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Bank of Canada Quarterly Research Update

2025Q2

This quarterly newsletter features the latest research publications by Bank of Canada economists. The report includes papers appearing in external publications and staff working papers published on the Bank of Canada's website.

PUBLISHED PAPERS

In-Press

Engi Abou-El-Kheir & **Gabriela Galassi** & Daniel Stockemer, "Closing the Publishing Gender Gap in Economics and Political Science: Does a Critical Mass Matter?", *Plos One*, May 2025

Md. Nazmul Ahsan & Jean-Marie Dufour & **Gabriel Rodriguez-Rondon**, "Estimation and Inference for Higher-Order Stochastic Volatility Models with Leverage", *Journal of Time Series Analysis*, June 2025

Juliane Begenau & Saki Bigio & Jeremy Majerovitz & **Matias Vieyra**, "A Q-Theory of Banks", *Review of Economic Studies*, June 2025

Serdar Birinci & **Kurt See** & Shu Lin Wee, "Job Applications and Labour Market Flows", *Review of Economic Studies*, Vol. 92(3): 1438-1496, May 2025

Scott Cameron & Patricia C. Franks & Isto Huvila & Norman Mooradian, "Navigating Accountability: The Role of Paradata in AI Documentation and Governance", *Journal of Documentation*, May 2025

Edouard Djeutem & Shaofeng Xu, "Return Expectations Across the Wealth Distribution", *Journal of Mathematical Economics*, Vol. 118, June 2025

Shutao Cao & **Wei Dong**, "Production Networks and the Macroeconomic Impacts of Commodity Price Shocks", *Canadian Journal of Economics*, Vol. 58(2): 690-715, May 2025

Thibaut Duprey & **Kerem Tuzcuoglu**, "High-Frequency Effects of Macroprudential Policy Announcements", *Economics Letters*, Vol. 250, April 2025

Pablo Estrada & Juan Estrada & **Kim P. Huynh** & David Jacho-Chávez & Leonardo Sánchez-Aragón, "Netivreg: Estimation of Peer Effects in Endogenous Social Networks", *Stata Journal*, Vol. 25(2), June 2025

Tommaso Di Francesco & **Cars Hommes**, "Sentiment-Driven Speculation in Financial Markets with Heterogeneous Beliefs: A Machine Learning Approach", *Journal of Economic Dynamics and Control*, Vol. 175, June 2025

Bulent Guler & **Temel Taskin** & Yasin Kürşat Önder, "Sovereign Debt Disclosure", *Journal of International Economics*, June 2025

Justin-Damien Guénette & **Lin Shao**, "Assessing the Impact of Demographic Composition on Productivity", *Canadian Public Policy-Analyse De Politiques*, Vol. 51, May 2025

Lin Shao, "Aggregate Fluctuations and the Role of Trade Credit", *Review of Economic Dynamics*, Vol. 56, April 2025

James Macgee & Joel Rodrigue, "The Distributional Origins of the Canada-US GDP and Labour Productivity Gaps", *Canadian Public Policy-Analyse De Politiques*, Vol. 51, May 2025

Antonio Diez De Los Rios, "A Portfolio-Balance Model of Inflation and Yield Curve Determination", *Review of Asset Pricing Studies*, Vol. 15(2): 121-161, June 2025

Forthcoming

Ajit Desai & Anneke Kosse & Jacob Sharples, "Finding a Needle in a Haystack: A Machine Learning Framework for Anomaly Detection in Payment Systems", *Journal of Finance and Data Science*

Yuko Imura & Julia Thomas, "Productive Misallocation and International Transmission of Credit Shocks", *International Economic Review*

Genevieve Nelson, "Securitization and House Price Growth", *Review of Economic Dynamics*

Radoslav Raykov, "Decomposing Large Banks' Systemic Trading Losses", *Imf Economic Review*

STAFF WORKING PAPERS

Engi Abou-El-Kheir & **Gabriela Galassi** & Daniel Stockemer, "A Fresh Look at the Publication and Citation Gap Between Men and Women: Insights from Economics and Political Science", Bank of Canada Staff Working Paper 2025-13

Helmut Lütkepohl & Fei Shang & **Luis Uzeda** & Tomasz Woźniak, "Partial Identification of Heteroskedastic Structural Vector Autoregressions: Theory and Bayesian Inference", Bank of Canada Staff Working Paper 2025-14

