

PATRICK SHULTZ
Finance Department
University of Pennsylvania
Wharton School of Business
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Education

- PRESENT UNIVERSITY OF PENNSYLVANIA, WHARTON SCHOOL OF BUSINESS
PhD in Finance, May 2024 (Expected)
- 2015 CLAREMONT MCKENNA COLLEGE
Bachelor of Arts, Economics, May 2015

Fields of Interest

- Asset Pricing
- Financial Intermediation
- Monetary Policy

Publications

1. **Bond Flows and Liquidity: Do Foreigners Matter?**
with Jens H.E. Christensen and Eric Fisher
Journal of International Money and Finance (2021)
2. **Is There an On-the-Run Premium in TIPS**
with Jens H.E. Christensen and Jose A. Lopez
Quarterly Journal of Finance (2020)

Working Papers

1. **Can Monetary Policy Create Fiscal Capacity?**
with Vadim Elenev, Tim Landvoigt, and Sitjn Van Nieuwerburgh

Governments around the world have gone on a massive fiscal expansion in response to the GFC and Covid crises, increasing government debt to levels not seen in 75 years. How will this debt be repaid? What role do conventional and unconventional monetary policy play? We investigate debt sustainability in a New Keynesian model with an intermediary sector, realistic fiscal and monetary policy, endogenous convenience yields, and substantial risk premia. During a large economic crisis, increased government spending and lower tax revenue lead to a large rise in government debt and raise the risk of future tax increases. Quantitative easing (QE) contributes to lowering the debt/GDP ratio and reducing the risk of future tax increases. QE is state- and duration-dependent: while a temporary QE policy deployed in a crisis stimulates aggregate demand, permanent QE crowds out investment and lowers long-run output.

2. **Accounting for Low Long-Term Interest Rates: Evidence from Canada**
with Jens H.E. Christensen and Glenn D. Rudebusch

In recent decades, long-term interest rates around the world have fallen to historic lows. We examine this decline using a dynamic term structure model of Canadian nominal and real yields with adjustments for term, liquidity, and inflation risk premiums. Canada provides a useful case study that has been little examined despite its established indexed debt market, negligible distortions from monetary quantitative easing or the zero lower bound, and no sovereign credit risk. We find that since 2000, the steady-state real interest rate has fallen by more than 2 percentage points, long-term inflation expectations have edged down, and real bond and inflation risk premiums have fluctuated but shown little longer-run trend. Therefore, the drop in the equilibrium real rate appears largely to account for the lower new normal in interest rates.

Policy Papers

1. **Emerging Bond Markets and COVID-19: Evidence from Mexico**
with Jens H.E. Christensen and Eric Fisher
FRBSF Economic Letter 2020
2. **Do Foreign Funds Matter for Emerging Market Bond Liquidity?**
with Jens H.E. Christensen and Eric Fisher
FRBSF Economic Letter 2018
3. **How Futures Trading Changed Bitcoin Prices**
with Galina Hale, Arvind Krishnamurthy, and Marianna Kudlyak
FRBSF Economic Letter 2018
4. **Valuation Ratios for Households and Businesses**
with Thomas Mertens and Michael Tubbs
FRBSF Economic Letter 2018
5. **China's Exchange Rate Policies and U.S. Financial Markets**
with Thomas M. Mertens
FRBSF Economic Letter 2017
6. **Has the Dollar Become More Sensitive to Interest Rates?**
with John Fernald and Thomas M. Mertens
FRBSF Economic Letter 2017
7. **Do All New Treasuries Trade at a Premium?**
with Jens H.E. Christensen and Jose A. Lopez
FRBSF Economic Letter 2017

Teaching Experience

Teaching Assistant:

2021	Behavioral Finance (Prof. Marius Guenzel), Central Banks, Macroeconomic Policy and Financial Markets (Prof. Joao Gomes and Prof. Zvi Eckstein)
2020	Central Banks, Macroeconomic Policy and Financial Markets (Prof. Joao Gomes and Prof. Zvi Eckstein), Behavioral Finance (Prof. Nikolai Roussanov), FinTech: Business, Finance and Technology (Prof. Shimon Kogan)

Service

Referee for the *Journal of Money, Credit, and Banking*

Coding and Software Skills

Proficient Python, R, Stata, Matlab, L^AT_EX, Microsoft Excel

Basic SAS, SQL

Honors and Awards

2020 Rodney White Center Grant, Mack Institute Grant

Previous Employment/Research Experience

2020 Research Assistant to Tim Landvoigt

2016-2018 Research Assistant to Jens H.E. Christensen, Thomas Mertens, John Williams, Federal Reserve Bank of San Francisco

2015-2016 Financial Analyst, ICONIQ Capital