

MAX MILLER
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Education

PRESENT UNIVERSITY OF PENNSYLVANIA, THE WHARTON SCHOOL
PhD in Finance, August 2017 – May 2023 (Expected)

2013 EMORY UNIVERSITY, GOIZUETA SCHOOL OF BUSINESS
Bachelor of Business Administration, Finance

Fields of Interest

- Asset Pricing
- Household Finance
- Political Economy

Job Market Paper

1. Democratization, Inequality, and Risk Premia

MFA Best Doctoral Paper Award (2021)

WEA PhD Candidate Award For Outstanding Research (2021)

EFA Engelbert Dockner Memorial Prize for the Best Paper by Young Researchers, Runner-Up (2021)

FMA Best Paper in Investments (2021)

Bank of Canada Graduate Student Paper Award, Runner-Up (2022)

Abstract: Risk premia are significantly elevated during periods of democratization in a cross-country panel of equity data covering 85 countries over 200 years, despite little evidence of a negative effect on either realized or expected GDP and dividends. This result is explained in an asset pricing model in which wealthy asset market participants face higher taxes when democratizations succeed. Finally, using a shift in Catholic church doctrine in support of democracy, majority Catholic autocracies display significantly higher average excess returns relative to other countries in a difference-in-differences framework. These results shed light on how redistribution risk shapes asset prices.

Presented at: Econometric Society European Winter Meeting, Econometric Society World Congress, EFA (Poster Session), MFA, MFA Doctoral Symposium, Trans-Atlantic Doctoral Conference, WFA, World Finance Conference, Young Economist Symposium, EFA, NFA, FMA, UBC Winter Finance Conference, BSE Summer Forum, Bank of Canada GSPA Conference

Publications

1. **Relaxing household liquidity constraints through social security**
with Sylvain Catherine and Natasha Sarin
Journal of Public Economics (2020)
Press: MarketWatch, MarketWatch, MarketWatch
2. **Mutual Funds: Skill and Performance**
with Jonathan Berk and Jules van Binsbergen
Journal of Portfolio Management (2020)

Working Papers

1. **Social Security and Trends in Wealth Inequality**
with Sylvain Catherine and Natasha Sarin
Red Rock Finance Conference Best Paper Award (2020)
SFS Cavalcade Best Paper in Asset Pricing (2021)

Abstract: Recent influential work finds large increases in inequality in the U.S. based on measures of wealth concentration that notably exclude the value of social insurance programs. This paper revisits this conclusion by incorporating Social Security retirement benefits into measures of wealth inequality. We find that top wealth shares have not increased in the last three decades when Social Security is properly accounted for. This finding is robust to assumptions about how taxes and benefits may change in response to system financing concerns. When discounted at the risk-free rate, real Social Security wealth increased substantially from \$4.9 trillion in 1989 to \$52.6 trillion in 2019. When we adjust the discount rate for long-run macroeconomic risk, this increase remains sizable, growing from over \$4.0 trillion in 1989 to \$41.2 trillion in 2019. Consequently, by 2019, Social Security wealth represents 59% of the wealth of the bottom 90% of the wealth distribution.

Presented at: Chicago Annual Household Finance Conference*, EconTwitter Conference*, NBER SI CRIW*, Red Rock Finance Conference*, CEPR European Conference on Household Finance*, Northern Finance Association*, NBER Public Finance*, ASU Sonoran*, SFS Cavalcade, WFA*, NBER SI Inequality and the Macroeconomy*

*Denotes presentation by co-author

Press: Marginal Revolution, Pro-Market, The Economist

2. **Sovereign default and the decline in interest rates**
with James Paron and Jessica Wachter

Abstract: Sovereign debt yields have declined dramatically over the last half-century. Standard explanations for this decline, including aging populations and increases in asset demand from abroad, encounter difficulties when confronted with the full range of evidence across asset classes. We propose instead that the decline in inflation and default risk caused falling interest rates, a phenomenon that is not unique to our century. We show that a model with investment, inventory storage, and sovereign default captures the decline in interest rates, the stability of equity valuation ratios, and the recent reduction in investment and output growth corresponding to the zero lower bound.