Jonathan Witmer, "The Optimum Quantity of Central Bank Reserves", Bank of Canada Staff Working Paper 2025-15

Heng Chen & **Hongyu Xiao**, "Incorporating Trip-Chaining to Measuring Canadians' Access to Cash", Bank of Canada Staff Working Paper 2025-16

Heng Chen & **John Tsang**, "Correcting Selection Bias in a Non-Probability Two-Phase Payment Survey", Bank of Canada Staff Working Paper 2025-17

Jonathan Chiu & Cyril Monnet, "On the Programmability and Uniformity of Digital Currencies", Bank of Canada Staff Working Paper 2025-18

STAFF DISCUSSION PAPERS

Adam Epp & **Jeffrey Gao**, "Are Hedge Funds a Hedge for Increasing Government Debt Issuance?", Bank of Canada Staff Discussion Paper 2025-7

Julien Champagne & Mallory Long & **Antoine Poulin-Moore**, "The Shift in Canadian Immigration Composition and Its Effect on Wages", Bank of Canada Staff Discussion Paper 2025-8

Rakesh Arora & **Sriram Darbha** & **Cyrus Minwalla** & **Dinesh Shah**, "A Retail CBDC Design for Basic Payments: Feasibility Study", Bank of Canada Staff Discussion Paper 2025-9

ABSTRACTS

Papers In-Press

Closing the Publishing Gender Gap in Economics and Political Science: Does a Critical Mass Matter?

Using novel data on publications and citations by researchers in economics and political science in top 50 universities globally, we analyze the relationship between female representation and the gender gap in research output and impact. Using the concepts of substantive representation and critical mass, we expect that the average female researcher in departments with more women publishes more and receives more citations than the average female researcher in universities with a lower share of female faculty. Comparing women's publication and citation performance for the top 50 universities across the globe relative to men's, we find support for these expectations. We find that female researchers' performance matches that of their male counterparts in balanced departments, which are more common in political science. In contrast, the link between female performance and representation is weaker in departments with little gender balance, which are more typical in economics. These findings highlight the importance of reaching a critical mass of female representation to close gender gaps in research output and impact.

Estimation and Inference for Higher-Order Stochastic Volatility Models with Leverage

Statistical inference—estimation and testing—for stochastic volatility models is challenging and computationally expensive. This problem is compounded when leverage effects are allowed. We propose efficient, simple estimators for higher-order stochastic volatility models with leverage [SVL], based on a small number of moment equations derived from ARMA representations associated with SVL models, along with the possibility of using "winsorization" to improve stability and efficiency (W-ARMA estimators). The asymptotic distributional theory of the estimators is derived. The computationally simple estimators proposed allow one to easily perform simulation-based (possibly exact) tests, such as Monte Carlo tests (MCTS) or bootstrap procedures. In simulation experiments, we show that: (1) the proposed W-ARMA estimators dominate alternative estimators (including Bayesian estimators) in terms of bias, root-mean-square error, and computation time; (2) local and maximized Monte Carlo tests based on W-ARMA estimators yield good control of the size and

power of LR-type tests; (3) taking into account leverage improves volatility forecasting. The methods developed are applied to daily returns for three major stock indices (S&P 500, Dow Jones, Nasdaq), confirming the superiority of SVL models over competing conditional volatility models in terms of forecast accuracy.

A Q-Theory of Banks

Bank capital requirements are based on book values, which are slow to reflect losses. In this article, we develop a dynamic model of banks to study the interaction of regulation and delayed accounting. Our model explains four stylized facts: book and market values diverge during crises, the market-to-book ratio predicts future profitability, book leverage constraints rarely bind strictly even as market leverage fans out during crises, and banks delever gradually after net-worth shocks. We show how delayed accounting can allow the regulator to achieve better outcomes than immediate (mark-to-market) accounting. In an estimated version of the model, the optimal regulation couples faster loan-loss recognition with a modest relaxation of the book leverage constraint.

Job Applications and Labour Market Flows

Job applications have risen over time, yet job-finding rates remain unchanged. Meanwhile, separations have declined. We argue that increased applications raise the probability of a good match rather than the probability of job-finding. Using a search model with multiple applications and costly information, we show that when applications increase, firms invest in identifying good matches, reducing separations. Concurrently, increased congestion and selectivity over which offer to accept temper increases in job-finding rates. Our framework contains testable implications for changes in offers, acceptances, reservation wages, applicants per vacancy, and tenure, objects that enable it to generate the trends in unemployment flows.

