

**UNIVERSITY OF CHICAGO
BOOTH SCHOOL OF BUSINESS**

**Business 35901-50
Portfolio Choice and Asset Pricing .**

Spring 2022

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Monday 8:30 AM - 11:30 AM

*Students in this class are required to adhere to the standards of conduct in the
Chicago Booth Honor Code and Standards of Scholarship*

Course Description

This PhD-level course covers current research on investor portfolio choice and asset pricing in financial markets. After reviewing some basic analytical frameworks, much of the time in this course is spent on material from the current research frontier, with a particular focus on identifying open questions and further research opportunities. Topics include retail investor trading; cryptocurrency and DeFi; formation of investor expectations; implications of climate risk; inflation and sovereign risk.

The material is covered in a rigorous analytical manner, but with a focus on big picture issues rather than technical and methodological details. The course can be accessible to highly motivated MBA students with a strong quantitative background who are deeply interested in advanced topics in investments.

The prerequisites for the course are a good fundamental background in economics, statistics, linear algebra, and some finance, taken here or elsewhere. PhD students can register without my approval. To get approval to register, MBA students must first send me an e-mail describing their background. I reserve the right to exclude students who do not seem to be adequately prepared.

Office hours

By appointment. Please send me an email to arrange a meeting.

Course requirements and grading

We will spend a lot of time in this class on an in-depth discussion of recent research papers. For this to work well, it is crucial that you have read the papers on the reading list carefully and that you have thought about the analysis presented in these papers. There is a lot to read for this course. Make sure to plan sufficient time.

In addition to regular class participation, I expect the following contributions (for MBA students we can modify some of these requirements on an ad-hoc basis depending on background. Please make an appointment with me to discuss):

(1) **Paper reports:** The homework for every class is to prepare, in advance of our class session, a write-up (min. 5 pages per paper) that discusses each paper on the reading list (except for background material on the reading list that I marked with *B*. This is material that you should study carefully, but you don't need to write a report on it). These reports are due at the start of each class session. The discussion should focus on the key points made in the paper, its contribution to the existing literature, strengths and weaknesses of the paper, and open questions and possible extensions. Use your own words and do not copy-and-paste from the papers. (If want to take a piece of text verbatim from the paper, you need to clearly identify it as a quote, otherwise it is plagiarism!) To do these reports well, you will likely have to read additional papers on the methods used in the paper, or earlier literature that the paper builds on. So plan to spend a large amount of time every week on these reports. For some of these papers, I may provide some questions for additional guidance on what you should focus on.

(2) **Lead discussion:** Each student (or teams of students, depending on how many students we will have in class) will prepare slides and lead the discussion of one or two papers (will depend on the number of students in the class) for approx. 50 mins. (which means that you should aim for about 30 mins. of presentation with an estimated 20 mins. of Q&A and discussion during the presentation). I marked these papers with *S* on the reading list. I will ask you to select your top three choices from these by the end of the day after the first class session. I will then assign them based on these preferences.

(3) **Research proposal:** A research proposal is due in the last class. In this proposal, you should describe a research question, outline the potential contribution relative to the existing literature, the methods and data that you would employ (if it's an empirical project), and difficulties that you anticipate at this point. You're welcome to add some preliminary analyses as well. But this is not necessary.

Grading

The grade will be based on class participation (20%) paper reports (40%) presentation (20%) and research proposal (20%).

Accommodations

If you require any accommodations for this course, please provide a copy of your *Accommodation Determination Letter* (provided to you by the Student Disability Services office) so that you may discuss with me how your accommodations may be implemented in this course. The University of Chicago is committed to ensuring the full participation of all students in its programs. If you have a documented disability (or think you may have a disability) and, as a result, need a reasonable accommodation to participate in class, complete course requirements, or benefit from the University's programs or services, you are encouraged to contact Student Disability Services as soon as possible. To receive reasonable accommodation, you must be appropriately registered with Student Disability Services. Please contact the office at 773-702- 6000/TTY 773- 795-1186 or disabilities@uchicago.edu, or visit the website at disabilities.uchicago.edu. Student Disability Services is located at 5501 S. Ellis Avenue.

Outline of Sessions

Below is a preliminary outline of the sessions and topics. We may change this as we go along, depending on our progress.

