papers.
- **‘The role of counterparty risk in CHAPS following the collapse of Lehman Brothers’** (with Evangelos Benos and Rodney Garratt), *International Journal of Central Banking*, 2014. Earlier versions published as Bank of England working paper and VoxEU article.

## **POLICY ARTICLES**

- **‘Why worry about financial exclusion?’** (with Paola Boel), Federal Reserve Bank of Cleveland Economic Commentary, 2022.
- **‘Unbanked in America: a review of the literature’** (with Paola Boel), Federal Reserve Bank of Cleveland Economic Commentary, 2022.
- **‘The cheque republic: money in a modern economy with no banks’** (with Ben Norman), Bank of England blog, 2016.
- **‘Market discipline, public disclosure and financial stability’** (with Rhiannon Sowerbutts), book chapter in ‘The handbook of post-crisis financial modelling’ eds. Haven, Molyneux, Wilson, Fedotov and Duygun, Palgrave-MacMillan, 2016.
- **‘Who benefits from the implicit subsidy?’** (with Rhiannon Sowerbutts), Bank of England blog, 2015.
- **‘Banks’ disclosure and financial stability’** (with Rhiannon Sowerbutts and Ilknur Zer), Bank of England Quarterly Bulletin, 2013. Also published as VoxEU article.

- **'The sterling unsecured loan market during 2006-08: insights from network theory'** (with Anne Wetherilt and Kimmo Soramäki), Bank of England working paper, 2010.
- **'The economics of large-value payments and settlement: theory and policy issues for central banks'** (eds Manning, Nier and Schanz), Oxford University Press, 2009. Contributing author.

## **PRESENTATIONS**

**2023:** Federal Reserve Bank of Cleveland; Midwest Economic Association.

**2022:** Academy of Finance; Case Western University; Cleveland Fed–OFR financial stability conference (discussant); Economics of Financial Technology Conference; Financial Markets and Corporate Governance Conference; Stern/Salomon Center Microstructure Conference; Summer Workshop on Money, Banking, Payments, and Finance (poster); University of Bergen; Vienna–Copenhagen Conference on Financial Econometrics; Search & Matching workshop; World Federation of Exchanges.

**2021:** Boca Corporate Finance and Governance Conference; Cryptocurrency Research Conference; Federal Reserve Bank of Cleveland; Global AI Finance Research Conference; New Zealand Finance Meeting; Paris Fintech and Crypto webinar series; UWA Blockchain and Cryptocurrency Conference.

**2020:** Bank of Canada; Bank of England; Boca Corporate Finance and Governance Conference; Bowling Green State University (accepted; conference cancelled); Center for Latin American Monetary Studies; Central Bank Research Association; Federal Reserve Bank of Cleveland; Northern Finance Association (discussant); Qatar Centre for Global Banking & Finance (panellist); SAFE Market Microstructure conference (discussant); Southern Finance Association; Southwestern Finance Association; UCL PSPFISY meeting; Value of Bitcoin conference (presenter & panellist).

**2019:** Bank for International Settlements; Bergen FinTech conference; Cleveland Fed–OFR financial stability conference; Copenhagen Business School; Crypto Valley Conference (presenter & discussant); European Capital Markets Cooperative Research Centre (presenter & discussant); European Finance Association (two discussions); Federal Reserve Bank of Cleveland; Federal Reserve Board of Governors; Lancaster University; Monash University; Queen Mary University of London; University of Amsterdam; University of New South Wales; University of North Carolina; University of Sussex Young Finance Scholars conference; University of Sydney; University of Toronto.

**2018:** Anglia Ruskin University (presenter & discussant); Bank of England; Cambridge Centre for Alternative Finance; Edinburgh University (presenter & discussant); EuroFIT; European Financial Association Doctoral Tutorial (presenter & discussant); Northern Finance Association; Oxford Financial Intermediation Theory conference (discussant & programme committee).

**2017:** Oxford Financial Intermediation Theory conference (discussant & programme committee); Washington University in St Louis Finance Theory Group summer school; Wharton School PhD seminar.

**2016:** HEC PhD workshop; International Finance and Banking Society; London Business School Financial Intermediation Theory workshop; Oxford Financial Intermediation Theory conference (discussant); Oxford Man Institute; Saïd Business School.

**2015:** Oxford Man Institute; Saïd Business School; Society for Advancement of Economic Theory.

**Prior to PhD:** Bank of England; Bank of Finland; Bank of Italy (discussant); Bank of Korea; INET.

### **REFEREEING**

Review of Financial Studies; Journal of Money, Credit & Banking; Journal of Banking and Finance; Management Science; Journal of Economic Dynamics and Control; Journal of Economic Modelling; Journal of Empirical Finance, Journal of Financial Stability; Canadian Journal of Economics; Journal of International Financial Markets, Institutions & Money; Quarterly Review of Economics and Finance; Polish National Science Centre; Routledge handbooks.

### **AWARDS**

- Winner best paper award, Cryptocurrency Research Conference 2021.
- Best job market paper award, Saïd Business School, Oxford 2019.
- European Finance Association doctoral tutorial stipend, 2018.
- Winner best student paper award, Anglia Ruskin Cryptocurrency Research Conference 2018.
- Oxford Man Institute scholarship 2015-19.
- Winner Terence Gorman award for best MSc Economics student, Trinity College Dublin, 2007.
- Scholarship Award, St John's College, Cambridge 2000-02.

### **ADDITIONAL COMPETENCIES**

- Matlab, LaTeX and Stata.
- Languages: English (native), Japanese (advanced), French (moderate), Spanish (basic).

### **TEACHING EXPERIENCE**

2022: Guest lecture on cryptocurrencies and money, Weatherhead School of Management, CWRU.

2015-2016: Financial analysis, Saïd Business School, Oxford.

2015: Finance for senior executives, Saïd Business School, Oxford.

2006-2007: Mathematics and statistics for economists, Trinity College Dublin.