

Research Statement – Juliane Begenau

The architecture of financial intermediation has undergone significant changes over the past few decades: bank regulation has evolved, nonbank intermediation has expanded, and production has shifted toward capital-light, intangible-intensive activity. Against this backdrop, I study how the intermediation sector allocates capital and liquidity, who bears which risks, and the channels through which frictions, incentives, and rules map to aggregate outcomes—namely, liquidity creation, credit supply, investment, productivity, and financial stability.

One strand of my research studies banks—their regulation and macroeconomic impact. Banks bundle deposits and payments with lending, creating liquidity while taking on run, credit, and interest-rate risk. Nonbanks now provide similar services under lighter oversight. I develop tractable general-equilibrium (GE) models to study how capital, liquidity, and accounting rules shape portfolio choice and funding mix, push activity onto shadow balance sheets, and ultimately affect liquidity, credit supply, and stability. I design these models to match bank balance-sheets and macro moments; purposeful abstractions omit some micro detail to yield transparent, policy-relevant counterfactuals and clean attribution of effects between banks and nonbanks. My contributions are twofold: (i) when deposits' liquidity services are priced in GE, tighter capital requirements can increase lending and stability even as some intermediation migrates to nonbanks; and (ii) effective bank regulation requires aligned accounting rules, because book values can mask risk, distort behavior, and undermine stability.

My quantitative research is informed and complemented by empirical work on the economics of banking. I examine banks' interest-rate-risk exposure arising from maturity transformation. Funding long-duration assets with deposits and other short-duration liabilities naturally creates a duration mismatch; conventional wisdom claims that banks neutralize this risk through derivatives hedging or a “sleepy” deposit base. That view likely contributed to underweighting interest-rate risk in supervision as policy rates rose to new highs. My work, which predates much of the recent literature, develops a novel measure of banks' risk exposures and documents that banks actively sought interest-rate exposure. These findings challenge the “banks are hedged” narrative, help explain the recent 2023 stress episodes, and imply that capital rules and supervision should account for rate risk.

Building on my work on nonbanks, my second research strand examines private equity and private credit—now financing capital-light, R&D-intensive firms at scale. These markets have grown from early-1990s niche segments into a multi-trillion-dollar sector. Despite advances in the literature, opacity in the contracts channeling capital between funds and investors complicates analysis of activity and growth. I shed light on these contracts by showing that different investors often pay different fees within a fund, even after accounting for observables. Fee differences create dispersion in net-of-fee performance, with first-order implications for pension funds and other fiduciaries. I then ask why, despite such frictions, private funds became central capital allocators: shifts in consultant-driven expected risk-adjusted returns predict which institutions entered private markets and quantitatively explain a sizable share of their aggregate rise in pensions' portfolios.

My third research strand studies how financial frictions shape firm behavior. I show that firms' heterogeneous marginal productivities interact with cost-of-capital frictions to determine who borrows versus who issues equity over the business cycle. As production becomes more intangible, rising corporate cash partly reflects selection and compositional shifts rather than higher precautionary saving, and improvements in data processing lower the cost of capital—especially for data-rich large firms—amplifying scale advantages and concentration.

The central insight from my work is that structural change in technology and regulation continually reassigns who supplies capital and liquidity and who bears which risks, so policy must evolve as well. I combine microdata with quantitative models to identify mechanisms, quantify trade-offs, and run policy-relevant counterfactuals, while using simplified microfoundations to maintain tractability. I go back and forth between reduced-form evidence and model ingredients, so data disciplines the model and the model guides measurement. This agenda has (i) provided early warnings on banks' interest-rate exposures and supervisory complacency; (ii) supported tighter, better-targeted bank capital standards; and (iii) informed rulemaking and oversight—e.g., contributions to the SEC's private-fund documentation rule discussion and service on the Federal Reserve Board's Model Validation

Council—while drawing attention from market observers.ⁱ I now expand on these themes above.

Banks, capital regulation, and general equilibrium: In ([3]), I study whether tighter bank capital requirements reduce lending using a quantitative GE model calibrated to U.S. bank balance-sheet and business-cycle moments. Banks invest in risky credit and supply liquidity through insured deposits. I take the scope of deposit insurance and its effect on banks' optimal capital structure as given to isolate the general-equilibrium channel. Deposits carry a convenience yield that lets banks fund themselves below the risk-free rate; when deposits are scarce, the convenience yield rises. A tighter capital requirement curbs risk-taking and reduces deposit issuance, but the higher convenience yield lowers funding costs in GE and can increase lending, overturning the partial-equilibrium intuition. In [5], we extend this framework to nonbanks, where shadow banks issue uninsured deposit-like claims and regulated deposits and shadow debt are imperfect substitutes. We calibrate the key liquidity-preference parameters to match how liquidity spreads move with flows into liquid assets. Under this parametrization, tighter capital requirements lower fragility overall, and the convenience-yield channel helps preserve credit provision despite some migration to nonbanks. The policy implication is that objections that “capital kills credit” ignore the convenience-yield GE channel and that regulation must be evaluated with both bank and nonbank behavior in mind. A natural direction for future work is to endogenize the scope of deposit insurance from a welfare perspective, so that equity's additional financial-stability benefits are accounted for.