Session 1: Review of Basic Frameworks

Readings:

- TBA

Session 2: Retail investor trading

Readings:

- *S* Barber, Brad M, Xing Huang, Terrance Odean, and Christopher Schwarz, 2020, Attention induced trading and returns: Evidence from robinhood users, Working paper, University of California Berkeley
- *S* Kalda, Ankit, Benjamin Loos, Alessandro Previtero, and Andreas Hackethal, 2021, Smart (phone) investing? a within investor-time analysis of new technologies and trading behavior., Working paper, National Bureau of Economic Research
- *S* Hu, Danqi, Charles M Jones, Valerie Zhang, and Xiaoyan Zhang, 2021, The rise of reddit: How social media affects retail investors and short-sellers' roles in price discovery, Working paper, SSRN

Session 3: Retail investors, social networks, and memes

Readings:

- *S* Pedersen, Lasse Heje, 2021, Game on: Social networks and markets, Working paper, SSRN
- *S* Cookson, J Anthony, Joseph Engelberg, and William Mullins, 2021, Echo chambers, Working paper, SSRN
- *S* Tenguov, Angel, Franklin Allen, Eric Nowak, and Matteo Pirovano, 2021, Squeezing shorts through social news platforms, Working paper, SSRN

Session 4: Cryptocurrencies, DeFi

Readings:

- *S* Liu, Yukun, and Aleh Tsyvinski, 2021, Risks and returns of cryptocurrency, *Review of Financial Studies* 34, 2689–2727
- *S* Griffin, John M, and Amin Shams, 2020, Is bitcoin really untethered?, *Journal of Finance* 75, 1913–1964
- *S* Kozhan, Roman, and Ganesh Viswanath-Natraj, 2021, Decentralized stablecoins and collateral risk, *SSRN*

Session 5: Subjective Expectations and Financial Decisions

Readings:

- Gormsen, Niels Joachim, 2020, Expected stock returns and firms' perceived cost of capital, *SSRN*
- *S* Giglio, Stefano, Matteo Maggiori, Johannes Stroebe, and Stephen Utkus, 2019, Five facts about beliefs and portfolios, Working paper, NBER
- Malmendier, Ulrike, and Stefan Nagel, 2016, Learning from inflation experiences, *Quarterly Journal of Economics* 131, 53–87

Session 6: Subjective expectations and asset prices

Readings:

- Nagel, Stefan, and Zhengyang Xu, 2021, Dynamics of subjective risk premia, Working paper, University of Chicago
- *S* De La O, Ricardo, and Sean Myers, 2021, Subjective cash flows and discount rates, *Journal of Finance* 76, 1339–1387
- *S* Lochstoer, Lars A, and Tyler Muir, 2019, Volatility expectations and returns, *Journal of Finance*, forthcoming

Session 7: Inflation risk

Readings:

- Nagel, Stefan, and Yan Zhen, 2022, Inflation hedging on main street? evidence from retail tips fund flows, Working paper, University of Chicago
- *S* Roussanov, Nikolai L, Yang Liu, and Xiang Fang, 2021, Getting to the core: Inflation risks within and across asset classes, *Jacobs Levy Equity Management Center for Quantitative Financial Research Paper*
- *S* Reis, Ricardo, 2020, The people versus the markets: A parsimonious model of inflation expectations, Working paper, London School of Economics

Session 8: Climate risk

Readings:

- Paper TBA
- *S* Ilhan, Emirhan, Zacharias Sautner, and Grigory Vilkov, 2021, Carbon tail risk, *Review of Financial Studies* 34, 1540–1571
- *S* Alekseev, Georgij, Stefano Giglio, Quinn Maingi, Julia Selgrad, and Johannes Stroebe, 2021, A quantity-based approach to constructing climate risk hedge portfolios, Working paper, NYU Stern

Session 9: Sovereign debt

Readings:

- Cochrane, John H, 2019, The value of government debt, Working paper, National Bureau of Economic Research
- *S* Gilchrist, Simon, Bin Wei, Vivian Z Yue, and Egon Zakrajšek, 2021, Sovereign risk and financial risk, Working paper, National Bureau of Economic Research
- *S* Meyer, Josefin, Carmen M Reinhart, and Christoph Trebesch, 2019, Sovereign bonds since waterloo, Working paper, National Bureau of Economic Research