

AHMED MOHAMED ABDELRAHMAN AHMED

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Current Employment:

2022- Assistant Professor of Finance, Babson College

Education:

2022 Ph.D. in Economics, The University of Chicago
2022 Master of Arts in Economics, The University of Chicago
2014 Master in Finance, Massachusetts Institute of Technology
2013 Master of Mathematics in Actuarial Science, University of Waterloo
2012 Bachelor of Science, Actuarial Science, The American University in Cairo

Professional Designation:

2020- CFA Charterholder (Passed the three exams since June 2015)
2015- Fellow of the Society of Actuaries (FSA)
2012- Associate of the Society of Actuaries (ASA)

Teaching Experience:

Lecturer:

2025- Risk Management (BA & MSC), Babson College
2023- Principles of Finance (BA), Babson College
2018 Introduction to Finance (BA), University of Chicago

Teaching Assistant:

2020-2021 Money & Banking (BA), University of Chicago
2020 International Economics (BA), University of Chicago
2019 Development Economics (PhD), University of Chicago
Econometrics (BA), University of Chicago
2018 Intermediate Macroeconomics (BA)
2012-2013 Financial Statistics (BA), University of Waterloo
2011 Life Contingencies II (BA), The American University in Cairo
Derivatives Pricing I & II (BA), The American University in Cairo
2010 Financial Mathematics, The American University in Cairo (BA)

Research Experience and Other Employment:

2025-	DHCB, Economic Advisor
2022-	United Nations Development Programme, Economic Advisor
2021-	Bank for International Settlements, Technical Advisor
2024	Asset Liability Management Expert Trainer, EFG Hermes
2022	Bank of England, PhD Intern
2019-2020	Bank for International Settlements, Senior Associate
2016-2017	ETH Zurich Financial Crisis and Real Estate Observatories, Researcher
2014-2015	Goldman Sachs, London, Senior Quantitative Analyst
2014	BlackRock, San Francisco, Risk Modeling Winter Intern
	MIT Centre of Finance and Policy, Researcher
	Harvard Law School, Researcher in the Islamic Finance Project
2012	EBRD, London, Market Research Intern
2011-2012	Egyptian Takaful Life Insurance, Cairo, Actuarial Intern

Honors, Scholarships, and Fellowships:

2025	Top 50 Undergraduate Business Professor, Poets & Quants
	Undergraduate Professor of the Year, Babson College
	Deans' Award for Excellence in Service, Babson College
	Career Champion, The Hoffman Family Undergraduate Center for Career Development, Babson College
	Fund for Innovation in Development Grant (€1,500,000) for "Estimating the social costs of Debtor Prisons"
2024	JPAL MENA/Egypt Impact Lab Grant (\$74,353) for "Estimating the social costs of Debtor Prisons" (Pilot)
2023-2024	Research Fellowship, Bank for International Settlements, Switzerland
2022-2023	Babson College Research Fund Grant (\$6000)
2017-2022	Social Science Division Scholarship, University of Chicago
2017-2022	International House Graduate Fellowship, University of Chicago
2019-2020	PhD Fellowship, Bank for International Settlements, Switzerland
2019	The Department of Economics Data Award, University of Chicago
2017-2018	Sherwin Rosen Fellowship, The University of Chicago
2015-2020	James C. Hickman Scholar, The Society of Actuaries
2015	Distinguished Alumni Award, The American University in Cairo
2015	Most Promising Global Actuaries, The Society of Actuaries
2013-2014	Office of Dean of Graduate Education Fellowship, MIT
2013	Statistics and Actuarial Science Chair's Award, University of Waterloo
2012-2013	Mathematics Graduate prize and International Student Award, University of Waterloo
2012	President's Cup and Mohamed M. El-Beleidy Award, The American University in Cairo
2011	The Exemplary Student, The American University in Cairo
2011	The John Wooddy Scholarship, The Actuarial Foundation, USA
2009-2012	Academic Merit Scholarship, The American University in Cairo

College Service:

2025- Faculty Representative, Student Success Strategic Plan Working Group
Faculty Representative, MLK Committee
Faculty Representative, Undergraduate Award Committee
2025 Finance Division Liaison, Undergraduate Academic Policy Committee
2023- Faculty Mentor, Global Scholars Program
Affiliated Faculty, KMH Center for Health Innovation and
Entrepreneurship
2022- Faculty Mentor for Muslim Students, Glavin Chapel
2022-2024 Finance Seminar Organizer, Finance Division

Publications:

Firms Subjective Political Uncertainty: Survey Evidence of Egypt's Arab Spring, *Applied Economics Letters*, 2025, pp. 1–10.

Abstract: We provide evidence of firms' perceived political uncertainty. We exploit a new survey question in the Egyptian Enterprise Survey to develop a representative panel data set of firms' subjective beliefs, characteristics and performance for the Egyptian private sector. We then document how subjective political uncertainty varies in the time series as well as in the cross section of firms. Our main result is that perception of political uncertainty reflects change. Firms perceive political uncertainty more when they realize change, either good or bad. To explain this empirical result, we present a stylized two-period Bayesian updating model where firms receive signals about the impact of the political uncertainty on their business situations.

