## 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? I combine machine learning with the 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. This measure is a strong predictor of returns. A long-short trading strategy exploiting this signal returns annual excess returns of 13%.

#### Payout-induced Trading

· This paper shows that firm payouts generate price pressure and market feedback spillover effects on other firms held in the same portfolios of financial institutions. When firms pay dividends, repurchase shares, or are acquired, institutional shareholders invest the cash proceeds into their existing portfolio - Payout-induced Trading - driving up asset prices of connected stocks. Using payout-induced trading, I estimate an asset demand elasticity of one and identify large market feedback effects on investment.

## **Interacting Anomalies**

· An extensive literature examines interactions of stock market anomalies using double-sorted portfolios. But given hundreds of known candidate anomalies, examining selected combinations of anomalies is subject to a data mining critique. In this paper, we conduct a comprehensive analysis of all possible double-sorted portfolios constructed from 102 underlying anomalies. We find hundreds of statistically significant anomaly interactions, even after accounting for multiple hypothesis testing. An out-of-sample trading strategy based on double-sorted portfolios performs on par with state-of-the-art machine

learning strategies, suggesting that simple combinations of characteristics capture a similar amount of variation in expected returns.

# 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

Bundesbank (German Central Bank) Visiting Researcher	Summer 2017 & 2018
EY Germany Advisory Intern	2014
Airbus Group, Eurocopter UK Intern	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)
Languages	English, German, French (Proficient), Latin (Translation)

### 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