# SIMON N. M. SCHMICKLER

 $(609) \cdot 933 \cdot 2898 \diamond Simon.Schmickler@princeton.edu$ 

### **EDUCATION**

Princeton University
Ph.D. in Economics
Advisor: Motohiro Yogo

Princeton University
M.A. in Economics

University of Bonn, Germany
B.Sc. in Economics
Rank: 1/378

### RESEARCH AREAS

Primary Field: Asset Pricing

Secondary Field: Machine Learning, Fintech, Industrial Organization

#### WORKS IN PROGRESS

## "Demand System Asset Pricing and Monetary Policy"

· I use demand system asset pricing techniques and big, proprietary securities holdings microdata to build a new tool for monetary policy analysis. I show that the spillovers from central bank purchases to other assets are local because they depend on the co-occurrence of portfolio holdings.

# "Machine Learning Institutional Trading and Return Predictability"

· How can we leverage the predictive power of Machine Learning to estimate the cross-section of expected stock returns without losing all economic intuition in a black box? In fact, can we increase predictive performance by imposing economic structure?

I combine Machine Learning with the mutual fund demand pressure literature to infer expected returns from portfolio holdings of financial institutions. Instead of predicting returns directly, I train neural nets to predict how institutions trade. Then, I construct expected returns as the product of expected excess demand and the inverse aggregate demand elasticity. First, neural nets outperform simple models out-of-sample. In particular, they excel at predicting hedge fund and mutual fund fire sales. Second, my measure of expected returns, ER, is a strong predictor of returns. ER also absorbs anomalies related to liquidity and trading. Third, a long-short trading strategy using ER-sorted portfolios returns an annual alpha of 25% at an information ratio of 2.1.

# "High-Frequency Trading and Fundamental Price Efficiency", with J. Gider and C. Westheide

· We study the impact of HFT on fundamental price efficiency, a measure which captures how well current stock market valuations predict future earnings. We estimate the effect by exploiting the staggered start of HFT in a panel of international exchanges and find a negative impact.

#### TEACHING EXPERIENCE

Money & Banking (ECO342) with Markus Brunnermeier

Corporate Restructuring (FIN519) with O. Griffith Sexton

Junior Independent Work with Will Dobbie and Christopher Neilson

# PROFESSIONAL EXPERIENCE

Bundesbank (German Central Bank) Visiting Reasearcher  EY Germany Advisory Intern  Airbus Group, Eurocopter UK Intern		Summer 2017 & 2018
		2014
		2013
HONORS AND	AWARDS	
Griswold Center for Economic Policy Studies Fellowship		2019 - 2020
Princeton University Graduate Fellowship		2015 - 2021
German National Academic Foundation Scholarship		2015 - 2017
Cusanuswerk Foundation Scholarship		2013 - 2014
University of Bonn Exchange Program Stipend		2013 - 2014
Konrad Adenauer Foundation Scholarship		2012 - 2015
SKILLS		
Software	Python, Stata, Matlab, LATEX Blockchain analysis (BlockSci), Machine Learning (Tensorflow	7)
Languages	English, German, French (Proficient), Latin (Translation)	
OTHER ACTIV	VITIES	
Peace Hill Senior High School in Koforidua, Ghana German Red Cross Computer Science teacher for one semester		2011 - 2012

Scuba Diving, Kiteboarding, Rock Climbing, Golf, Traveling