

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

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 industry-oriented 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: https://www.vmock.com/employer-login

For company presentations tailored to the MSFE students, please contact Sandra Baum, Career Management Center: sb3224@gsb.columbia.edu

MSFE 1st YEAR STUDENT RESUME BOOK

MSFE 2nd YEAR STUDENT RESUME BOOK

Student Highlights: Master of Science in Finance Economics (MSFE)

Kevin Guo, MSFE '22



1. What brought you to Columbia Business School?

Personally, I believe Columbia and the MSFE program can take my statistics and coding skills to a next level. I think everyone should at least have some basic or intermediate level of competency on these skills in the modern world. Also, one of my childhood biggest dreams is to become a lawyer. Although right now is too late for that, I am still eligible for registering some courses at the law school to partially fulfill my dream. Columbia is truly a wonderful place.

2. What are you pursuing professionally?

I interned at Morgan Stanley as an equity derivatives trader last summer. My short-term goal is to land a job at one of the investment banks or buy-side firms as a trader or capital market analyst. From a long-term perspective, I desire to build my own business in the tech space.

3. What has been the most useful thing you've taken with you from your MSFE degree?

I found the Computing for Business and Big Data in Finance courses very useful. I applied a lot of the machine learning and statistical methods in those courses to conduct security analysis and reduce fundamental bias during my summer internship at Morgan Stanley. I have also met a lot of great classmates from my program. They are extremely talented and hard-working. I always have the greatest admiration and utmost respect towards my professors and fellow students, and they are the keys to my academic and professional success so far.

4. A word of wisdom to fellow students:

Always agree to disagree and help others if possible. Respect is the foundation of everything.

Cait Walsh, MSFE '20



1. What brought you to Columbia Business School?

After graduating from the University of Oklahoma, I worked for 2 years at the Federal Reserve Board as a fixed income data analyst, which confirmed my interest in quantitative financial analysis but also revealed my lack of theoretical knowledge in finance specifically. Additionally, I knew that I wanted to pivot into private industry as an opportunity to expand my range of experiences and to pursue diverse, short-term professional projects. As a result, I found myself searching for a two-year program that would equip me for the private sector while also exposing me

to PhD finance coursework. Columbia's MSFE is the only program fitting those specifications.

2. What are you pursuing professionally?

I work at Blackstone as an associate in Private Wealth Solutions. Specifically, I work for Blackstone's Chief Investment Strategist, helping to develop our team's view on anything that is "global, macro, and moving." We work with business units around the firm to provide a macro perspective for investor and asset management teams. We also speak frequently with clients to discuss our current view of the global economic and market environment, and we publish regularly as thought leaders.

3. What has been the most useful thing you've taken with you from your MSFE degree?

My participation in coursework at one of the country's top finance PhD programs provided an invaluable theoretical framework for my understanding of finance as a discipline. Specifically, the second-year asset pricing courses have been critical for my understanding of the theoretical underpinnings of the field and for exposure to numerous topics in the empirical literature, including risk factor identification. But, regardless of whether you're most interested in asset pricing, corporate finance, bank regulation, or market function, you'll leave the program having learned about each of these topics from leaders in that field.

4. A word of wisdom to students:

Always be willing to bet on yourself. I've faced countless opportunities in my academic and professional journey in which I felt underqualified, underprepared, and uncertain of how successful I could be. I've made a practice of saying "yes" to each of those challenges and, with a great deal of privilege, luck, and help along the way, have built a career that far exceeds what I dreamt of when heading to college a decade ago.

Upcoming PFS and MSFE Seminars



Ted talk-style research presentations by CBS faculty

Anton Lines, Assistant Professor of Finance Simona Abis, Assistant Professor of Finance

November 8, 6:00-7:00pm EST

Harry Mamaysky, Faculty Director, MSFE and Program for Financial Studies; Professor of Professional Practice in Finance

November 18, 6:00-7:00pm EST

MSFE welcome luncheon September 14

Bob Shainheit: Careers in Quantitative Finance presentation September 20, 12:15-1:45pm EST

Vanguard careers presentation September 22, 12:30-1:30pm EST

MSFE Alumni panel featuring Rafa Cardoso '19 and Linda Yang '19 September 27, 12:15-1:45pm EST

Takis Georgakopoulos, JPMorgan, presentation: October 5, 12:15-1:45pm EST

Communications seminar, Melina Denebeim '12, Director, MSFE and Program for Financial Studies October 27, 12:15-2:00pm EST November 3, 12:15-2:00pm EST

Refinitiv: How Quant Research Informs Fundamental Analysis October 25, 12:15-1:45pm EST

Latest Finance and Business Research



Mining for Oil Forecasts

Harry Mamaysky, Professor of Professional Practice (Finance), Charles Calomiris, Henry Kaufman Professor of Financial Institutions and co-authors

We study the usefulness of a large number of traditional variables and novel text-based measures for in-sample and out-of-sample forecasting of oil spot and futures returns, energy company stock returns, oil volatility, oil production, and oil inventories. After carefully controlling for small-sample biases, we find compelling evidence of in-sample predictability. Our text measures hold their own against traditional variables for oil forecasting. However, none of this translates to out-of-sample predictability until we data mine our set of predictive variables. Our study highlights that it is difficult to forecast oil market outcomes robustly.

LINK TO RESEARCH



<u>Choosing News Topics to Explain Stock Market</u> Returns

Paul Glasserman, Jack R. Anderson Professor of Business (Decision, Risk & Operations), Harry Mamaysky, Professor of Professional Practice (Finance) and co-authors

We analyze methods for selecting topics in news articles to explain stock returns. We find, through empirical and theoretical results, that supervised Latent Dirichlet Allocation (sLDA) implemented through Gibbs sampling in a stochastic EM algorithm will often overfit returns to the detriment of the topic model. We obtain better out-of-sample performance through a random search of plain LDA models. A branching procedure that reinforces effective topic assignments often performs best. We test these methods on an archive of over 90.000 news articles about S&P 500 firms.

LINK TO RESEARCH





Simona Abis, Associate Professor (Finance); Anton Lines, Associate Professor (Finance)

The proliferation of mutual fund strategies is a longstanding puzzle in the asset management literature. To gain new insight into this topic, we introduce a method for categorizing funds based on the strategy descriptions in their prospectuses. The resulting Strategy Peer Groups (SPGs), constructed using unsupervised machine learning, capture novel information about the funds and are more detailed than existing style categories. Where the prior literature finds that more unique funds experience greater flows, we find instead that investors prefer funds whose portfolio weights and characteristics are closer to the SPG averages. Our results are consistent with a mutual fund industry that caters to distinct investor clienteles with heterogeneous marginal rates of substitution, rather than investors with a general preference for variety.

LINK TO RESEARCH



Geert Bekaert, Professor Finance and co-authors

We study how monetary policy and risk shocks affect major asset prices (short-term interest rates, stocks, long-term bonds) in three large economies, the US, the euro area, and Japan, since the turn of the century. Examining the impact of monetary policy on risk, monetary policy does not drive asset price cycles through a risk channel. Instead, we find a strong global common component in risk shocks which is not driven by monetary policy. Comparing the impact of monetary policy and risk shocks on asset prices across countries, monetary policy spillovers are economically more (less) important for interest rates and bond prices (stock prices) than risk shocks. The US generates relatively important monetary policy spillovers, but information shocks emanating from the euro area produce the strongest effects on international stock and bond markets. We provide suggestive evidence that monetary policy effects on asset prices reflect a persistent interest rate rather than a risk premium effect.

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www.gsb.columbia.edu/financialstudies





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