SIMON N. M. SCHMICKLER

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EDUCATION

Princeton University Ph.D. in Economics Advisor: Motohiro Yogo	2021
Princeton University M.A. in Economics	2017
University of Bonn, Germany B.Sc. in Economics Rank: 1/378	2015

RESEARCH AREAS

Primary Field: Empirical Asset Pricing Secondary Field: Machine Learning, Fintech

WORKS IN PROGRESS

Asset Fire Sales or Assets on Fire?

· Using high frequency data and machine learning methods, I propose a new method to isolate a plausibly exogenous component of mutual fund flows and use it as an instrument to revisit classic empirical questions in Finance because previous methods are vulnerable to a reverse causality critique.

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 15%.

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.

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, Christopher Neilson and Adrien Matray

PROFESSIONAL EXPERIENCE

2014
2013
2019 - 2020
2015 - 2021
2015 - 2017
2013 - 2014
2013 - 2014
2012 - 2015

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Software	Python	Stata	Matlab.	$IAT_{D}Y$
Sonware	гуьнон.	otata.	manab.	FIFT

Blockchain analysis (BlockSci), Machine Learning (Tensorflow)

English, German, French (Proficient), Latin (Translation) Languages

OTHER ACTIVITIES

Peace Hill Senior High School in Koforidua, Ghana

2011 - 2012

German Red Cross Computer Science teacher for one semester

Scuba Diving, Kiteboarding, Rock Climbing, Golf, Traveling