Presented at: NBER SI Capital Markets, SF Fed Conference on Macro and Monetary Policy*, WFA*, NBER SI Asset Pricing

*Denotes presentation by co-author

3. **Foreign Influence in U.S. Politics**

with Marco Grotteria and Lakshmi Naaraayanan

Abstract: We provide the first large-sample evidence of foreign influence in US politics, showing that meetings between foreign countries and legislators affect government resource allocation directly for countries and indirectly for firms. To do so, we introduce a comprehensive dataset of date-stamped meetings between foreign countries and individual US legislators, spanning 2000 to 2018 and covering 146 countries, 1,200 US legislators, and 10 Congresses. From this new dataset, three facts emerge: (1) foreign countries lobby most intensely for trade and the economy, (2) meetings are positively related to legislator lawmaking effectiveness and past employment connections with lobbyists while they are unrelated to political ideology, and (3) foreign countries maintain connections with all legislators even after they depart from committees that are important in allocating public resources. Using legislator deaths as a shock to connections, our estimates imply a per-meeting direct loss of US\$5.7 million to countries in foreign aid and indirect loss to foreign firms in state subsidies and government contracts amounting to US\$250,000. Overall, these results highlight the significance of foreign influence in the US and present new observations to guide work in economics, public finance, and political science.

Presented at: Craig Holden Memorial Conference, CEPR Political Economy*, ISB Summer Conference, FMA (Scheduled)

*Denotes presentation by co-author

4. **Who hedges interest-rate risk? Implications for wealth inequality**

with Sylvain Catherine, James Paron, and Natasha Sarin

Abstract: We present a life-cycle model in which households can invest in short- or long-term assets to hedge against interest-rate risk. Our model matches important stylized facts. First, the share of long-term assets in households' wealth is hump-shaped over the life-cycle. Within cohorts, it increases with wealth and earnings. Second, wealth inequality grows when interest rates fall, but only when wealth does not include the value of Social Security. Hedging demand against interest-rate risk can explain 40% of long-run changes in wealth inequality since 1960.

Presented at: LBS Summer Finance Symposium*

*Denotes presentation by co-author

Technical Reports

1. **International Portfolio Investment Holdings of Long-term Securities in the Enhanced Financial Accounts**

with Elizabeth Holmquist and Youngsuk Yook

FEDS Note (2016)

Conference Presentations

2022	UBC Winter Finance Conference, Craig Holden Memorial Conference, BSE Summer Forum, ISB Summer Conference, Bank of Canada GSPA Conference, FMA (Scheduled)
2021	NBER SI Asset Pricing, WFA, MFA, MFA Doctoral Symposium, SFS Cavalcade, Trans-Atlantic Doctoral Conference, World Finance Conference, Young Economist Symposium, EFA, NFA, FMA
2020	NBER SI Capital Markets, Econometric Society World Congress
2019	Econometric Society European Winter Meeting

Invited Discussions

2022	FMA (Scheduled)
2021	Trans-Atlantic Doctoral Conference, Young Economist Symposium, World Finance Conference

Honors and Awards

2022	Bank of Canada Graduate Student Paper Award, Runner-Up
2022	Jacobs Levy Center Grant
2022	Jacobs Levy Center Dissertation Fellow
2021	FMA Best Paper in Investments
2021	EFA Engelbert Dockner Memorial Prize for the Best Paper by Young Researchers, Runner-Up
2021	WFA PhD Candidate Award For Outstanding Research
2021	SFS Cavalcade Best Paper in Asset Pricing
2021	MFA Best Doctoral Paper Award
2020	Red Rock Finance Conference Best Paper Award
2019	Rodney White Center Grant
2019	Jacobs Levy Center Grant

Teaching Experience

Teaching Assistant:

2020	PhD Asset Pricing (Prof. Nikolai Roussanov)
2019	PhD Asset Pricing (Prof. Nikolai Roussanov), Investment Management (Prof. Robert Stambaugh), Investment Management (Prof. Donald Keim), Financial Technology (Prof. Shimon Kogan)
2018	Investment Management (Prof. Donald Keim), Policy Decisions by Central Banks (Prof. Zvi Eckstein)

References

Jules van Binsbergen (Chair)

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Sylvain Catherine

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Service

Referee	<i>Journal of Finance, American Economic Review: Insights, Review of Finance, National Tax Journal</i>
Other	Co-founder of the <i>Inter-Finance PhD Seminar</i> which provides a forum for students from finance PhD programs across the United States to present and discuss their research.

Coding and Software Skills

Proficient	Python, R, Stata, Matlab
Basic	SAS, SQL

Employment/Other Research Experience

2019	Research Assistant to Prof. Jules van Binsbergen
2019	Research Assistant to Prof. Lucian Taylor
2015-17	Research Assistant, Federal Reserve Board of Governors, Flow of Funds
2014-15	Research Assistant to Prof. Francis X. Diebold; Expatriate of the Friday Morning Econometrics Group
2013-14	Operations Analyst, YP

Other Education

2015-16	Non-Degree Student, George Washington University
2014-15	Post-Baccalaureate Certificate in Mathematical Economics, University of Pennsylvania

Interests

Hobbies	Basketball (Wharton League Champion, 2022), chess (99th percentile on Blitz and Bullet), football, guitar, piano, ukulele.
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