Measuring risk and supervisory implications: My work shows neither derivatives nor a “sleepy” deposit franchise neutralized banks' duration risk. In [12], we use regulatory microdata on banks' fixed-income positions—including derivatives—to build interest rate and credit risk measures. For each bank, we represent these positions as a levered bond portfolio and measure how it moves with rates. We define franchise value as the share of equity value not explained by that portfolio. Unlike standard approaches that infer exposures through regressions, our measure directly exploits detailed, real-time information on banks' individual holdings and movements in risk factors. Our findings show that banks actively sought interest-rate exposure through most of the sample. In 2022–23, as interest rates rose, franchise values offered a limited hedge. Banks typically invest incoming deposits in long-duration securities, which can make net-interest margins (NIM) look stable. However, in [10], we show that banks' stable NIM, often emphasized as a proxy to infer interest rate risk, does not reveal duration risk. One can engineer long–short, hold-to-maturity U.S. Treasury portfolios with stable net income yet carrying substantial duration risk. In a falling interest-rate environment, banks' actual duration exposure can mask weak fundamentals [9, 11]. Because book values lag losses and bind regulatory constraints, in [7], we develop a dynamic heterogeneous-bank model with slow loss recognition to show that co-designing capital and mark-to-market intensity dominates capital-only rules. Accelerating loss recognition in normal times disciplines banks' risk-taking. The policy implication is that interest rate-risk governance and accounting design are first-order for financial stability; income stability and book ratios are unreliable guides.

Bank pricing and monetary transmission: I document in [13] that banks set uniform deposit rates across their branch networks. Moreover, cross-local market differences in deposit growth during tightening reflect entry and expansion into attractive markets (the extensive margin), not within-bank local price dispersion from local market power. This work reframes deposit-channel tests and redirects empirical and structural analysis toward bank-specific demand and network/entry dynamics rather than local monopoly pricing.

Private equity/credit as allocators: Despite important advances in the literature, private-fund opacity still limits what we can measure about activities and sources of growth. In [6], we advance this by analyzing the implications of limited-partnership contracts that govern how fees and control rights are allocated and how capital is channeled between investors and funds. Leveraging within-fund comparisons of investor-level net-of-fee returns, we document that investors pay heterogeneous fees to access the same fund. Those fee differentials translate into dispersion in net-of-fee performance even after accounting for observables, indicating bargaining and access-channel frictions with clear fiduciary stakes for pension funds and other large allocators. This finding has informed SEC discussions on transparency and documentation standards of private funds. In [8], we show that shifts in consultants' beliefs about expected risk-adjusted returns predict which institutions moved into private markets and away from public equities. Calibrating a standard portfolio-choice model to early-

2000s aggregate pension portfolios, we find that plausible belief shifts can quantitatively account for the two-decade rise in private-market allocations.

Firms, intangibles, and the cost of capital: I analyze how financial frictions mediate how macro conditions and production technologies impact firm financing and investment behavior. Over the business cycle, financial frictions, heterogeneous marginal productivities, and financing needs explain equity issuance versus borrowing patterns: small growing firms raise debt and equity in booms. In contrast, large firms substitute debt for equity ([2]). Improved information processing creates a big-data advantage that disproportionately lowers the cost of capital for data-rich large firms, amplifying their scale and concentration ([1]). The secular rise in corporate cash holdings largely reflects composition, entry, and selection of intangible-intensive firms, rather than uniformly higher precaution, as shown in a dynamic corporate-finance model ([4]).

Ongoing work: My future work hopes to extend my agenda by evaluating policy levers and their effect: how capital, liquidity, deposit insurance, accounting/mark-to-market rules, and bank equity should be co-designed; how risk choice and franchise value determine exposures and supervision. For instance, in [14], I evaluate capital and liquidity rules in a heterogeneous-bank GE model with differentiated demand for insured versus uninsured deposits and portfolio choice between interest-rate-risky and credit-risky assets. Tightening capital for the largest banks reduces fragility more effectively than raising liquidity requirements on uninsured deposits, which distorts credit provision toward less-productive small banks through GE price effects. I hope to study how the bank–nonbank boundary (including specialized private intermediaries) reallocates liquidity provision and risk-bearing, how shifts in production technology (intangibles, data) move financing across sectors and firm sizes, and, within a welfare framework, endogenize the scope of deposit insurance so that the resulting financial-stability benefits of bank equity are explicitly accounted for. The goal is implementable, welfare-relevant counterfactuals for regulators and large allocators (e.g., pensions) in a system where intermediation, technology, and rules co-evolve.