Fiscal Stimulus and Pension Contributions: Evidence from the TCJA, with Anna Zabai (UBS), *Journal of Pension Economics and Finance*, 2024, 24(2), pp. 209–234.

Abstract: We evaluate the impact of the 2017 Tax Cut & Jobs Act (TCJA) pension tax break on sponsor contributions to defined-benefit retirement plans. We exploit cross-sectional variation in ex-ante exposure to the tax break. We find that the tax break induced an extra \$2.8 billion of sponsor contributions to medium- and large-scale plans in 2017. However, we find strong evidence of reversal, both in terms of sponsor contributions and plan funding ratios by 2018. Our contributions model indicates that this reversal is consistent with more binding financial constraints in 2018 relative to 2019. Our results suggest that the TCJA did not have a long-lasting impact on corporate defined-benefit pension funds.

Comparing ask and transaction prices in the Swiss housing market, with Diego Ardila (ETHZ) and Didier Sornette (ETHZ), *Quantitative Finance and Economics*, 2021, 5 (1), pp. 67-93.

Abstract: We analyze the relationship between ask and transaction prices in the Swiss residential real estate market over the 2005-2015 period. First, we present strong evidence that ask and transaction prices are co-integrated across different market segments, but they do not Granger-cause one another. Second, we analyze the cross-sectional distributions of ask and transaction prices/per living space and conclude that they do not follow the same distribution, with the distribution of transaction prices close to a log normal distribution and the distribution of ask prices exhibiting slightly fatter tails. Finally, we show significant evidence that transaction prices tend to exceed ask prices during protracted booms and bubble regimes. We discuss these empirical patterns in light of theoretical housing search models, and provide support for the hypothesis that the 2005-2015 Swiss market has

been dominated by an auction like dynamics. Hence, although ask prices constitute a suitable proxy to follow the development of the Switzerland's real estate market, especially given the sparsity of available transaction data, they might be prone to underestimate the extent of price increases when the market is booming, and the magnitude of the correction when the market enters the bust phase of the housing cycle.

Working Papers:

The Hedging Cost Channel of Monetary Policy Transmission: Evidence from Cross-Border Bond Flows, with Boris Hofmann (BIS) and Martin Schmitz (ECB). BIS Working Papers #1153.

Abstract: This paper uses unique security-level data from euro area investment funds to analyze how foreign investors adjust their portfolios in response to changes in US monetary policy. When US policy tightens, euro area funds, in particular those with FX hedging mandates, respond in two ways: they (1) cut their overall exposure to US dollar bonds and (2) shift their remaining holdings toward higher-yielding, lower-rated securities. These findings are consistent with a conceptual framework for cross-border portfolio allocation in the presence of hedging costs. The mechanism operates through the use of rolling short-term hedging contracts, which erode the hedged yield on US dollar bonds when US rates rise. This hedging channel of monetary transmission stands in sharp contrast to the classical risktaking channel, in which monetary tightening dampens investors' reach for yield. Finally, we show that the resulting yield-driven purchases by euro area funds with FX hedging mandates have economically meaningful price effects that influence conditions in US dollar credit markets.

Pension De-risking and Treasury Yield Curve Dynamics, with Hui Chen (MIT)

Abstract: We provide causal evidence that pension funding status drives maturity-specific portfolio reallocation with material effects on Treasury yields and yield curve shape. Exploiting the Tax Cuts and Jobs Act of 2017 as a natural experiment, we show that improvements in pension funding triggered concentrated demand for ultra-long (25–30 year) Treasury STRIPS, accompanied by exits from shorter and intermediate maturities. Pension funds absorbed \$41 billion of ultra-long Treasuries, generating a pronounced flattening of the yield curve. Using instrumental variables, we find that pension demand accounts for nearly all the 52-basis point compression in the 30–10-year term spread and 155 basis points of the compression in the 30–2 spread during this period. Plan-level evidence confirms the mechanism: a 10-percentage point increase in funding raises safe-asset allocations by 1.4 percentage points, with discrete increases around the 95% funding threshold where regulatory and risk-management incentives intensify. Unlike prior work focused on falling-rate environments, we document pension de-risking in a rising-rate context, showing that institutional demand can amplify yield curve flattening and contribute to inversion even absent deteriorating fundamentals. These findings provide direct support for preferred-habitat theories and highlight how coordinated institutional rebalancing affects monetary policy transmission in deep Treasury markets.

