John W. Heilbron

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Employment

2022-2025	Researcher, Office of Financial Research, U.S. Department of the Treasury References: Mark Paddrik, Stathis Tompaidis, Peyton Young

Education

2022	Ph.D. in Finance, Booth School of Business Committee: Amir Sufi, Elisabeth Kempf, Scott Nelson, Anthony Zhang
2020	M.A. in Economics, University of Chicago
2014	B.A. in Social Studies, Harvard College *Magna Cum Laude*, Phi Beta Kappa Junior Year (top 1% of class)

Interests

Research	Financial Stability, Market Supervision, Central Counterparties (CCPs), Housing Finance, Household Finance
Teaching	Household Finance, Corporate Finance, Price Theory, Applied Micro-economics

Working Papers

- "Central Counterparty Management of Liquid and Prefunded Resources." With Nicholas Schwartz. 2025.

  This paper presents a simple analytical framework for understanding aggregate central counterparty (CCP) resource demands. The framework integrates various dimensions of CCP heterogeneity, including outstanding cleared volume, final settlement mechanism, contract turnover rate, underlying price volatility, market liquidity, market concentration, and certain CCP risk-management parameters, such as the extent of resource mutualization. Where available, we present empirical counterparts to these parameters using data from the CPMI-IOSCO Public Quantitative Disclosures (PQDs). Our framework extends previous literature by explicitly considering liquid as well as capital resources and we conclude with two reflections on CCP liquidity management. First, CCPs with a high turnover of physically settled contracts, such as securities or repo, may use liquid resources to help share funding risks associated with default between members. This helps explain the greater degree of resource mutualization at such CCPs and may even provide a motive for common ownership. Second, without sufficient liquid resources to weather large price dislocations, CCPs may be unable to commit to putting members into default in such circumstances. This may limit market discipline for appropriate ex-ante liquidity management by clearing members.

- "Credit Constraints and Bias in Hedonic Amenity Valuations." 2024.

  I demonstrate that credit constraints bias price-based (cf. rent-based) hedonic valuations of local public amenities. Mis-measurement of the private value of local public amenities distorts welfare analysis and could cause under-investment in amenities. I introduce a method to measure this bias by applying the hedonic framework to a problem of mortgage choice in the presence of credit constraints. I use Fannie Mae pricing grids and private mortgage-insurance requirements to construct borrower-level mortgage choice menus and estimate the extent of bias among fixed-rate agency loan borrowers. I find evidence that traditional hedonic techniques understate the value of amenities by $\sim 50\%$.

- "The Impact of CCP Liquidity and Capital Demands on Clearing Members Under Stress." With Stathis Tompaidis. 2024.

  We examine the impact of liquidity and capital demands by central counterparties (CCPs) on clearing members (CMs) under stress conditions. Our methodology provides insights into potential systemic vulnerabilities and resilience in centrally cleared markets and can be used to monitor the potential impact of CCPs on their clearing members. We consider 11 major CCPs and 6 CMs that are large U.S. financial institutions. We apply various stress scenarios to both CCPs and CMs and find that, while large clearing members have sufficient resources to meet CCP demands during periods of heightened risk, the size of these demands is material and has fluctuated over time.

Publications

- "Who Bears Climate-Related Physical Risk?" With David Wylie, Natee Amornsiripanitch, and Kevin Zhao. JUE Insights. 2025.

  This paper combines data on residential property-level physical risk from major climate-related perils (severe convective storm, inland flood, hurricane storm surge, hurricane wind, winter storm, and wildfire) with data on local economic characteristics to establish three facts about the severity of and five facts about the demographic distribution of this class of risk in the contiguous United States. On the severity of climate-related physical risk, we find (i) severe convective storms are the leading contributor to expected damage, (ii) inland flood and hurricane-related perils drive aggregate tail risk, and (iii) the difference in risk level between the safest and the riskiest places is expected to grow by 2050. On the demographic distribution of risk, we find (i) the safest areas have the most expensive homes, (ii) levels of economic well-being are lower in risky areas, (iii) there is little relationship between local racial composition and risk level, (iv) rural areas face the highest risks, and (v) there is no evidence of lower aggregate development activity or in-migration in risky areas. These facts are an important foundation for climate risk-mitigation policymaking and academic research on how the U.S. population view and respond to this class of risk.

- "Central clearing and trade cancellation: the case of London Metal Exchange nickel contracts on March 8, 2022" Journal of Financial Market Infrastructures. 2024.

  In March 2022, nickel prices on the London Metal Exchange (LME) nearly quadrupled in just three trading days, threatening to put several clearing members into default and exhaust the default fund at LME Clear, the exchange's central counterparty (CCP). The LME responded in an unprecedented fashion, by cancelling eight hours of nickel market trades. Though challenged in court, its authority to do so was ultimately upheld. This paper documents the market stress and LME's response in order to understand the implications of the trade cancellation decision for financial stability and CCP powers going forward. While LME's trade cancellation helped to alleviate distress, its decision runs counter to the function of a CCP, which is to ensure contract performance. In upholding LME's right to void contracts, the court's verdict could change how CCP rule books are applied under financial distress, potentially creating scope for moral hazard or other adverse consequences.