Teaching Statement– Juliane Begenau

I teach students to reason with financial principles—building conceptual fluency and the judgment to apply it across contexts, not to memorize formulas. Whether working with MBA students encountering present value for the first time or PhD students building quantitative models, my goal is to build confidence and clarity that lets them use finance as a problem-solving language. Three commitments guide my teaching—real problems, deliberate practice, and open access. I anchor concepts in tangible decisions, revisit core ideas until they stick, and make time for technical questions and other discussions.

These principles manifest differently across contexts. In Finance 201, designed for students without quantitative backgrounds, the structure ensures our "base-level" students gain both technical skills and confidence for advanced work. Based on my experience teaching students, I believe they learn best from tangible finance with a clear connection to their personal or business life. I deliberately anchor the class around a small set of foundational concepts and circle back throughout the quarter. I start each session with a quick review to set the pace and close gaps early. In some years, I designed a capstone valuation case of a company (e.g., Spotify) using simplified financials so students can apply the full toolkit end-to-end. Teaching this course has been deeply collaborative, and I learned a great deal from my colleagues, Peter DeMarzo, Paul Pfleiderer, Joshua Rauh, Steve Grenadier. When COVID forced us online in Fall 2020, Peter, Josh, and I rebuilt the course with instructional videos and richer applied exercises to maintain engagement. More recently, I've also served as a conduit, passing what I've learned to younger colleagues teaching this course (Naz Koont and Tim de Silva).

In PhD-level Empirical Corporate Finance (Finance 630), which I've taught since 2020, learning happens through active engagement with frontier research. The course is paper-driven. Students read foundational and current work, discussing not just results but the choices and trade-offs—identification strategies, measurement approaches, modeling assumptions—that produce them. Throughout, I emphasize connections between different research areas and approaches to help students achieve conceptual fluency. Training the next generation means teaching techniques and showing them how to ask questions worth answering. Over the years, I have co-developed the curriculum with Amit Seru and Vikrant Vig to pair causal inference methods with structural and quantitative tools, reflecting my conviction that PhD students should invest in a rich set of tools. Teaching this course reveals students' emerging research interests early, enabling ongoing mentorship and, in some cases, coauthored work.

Publications and forthcoming/accepted papers

1. Begenau, Juliane, Maryam Farboodi and Laura Veldkamp. “Big data in finance and the growth of large firms”, *Journal of Monetary Economics*. Volume 97, 2018, Pages 71-87
2. Begenau, Juliane, and Juliana Salomao. “Firm Financing over the Business Cycle”, *The Review of Financial Studies*, Volume 32, Issue 4, 1 April 2019, Pages 1235–1274. Lead article.
3. Begenau, Juliane. “Capital Requirements, Risk Choice, and Liquidity Provision in a Business Cycle Model” *Journal of Financial Economics*, Volume 146, Issue 2, May 2020, Pages 355-378
4. Begenau, Juliane, and Berardino Palazzo. Firm Selection and Corporate Cash Holdings, *Journal of Financial Economics*, Volume 139, Issue 3, March 2021, Pages 697-718. Editor’s choice.
5. Begenau, Juliane, and Tim Landvoigt. “Financial Regulation in a Quantitative Model of the Modern Banking System” *Review of Economic Studies*, Volume 89, Issue 4, July 2022, Pages 1748-1784. (WFA Award for best paper on financial institutions)
6. Begenau, Juliane and Emil Siriwardane. Fee Variation in Private Equity, *The Journal of Finance* 79, no. 2 (2024): 1199-1247
7. Begenau, Juliane, Saki Bigio, Jeremy Majerovitz, and Matias Vieyra. “A Q-Theory of banks.” *Review of Economic Studies*. Forthcoming.
8. Begenau, Juliane, Pauline Liang, Emil Siriwardane. The Rise of Alternatives. Conditionally accepted at *The Review of Financial Studies*.

Working papers

9. Begenau, Juliane, and Erik Stafford. “Do Banks Have an Edge?” October 2019. Working paper.
10. Begenau, Juliane, and Erik Stafford. “Unstable Inferences from Banks’ Stable Net-Interest Margins.” April 2022. Working paper.
11. Altavilla, Carlo, Juliane Begenau, Lorenzo Burlon, and Franziska Maruhn. “Determinants of bank performance: evidence from replicating portfolios” July 2024. Working paper.
12. Begenau, Juliane, Monika Piazzesi, and Martin Schneider. “Banks’ Risk Exposure.” August 2025. Working paper.
13. Begenau, Juliane, and Erik Stafford. “Uniform Rate Setting, Branch Expansion, and the Deposit Channel.” September 2025. Working paper.
14. Begenau, Juliane, Vadim Elenev, and Tim Landvoigt. “Interest Rate Risk and Cross-Sectional Effects of Micro-Prudential Regulation.” April 2025. Working paper.

ⁱ See <https://www.sec.gov/files/rules/final/2023/ia-6383.pdf>