Navigating Accountability: The Role of Paradata in AI Documentation and Governance

The increased use of Artificial Intelligence (AI) has prompted governments internationally to provide guidance and legislation to maximize the benefits of AI while minimizing the risks to humans and organizations. This paper explores how published requirements for documentation in a sampling of authoritative texts address the challenges of creating, capturing and preserving records of the design, implementation and use of AI tools for accountability and transparency, and how the analytical concept of paradata can help to

meet the recordkeeping challenges presented by the design, development and implementation of AI systems.

Return Expectations Across the Wealth Distribution

This paper examines how a household's expectation of asset returns varies with wealth. In the model, households face idiosyncratic investment risks and confront Knightian uncertainty about returns on the risky asset. Their return expectations are formed out of a dynamic zero-sum game with nature. We characterize the robust consumption-investment policies using a perturbation method. The model predicts a U-shaped relationship between expected risky returns and wealth, as nature is less incentivized to distort the perceptions of both poor and rich households. We confront this prediction with U.S. survey data.

Production Networks and the Macroeconomic Impacts of Commodity Price Shocks

We examine the macro implications of commodity price shocks in a small open economy model with input–output linkages for a commodity-exporting small open economy. In the model, fluctuations in commodity prices have impacts on aggregate output not only through resource reallocation, currency value changes and monetary policy reaction but also through upstream and downstream input–output linkages (both domestically and with the rest of the world). We show the importance of input–output linkages as a shock transmission mechanism. We find that production linkages with the rest of the world play a significant role in amplifying the shock's aggregate impact.

High-Frequency Effects of Macroprudential Policy Announcements

We investigate high-frequency impacts of macroprudential policy announcements using novel Canadian daily data. Lender-side tightening announcements reduce large banks' perceived systemic risks but decrease bank stock prices. Borrower-side tightening announcements increase mortgage rate spreads and real estate investment stock prices.

Netivreg: Estimation of Peer Effects in Endogenous Social Networks

The command netivreg implements the generalized three-stage least-squares estimator developed in Estrada (2022, Causal inference in multilayered networks, PhD thesis) and the generalized method of moments estimator in Chan et al. (2024, Journal of Econometric Methods 13: 205-224) for the endogenous linear-in-means model.

The two procedures use full observability of a two-layered multiplex network data structure using Stata's new multiframes capabilities and Python integration (version 16 and above). Applications of the command include simulated data and three years' worth of data on peer-reviewed articles published in top general-interest journals in economics.

Sentiment-Driven Speculation in Financial Markets with Heterogeneous Beliefs: A Machine Learning Approach

We study an heterogenous asset pricing model in which different classes of investors coexist and evolve, switching among strategies over time according to a fitness measure. In the presence of boundedly rational agents, with biased forecasts and trend following rules, we study the effect of two types of speculation: one based on fundamentalist and the other on rational expectations. While the first is only based on knowledge of the asset underlying dynamics, the second takes also into account the behavior of other investors. We bring the model to data by estimating it on the Bitcoin Market with two contributions, relying on methods from Machine Learning. First, we construct the Bitcoin Twitter Sentiment Index (BiTSI) to proxy a time varying bias. Second, we propose a new method based on a Neural Network, for the estimation of the resulting heterogeneous agent model with rational speculators. We show that the switching finds support in the data and that while fundamentalist speculation amplifies volatility, rational speculation has a stabilizing effect on the market.

Sovereign Debt Disclosure

This paper studies debt and default dynamics under alternative disclosure arrangements in a sovereign default model. The government can access both observable and hidden debt. We show that when debt is not fully disclosed, the government does not internalize the full effects of hidden debt choices on bond prices, thereby reducing the cost of holding hidden debt. We find that switching to a full disclosure regime shifts the portfolio from hidden to observable debt, exacerbating the debt dilution problem. Thus, contrary to conventional wisdom, this switch generates welfare losses.

