PFS and MSFE Newsletter | Spring 2022

Columbia Business School AT THE VERY CENTER OF BUSINESS^{**} Program for Financial Studies

Program for Financial Studies (PFS) and Master of Science in Financial Economics (MSFE) Newsletter

Interdisciplinary research, events and education at the intersection of finance and data science.

The Program for Financial Studies (PFS) at Columbia Business School is a partnership between academia and industry whose goal is to support and promote the School's research in finance, connecting with internal and external stakeholders - students, alumni, advisory board - and the practitioners operating in the financial services industry. To learn more, please visit our website.

PFS WEBSITE

PFS ADVISORY BOARD MEMBERS

The Master of Science in Financial Economics (MSFE) is a highly selective 2-year STEM eligible master's degree program offered by the Finance Division of Columbia Business School. The program provides academically distinguished and industryoriented students the opportunity to obtain a rigorous, quantitative, graduate-level finance acumen. MSFE students take a carefully constructed curriculum of PhD and MBA courses. To learn more or apply, click below to access the website.

MSFE WEBSITE

<u>CLICK HERE</u> for directions on posting an internship or full-time position in VMock. Employer login: <u>https://www.vmock.com/employer-login</u>

For recruiting and company presentations tailored to the MSFE students, please contact Vyju Manian, Career Management Center: vvm8@gsb.columbia.edu

Congratulations MSFE Class of 2022!

We wish the MSFE graduating class of



2022 all the best!

David Alderman Tibor Zacharie Alec David Armando Sanchez Amador Apostolos Apostolou Luanda Cai Sam Chen Kevin Guo Xinruo Hu Sharon Lai Zeyao Liu Raksha Muralidharan Gangyu Ni Huasheng Nie Bridgid Alice Ruf Ruf Neel Shah Eva Yu Hongyi Zhou

Recap of Spring 2022 Programming



Ted talk-style research presentations by CBS faculty: <u>WATCH HERE</u>

Wei Jiang, Arthur F. Burns Professor of Free and Competitive Enterprise (Finance) presenting: *How to Talk When A Machine is Listening?* March 1

Laura Veldkamp, Leon G. Cooperman Professor of Finance and Economics presenting: *The Changing Economics of Knowledge Production* March 1 Spring 2022 Events

Breaking Down the Macro Backdrop, the Fed and Market Conditions, Brian Friedman, Global Head of Market Strats, Goldman Sachs January 25

Effective Decision-Making in the Equity Markets, Perry Boyle, Point72 (retired) February 8

Disruption in Financial Services, Tom Vandever '98, Head of FIG M&A, Barclays (PFS advisory board member) March 1

Effective Communication seminar,

Melina Denebeim '12, Co-Director, MSFE and Program for Financial Studies March 2 and April 22

MSFE Admitted Students Welcome Evening March 3

MSFE Alumni Panel featuring Gordon Li '19 and Lorelei He '19 March 22

6th Annual News & Finance Conference April 1

<u>Multi-Modal Machine Learning with</u> <u>Financial Text and Tabular Data</u>, Sanjiv Das, Amazon Scholar April 11

The Economy in 2022 - Managing a Transition, Michelle Meyer, Chief Economist, MasterCard April 14

Latest Finance and Business Research

How to Talk When A Machine Is Listening?



Wei Jiang, Arthur F. Burns Professor of Free and Competitive Enterprise and co-authors

Growing AI readership, proxied by expected machine downloads, motivates firms to prepare filings that are friendlier to machine parsing and processing. Firms avoid words that are perceived as negative by computational algorithms, as compared to those deemed negative only by dictionaries meant for human readers. The publication of Loughran and McDonald (2011) serves as an instrumental event attributing the difference-in-differences in the measured sentiment to machine readership. High machinereadership firms also exhibit speech emotion assessed as embodying more positivity and excitement by audio processors. This is the first study exploring the feedback effect on corporate disclosure in response to technology.

LINK TO RESEARCH LINK TO PRESENTATION

The Changing Economics of Knowledge Production

Laura Veldkamp, Leon G. Cooperman Professor of Finance and Economics and Simona Abis, Assistant Professor of Finance

Big data technologies change the way in which data and human labor combine to create knowledge. Is this a modest technological advance or a data revolution? Using hiring and wage data, we show how to estimate firms' data stocks and the shape of their knowledge production functions. Knowing how much production functions have changed informs us about the likely long-run changes in output, in factor shares, and in the distribution of income, due to the new, big data technologies. Using data from the investment management industry, our structural estimates predict that the labor share of income in knowledge work may fall by 5%. The change associated with big data technologies is similar in magnitude to estimates of the change brought on by the industrial revolution.

LINK TO RESEARCH LINK TO PRESENTATION

Monetary Policy Transmission in Segmented Markets

Yiming Ma, Assistant Professor (Finance) and co-authors

We show that dealer market power impedes the pass-through of monetary policy in repo markets, which is an important first stage of monetary policy transmission. In the European repo market, most participants do not have access to trade on centralized exchanges. Rather, they rely on OTC intermediation by a small number of dealers that exhibit significant market power. As a result, the passthrough of the ECB's policy rate to repo markets is inefficient and unequal. Our estimates imply that a secured funding facility like the Fed's RRP can alleviate dealer market power and improve the transmission efficiency of monetary policy.

LINK TO RESEARCH

The Importance of Investor Heterogeneity: An Examination of the Corporate Bond Market

Jane (Jian) Li, Assistant Professor Finance and co-author

Corporate bond market participants are increasingly worried about liquidity. However, bid-ask spreads and other standard measures indicate liquidity has not deteriorated significantly. This paper proposes a potential reconciliation. We show the sensitivity of credit yields to bid-ask spreads increased fourfold from 2005 to 2019. We then provide a model that connects this change to the rapid growth





of mutual funds in the corporate bond market. The model features heterogeneous investors with different trading needs who choose between a risk-free asset and illiquid bonds. As the risk-free rate declines, more short-term investors reach for yield and enter the bond market. These short-term investors reduce the selling pressure in each sub-market and so the bid-ask spreads. However, their greater trading needs amplify the sensitivity of credit yields to the bid-ask spreads, leading to a larger liquidity component. We next test the model's predictions using detailed data on investor holdings in the U.S. As predicted, we find investor turnover is associated with larger effects of illiquidity on credit yields. Bonds with more short-term investors are traded at lower bid-ask spreads, but their credit yields are more sensitive to the bid-ask spreads. Finally, we look across countries and show that, consistent with the model. larger declines in risk-free rates are associated with higher growth in mutual fund shares. These results highlight the key role that investor heterogeneity plays in determining how liquidity is priced into corporate bond yields and firms' financing conditions.

LINK TO RESEARCH



Program for Financial Studies Columbia Business School www.gsb.columbia.edu/financialstudies

Harry Mamaysky Faculty Director

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