CIP Deviations as a Pricing–Kernel Shifter, with Oyakhilome Wallace Ibhagui (IFC and Johns Hopkins University)

Abstract: We show that the cross-currency basis swap spread is a pricing-kernel shifter with first-order implications for equity discount rates. Departing from the view of covered interest parity deviations as funding anomalies or arbitrage puzzles, we develop an intermediary asset-pricing framework in which the basis directly enters the stochastic discount factor through balance-sheet constraints faced by dollar-funded intermediaries. A more negative basis signals tighter dollar funding conditions, raising the market price of risk and increasing equity discount rates via a discount-rate channel, while simultaneously diverting intermediary balance-sheet capacity toward currency-hedged bonds through a substitution channel. Both mechanisms are amplified in risk-off states when convex balance-sheet costs bind most strongly. Empirically, we show that basis spreads predict equity returns, contain forward-looking information about risk premia, and exhibit pronounced state dependence. Our results elevate CIP deviations to the status of a priced state variable, unifying international finance and asset pricing by linking global dollar funding frictions to equity premia and the stochastic discount factor.

Work In Progress:

Pension Funds Liquidity Management and Private Equity Investments, with Victoria Ivashina (Harvard)

Abstract: Subscription lines are used by the general partners (GP) and are secured by limited partners (LP) commitments to fund investments at least in the short run, in lieu of calling capital from the investors. On the one hand, use of liquidity tactics by the funds could ease liquidity management for pension funds. However, it also adds complexity in pension liquidity management and could easily lead to a duration mismatch, and result in a run on pension funds liquidity. Investigating the interaction between pensions' liquidity management and growing exposure to illiquid assets, combined with the active use of liquidity products by the alternative managers, is the central subject of this study.

Reverse Yankee and Hedging Costs, with Boris Hofmann (BIS) and Martin Schmitz (ECB).

Abstract: “Reverse Yankees” are offshore debt issued by US issuers in a currency than US dollars, typically euro. This market is very large and has grown over the last 13 years, albeit not always consistently. According to Dealogic data, the reverse Yankee bonds accounted for around 21% of a total 454 billion euros of euro-denominated corporate bond issuance in 2019. This led the United States to compete with France as the largest country in euro zone corporate bond indices such as the ones offered by the ICE-BofA and Bloomberg Barclays. Against this background, first, we examine in this paper the key drivers behind the reverse Yankee issuances. In particular, we show that the currency hedged corporate yields differential between the US and euro area plays a key role in the reverse Yankee issuance decision by US companies. This connects with our current work (Ahmed et al. (2023)) which studies the key role of currency hedging cost in the investment behavior of euro area investment funds in the USD bond market. Second, we show that yield hungry European insurance companies and pension funds created the most demand of these reverse Yankees as it is easier for them to buy euro-investment-grade, as there is no need to hedge the currency risk. Third, we investigate the impact of the reverse Yankee issuance on the firm's debt, real investment and payout decisions. Finally, we examine why US issuers prefer to issue reverse Yankee in euros rather than Japanese Yen, which experienced similar yield differential and currency hedging costs similar to the euro. According to Dealogic data, the

record yen bond sales by US issuers was \$4.62 billion in 2000, which is a tiny fraction of the reverse Yankee issuances.

Estimating the social costs of Debtor Prisons, with Kareem Haggag (UCLA), Abdelrahman (Sawiris Foundation) Nagy and Adam Osman (UIUC)

Abstract: A third of the Egyptian prison population is incarcerated for the sole offense of failing to repay privately-held debt (El Sherif 2018). The practice of penalizing unpaid checks and loans with imprisonment is rooted in the French penal code adopted by Egypt in 1935. Though France abolished the criminalization of default in 1972, the institution remains in Egypt and other countries across MENA. Our innovation is to generate causal estimates of the costs and benefits (relative to a modern alternative) of this policy. We suspect that policy-makers overestimate the benefits (i.e. decreased default rates) relative to its potentially large social costs. Through a suite of randomized experiments -- in collaboration with lenders and a local non-profit that releases prisoners -- we hope to build an evidence base to move the policy debate past its current stalemate.

Credit without Banks: Lending through a Digital Commerce Platform, with Leonardo Gambacorta (BIS) and Andrea Presbitero (IMF)

Abstract: We study how a non-bank fintech platform extends credit at scale to traditionally unbanked small retailers by leveraging high-frequency digital data generated through an integrated e-commerce marketplace. Using proprietary data from MaxAB, a leading B2B platform combining ordering, logistics, payments, and embedded credit in emerging markets, we show that granular transactional and behavioural signals—such as purchase histories, product mix, ordering rhythms, and payment timing—enable real-time screening, pricing, and monitoring of borrowers in the absence of formal credit histories or collateral. Despite operating in a weak-enforcement environment, the platform achieves low delinquency rates, driven by both predictive underwriting and dynamic monitoring tied to continued marketplace access. Access to credit increases retailers' order frequency and inventory variety, while credit expansion strengthens platform performance through higher gross merchandise value and deeper supplier integration. The findings demonstrate how embedded finance within digital platforms can substitute for traditional lending technologies and expand credit access in emerging economies.