Assessing the Impact of Demographic Composition on Productivity

This paper examines how demographic factors affect potential output, focusing on how the age distribution of the working-age population and old-age dependence affect aggregate productivity. Based on the

work of James Feyrer, we emphasize that the contribution to aggregate productivity varies by age group, with middle-aged individuals (aged 40–49) being the most productive. According to our analysis, changes in demographic composition could explain some of the productivity trends observed in China, the United States, and Canada, thus indicating the importance of incorporating the impact of demographic composition when estimating potential output. In particular, demographic factors are expected to narrow the differential in trend labour productivity (TLP) growth between China and the United States by nearly 1 percentage point over the remainder of the decade (2024–2030). On average, TLP growth in China could be reduced by 0.8 percentage points, while that in the United States could rise by 0.1 percentage points. Moreover, Canadian demographic factors tell a similar story to those of the United States. After averaging about 1 percentage point per year from 2010 to 2019, demographic headwinds are expected to dissipate fully through the 2020s, a trend which could signal an upside risk to Canadian TLP growth.

Aggregate Fluctuations and the Role of Trade Credit

This paper studies the aggregate implications of trade credit in a dynamic, general equilibrium model where heterogeneous entrepreneurs choose their lending and borrowing of trade credit in the presence of financial frictions. Motivated by empirical evidence, the model shows how trade credit flows from less constrained firms to more constrained ones, both in the cross-sectional distribution and in firms' response to heterogeneous financial shocks. In the face of an aggregate financial shock, entrepreneurs reduce their trade credit lending, further tightening their customers' borrowing constraints, resulting in an amplification of the initial shock. In contrast, when the financial shock only affects some, but not all, entrepreneurs, trade credit facilitates the flow of financing to entrepreneurs in financial distress, thereby mitigating its negative impacts. This mechanism, however, is only effective when the shock affects a sufficiently small number of entrepreneurs.

The Distributional Origins of the Canada-US GDP and Labour Productivity Gaps

Gross domestic product (GDP) per adult in Canada fluctuated between 70 and 90 percent of that of the United States between 1960 and 2020. Behind this gap lie large differences in relative incomes across the Canadian and US income distributions: there are small differences in average incomes among lower percentiles of the

income distribution, while large gaps exist for high-income earners, with larger gaps for business owners and university-educated individuals. Using data from the World Inequality Database, we find that the top 10 percent of the income distribution accounts for three-quarters of the gap in GDP per adult between Canada and the United States and up to two-thirds of the measured labour productivity gap. Our work suggests that selective emigration of high-ability workers to the United States—commonly referred to as “brain drain”—may play a significant role in accounting for the gaps in GDP per adult and labour productivity.

A Portfolio-Balance Model of Inflation and Yield Curve Determination

We propose a portfolio-balance model of the yield curve in which inflation is determined through an interest rate rule that satisfies the Taylor principle. Because arbitrageurs care about their real wealth, they only absorb an increase in the supply of nominal bonds if they are compensated with an increase in their real rates of return. Since the Taylor principle implies that the real return on nominal bonds positively depends on inflation, inflation increases in equilibrium when there is an increase in the supply of nominal bonds to compensate arbitrageurs for the additional supply they have to hold. (JEL E43, E52, G12, H63)

Forthcoming Papers

Finding a Needle in a Haystack: A Machine Learning Framework for Anomaly Detection in Payment Systems

We propose a flexible machine learning (ML) framework for real-time transaction monitoring in high-value payment systems (HVPS), which are central to a country’s financial infrastructure and integral to financial stability. This framework can be used by system operators and overseers to detect anomalous transactions, which—if caused by a cyber attack or an operational outage and left undetected—could have serious implications for the HVPS, its participants and the financial system more broadly. Given the high volume of payments settled each day and the scarcity of actual anomalous transactions in HVPS, detecting anomalies resembles finding a needle in a haystack. Therefore, our framework employs a layered approach to manage the high volume of payments and isolate potential anomalies. In the first layer, a supervised ML algorithm is used to identify and separate ‘typical’ payments from ‘unusual’ payments. In the second layer, only the ‘unusual’ payments are run through an unsupervised ML algorithm for anomaly detection. We test this framework using

artificially manipulated transactions and payments data from the Canadian HVPS. The ML algorithm employed in the first layer achieves a detection rate of 93 %, marking a significant improvement over commonly-used econometric models. The ML algorithm used in the second layer marks the artificially manipulated transactions as nearly twice as suspicious as the original transactions, proving its effectiveness.

Productive Misallocation and International Transmission of Credit Shocks

We develop an asymmetric, two-country equilibrium business cycle model to study the role of international trade in transmitting the real effects of financial shocks across borders. Our heterogeneous firms have differing needs for external finance and face occasionally binding collateral constraints that hinder their investments, while input-output linkages facilitate trade in both final goods and intermediate inputs. When confronted with global financial shocks, our model predicts that a recession in a large economy calibrated to the U.S. considerably alters a recession in its smaller trade partner calibrated to Canada, with distinct investment dynamics driving the transmission. The reverse does not hold.