Prior Research

- "The Uneven Distribution of Climate Risks and Discounts." With Kevin Zhao. OFR Brief. 2024.

  In this brief, we document the uneven distribution of climate risk in real estate using novel data on expected losses due to climate risk at the property-level. We show that properties located in counties that are poorer, less educated, older, more rural, and that have less belief in climate change tend to have more climate risk. Next, using home sales, we document heterogeneity between counties in the size of discount per unit of climate risk. We find a smaller discount per unit of climate risk in a similar set of more exposed counties.

- "The Loan-to-Value Elasticity of Housing Demand: Evidence from Bunching in FHA Borrowing." 2021.

  I adapt the bunching framework to measure the loan-to-value elasticity of housing demand. Unlike existing literature, my estimator can identify the effect of credit supply while remaining agnostic about how households form beliefs over future housing returns. I measure a statistically significant elasticity of demand, suggesting that households are credit constrained at the time of home purchase. The elasticity is economically small, ∼14-25bp, suggesting that shocks to credit supply drove housing demand largely through the channel of household beliefs.

- "Housing Wealth Management at Retirement." 2019.

  I instrument retirement with programmatic Social Security eligibility thresholds and find that retirement makes a household ∼12pp more likely to issue any new mortgage debt and ∼3pp more likely to extract equity from a home within the following two years. The transaction costs associated with refinancing and the predictability of retirement suggest that households may save excessive funds in housing wealth relative to a rational benchmark.

- "Decision-Making by Precedent and the Founding of American Honda (1949-1972)." With Ramon Casadesus-Masanell. Harvard Business School Working Paper. 2016.

  We review archival documents and conduct a novel oral history to document that Kihachiro Kawashima, President of American Honda from 1959 to 1965, made decisions according to precedent set by his boss and mentor, chief strategist of Honda, Takeo Fujisawa. We argue that decision-making by precedent represents neither 'deliberate' nor 'emergent' strategy because it is characterized by intentions of upper-management that are neither present nor absent but fictive. We propose and define an alternative: 'subjunctive' strategy.

Teaching Experience

Spring 2021	35801: Corporate Finance (TA to Anthony Marciano, 2 E.M.B.A. sections)
Spring 2020	20410: Corporate Finance (TA to Elisabeth Kempf, 1 Undergrad section)
Fall 2019	35200: Corporate Finance (TA to Constantine Yannelis, 2 M.B.A. sections)
Fall 2018	35200: Corporate Finance (TA to Pascal Noel, 3 M.B.A. sections)

Previous Employment

2019	Research Assistant, Booth School of Business, Prof. Elisabeth Kempf
2014–16	Research Associate, Harvard Business School, Prof. Ramon Casadesus-Masanell

Fellowships, Awards, and Honors

2021	Fama-Miller Center Grant: "Credit Constraints and the Valuation of Local Public Amenities"
2021	Eugene Fama Ph.D. Fellowship
2020	Fama-Miller Center Grant: "Credit Market Discrimination and Public School Desegregation"
2020	Fischer Black Ph.D. Fellowship
2019	Liew Fama-Miller Fellowship, Best 3rd Year Finance Student Paper
2019	Fama-Miller Center Grant: "Probation Monitoring and Household Financial Health"
2017	CRSP Summer Grant
2016–20	Booth Ph.D. Program Fellowship

Presentations and Conference Attendance

** indicates presentation*

2025 FSOC FMU Committee*, Over-the-Counter Derivatives Regulators Forum (ODRF) Conference, University of Michigan Seventh Conference on Law and Macroeconomics, Joint Conference on CCP Risk Management

2024 OFR Brownbag* (CCPs and Clearing Members Under Stress), OFR Household Finance and Real Estate Working Group* (Housing Prices in a Rising Rate Environment), Fed Board Climate-Related Financial Stability Risk Conference, Yale Program in Financial Stability (YPFS) Symposium* (Data Governance and Financial Stability Risks in Centrally Cleared Markets), Fischer-Shain Research Center Conference

2023 OFR Brownbag* (Central Clearing and Trade Cancellation), OFR Short Term Funding Working Group* (discussion of Capponi et al. "A Theory of Collateral Requirements for CCPs"), ASSA Annual Meeting* (discussion of An et al. "Wealth and COVID-19 Consumer Debt Relief"), Joint Conference on CCP Risk Management, Cleveland Fed Financial Stability Conference

2022 Urban Economics Association* (Credit Constraints and Bias in Hedonic Amenity Valuation)

2021 Booth Finance Seminar*, Sufi Student Working Group*, Booth Finance Student Brownbag*, Chicago Student Applied Micro Lunch*, Booth Household and Corporate Lending Conference, Chicago Household Finance Conference, NBER Summer Institute, Booth Household Finance Summer Reading Group*

2020 Sufi Student Working Group*, Booth Finance Student Brownbag*, NYU Research Seminar in Empirical Household Finance, ASSA Annual Meeting

2019 Yale Summer School in Behavioral Finance, Booth Finance Student Brownbag*

2018 Booth Finance Student Brownbag*