Securitization and House Price Growth

From 2000-2006 U.S. house prices and mortgage credit grew while the relative cost of mortgage credit fell – particularly for privately securitized mortgages – suggesting a credit supply expansion. This paper compares innovations in the securitization of mortgage credit (a credit supply shock) to other candidate credit supply shocks. I model a two-layered mortgage market. This generates a novel balance sheet effect: changes in aggregate mortgage credit quantity are linked to changes in mortgage spreads via the interaction of financially constrained commercial banks and mortgage securitizers. Innovation in securitization (a direct relaxation of the securitizers' financial constraint) matches mortgage market dynamics.

Decomposing Large Banks' Systemic Trading Losses

Large banks' tendency to suffer simultaneous trading losses, which strengthen systemic risk, is often attributed to portfolio overlap. By contrast, I show that common macro shocks that cause non-overlapping assets to move together in crises are at least as important as portfolio overlap, but are inadequately treated by Basel III capital requirements. This highlights an unintended consequence of portfolio differentiation, whereby reducing portfolio overlap can

increase trading loss comovements from common shocks. I propose three policy options for improving the Basel III standard, and advocate for higher regulatory scrutiny on banks' internal risk models.

Staff Working Papers

A Fresh Look at the Publication and Citation Gap Between Men and Women: Insights from Economics and Political Science

In recent years, significant efforts have been made to attract more women into academia and to support their careers, with the goal of increasing their representation. Using novel data for economics and political science, collected through web-scraping the corresponding departments of the top 50 universities worldwide, we document three key findings: (i) female scholars, on average, publish less and receive fewer citations than their male counterparts; (ii) this gap is smaller at junior ranks in both disciplines; and (iii) the gap decreases in departments with a higher proportion of female scholars, particularly in political science, where female faculty representation is generally higher compared to economics. Gaps do not differ significantly by field in economics, where a substantial proportion of women are concentrated in microeconomic subfields. Overall, our results underscore a persistent publication and citation gap between men and women in both disciplines, primarily driven by full professors, while suggesting that this gap diminishes in departments with greater sex balance among faculty.

Partial Identification of Heteroskedastic Structural Vector Autoregressions: Theory and Bayesian Inference

We consider structural vector autoregressions that are identified through stochastic volatility. Our analysis focuses on whether a particular structural shock can be identified through heteroskedasticity without imposing any sign or exclusion restrictions. Three contributions emerge from our exercise: (i) a set of conditions that ensures the matrix containing structural parameters is either partially or globally unique; (ii) a shrinkage prior distribution for the conditional variance of structural shocks, centred on the hypothesis of homoskedasticity; and (iii) a statistical procedure for assessing the validity of the conditions outlined in (i). Our shrinkage prior ensures that the evidence for identifying a structural shock relies predominantly on the data and is less influenced by the prior distribution. We demonstrate the usefulness of our framework through a fiscal structural model and a series of simulation exercises.

The Optimum Quantity of Central Bank Reserves

This paper analyzes the optimal quantity of central bank reserves in an economy where reserves and other financial assets provide liquidity benefits. Using a static model, I derive a constrained Friedman rule that characterizes the socially optimal level of reserves, demonstrating that this quantity is neither necessarily large nor small but depends on the marginal benefits of reserves relative to alternative safe assets. The model highlights how the supply of government and private-sector liquid assets influences demand for reserves and the size of a central bank balance sheet. I calibrate and estimate the model to determine the optimal amount of central bank holdings in the United States. I extend the analysis to account for shadow banking, where non-bank intermediaries create short-term liquid assets but generate monitoring costs and externalities. The presence of shadow banking alters the optimal balance of reserves and other assets, potentially constraining optimal balance sheet policy. The results offer new insights into the debate over the size of central bank balance sheets and the interaction between public and private liquidity provision.

Incorporating Trip-Chaining to Measuring Canadians' Access to Cash

Household mobility data can improve our measurement of access to cash. The existing literature typically assumes that households visit their nearest ABMs or financial institution branches from their homes, without combining cash withdrawals with other activities (i.e., on their way to shopping). However, the typical approach neglects two realistic features: The first is that, due to spatial agglomeration, cash access points could be co-located with popular points of interest, such as retail service centers; and, second, households could combine multiple trips, via trip-chaining, to reduce travel costs. Our paper employs smartphone data to construct an improved cash access metric by accounting for both spatial agglomeration and households' travel patterns. We find that incorporating trip-chaining into the travel metric could show that travel costs are from 15% to 25% less than not incorporating trip-chaining and that the biggest decrease is driven by rural residents.

Correcting Selection Bias in a Non-Probability Two-Phase Payment Survey

We develop statistical inferences for a non-probability two-phase survey sample when relevant auxiliary information is available from a probability survey sample. To reduce selection bias and gain

efficiency, both selection probabilities of Phase 1 and Phase 2 are estimated, and two-phase calibration is implemented. We discuss both analytical plug-in and pseudo-population bootstrap variance estimation methods that account for the effects of using estimated selection probabilities and calibrated weights. The proposed method is assessed by simulation studies and used to analyze a non-probability two phase payment survey.

On the Programmability and Uniformity of Digital Currencies

Central bankers argue that programmable digital currencies may compromise the uniformity of money. We explore this in a stylized model where programmable money arises endogenously, and differently programmed monies have varying liquidity. Programmability provides private value by easing commitment frictions but imposes social costs under informational frictions. Preserving uniformity is not necessarily socially beneficial. Banning programmable money lowers welfare when informational frictions are mild but improves it when commitment frictions are low. These insights suggest programmable money could be more beneficial on permissionless blockchains.

Staff Discussion Papers

Are Hedge Funds a Hedge for Increasing Government Debt Issuance?

This paper studies the rapid increase since 2019 of Government of Canada (GoC) debt issuance alongside greater hedge fund participation at GoC bond auctions. We find a systematic relationship between GoC debt stock and hedge fund bidding shares at auction. We attribute this to hedge funds' business models, which are based on volume and leverage. We also use bid-level auction data and find that hedge funds are more willing than other investor types to buy bonds at lower auction yields (higher auction prices). These two results i) help explain why GoC auction performance has remained steady despite greater issuance and ii) affirm the importance of hedge funds in supporting Canada's cost-effective debt distribution in recent years. In addition, we conduct a counterfactual analysis of the exit of hedge funds from auction, which further affirms the importance of hedge funds to GoC auction performance. However, the concentration of hedge funds represents a potential vulnerability because hedge funds have a greater flight risk relative to domestic real money investors and thus contribute to a potentially less stable investor base.

The Shift in Canadian Immigration Composition and Its Effect on Wages

We document recent changes in Canadian immigration, marked by an increasing prevalence of temporary residency. Using microdata from Statistics Canada's Labour Force Survey, we show that temporary workers' characteristics and nominal wages have diverged from those of Canadian-born workers. Between 2015 and 2024, temporary workers have become younger, less experienced and more likely to migrate from lower-income countries. As well, the shares of temporary workers in skilled occupations have declined moderately. Throughout this period, the average nominal wage gap between temporary and Canadian-born workers has more than doubled, widening from -9.5% to -22.6%. Further, we estimate Mincer regressions to assess how these evolving characteristics have contributed to the growing wage gap. Our findings show that this increase can be explained by observable characteristics. Our results suggest that aggregate nominal wages would have been, on average, 0.7% higher in 2023–24 had the characteristics of temporary workers remained unchanged over the past decade.

A Retail CBDC Design for Basic Payments: Feasibility Study

We frame the wide spectrum of possible system architectures for an online retail central bank digital currency (CBDC) and identify a promising architecture well-suited for basic payments. We select OpenCBDC 2PC, a representative system design that fits this architecture and analyze it using a range of criteria to assess the feasibility of such system designs. Our analysis, augmented with lab experiments, focuses on retail payment systems with two-tier deployment and includes a detailed assessment of non-repudiation, integrity of the monetary supply, privacy, compliance, scalability of performance and resilience of the system state. It suggests that such system designs can be fast and cheap for basic payments, with high privacy, although some areas such as integration with retail payments systems, performance of auditing and resilience of the core system state require further investigation. Our framing highlights other promising architectures for an online retail CBDC, whose analysis we leave as an area for further exploration.

UPCOMING EVENTS

Greg Feldberg (Yale University)
Organizer: FSD Seminar
Date: 24 July 2025

Chris Gibbs (University of Sydney)
Organizer: BAP -CEA Seminar
Date: 25 July 2025