University of Pennsylvania
The Wharton School
Prof. Ye Li

macrofin@upenn.edu   SH-DH 2427

FNCE 219: SH-DH 1206, MW 10:15 – 11:45AM

International Financial Markets and Cryptocurrencies
Spring 2024

This class focuses on the international aspects of financial markets and the recent trends in technology, globalization, and regulation.

Currency exchange rates have a major impact on international transactions and on the business environment. The class studies the markets for exchange rates. As the most liquid financial market, there are a variety of derivative contracts available on currencies such as forwards, futures, swaps and options. The class provides in-depth perspectives on these.

For many firms, exchange rates are primarily viewed as risks affecting operational and financial positions. Currency risk management is one of the main themes of this course.

For investors, currencies as well as international equity and bond markets represent opportunities that complement domestic investments. The class considers the optimal exposures to international stocks and bonds, and the role of currency risks in international portfolios.

Cryptocurrencies are a potentially disruptive new type of financial instrument. The class covers selected topics on blockchain technology, cryptocurrency, decentralized finance, decentralized autonomous organizations, stablecoins, and central bank digital currencies.

Cryptocurrency markets have grown by adopting and adapting financial instruments from the markets of traditional fiat currencies. The topics on derivative contracts in the traditional markets help you identify potential opportunities in the space of cryptocurrencies.

This course builds on skills acquired in introductory finance, economics and statistics. The class format is lecture-based. Class assignments are both conceptual and quantitative in nature.

Prerequisites (recommended but not required)
        FNCE 100, FNCE 101 or ECON 102, STAT 101

Teaching Assistants:
  Luke Min: lukekmin@wharton.upenn.edu
  Jaume Pujadas: jaumep@wharton.upenn.edu

Office hours (Zoom) from the week of Jan 22 – Jan 26 to the week of Apr 29 – May 3
  Ye Li: Mondays 5:30-6:30 pm (Zoom link: https://upenn.zoom.us/j/92363809722)
  Luke Min: Fridays 3-4pm (Zoom link: https://upenn.zoom.us/j/97571263872)
  Jaume Pujadas: Fridays, 2-3pm (Zoom link: https://upenn.zoom.us/j/96643926026)

Materials
  • Lecture notes, practice questions and answers, exam answers, assignment answers, and other materials will be made available on Canvas. You may want to print out the lecture notes beforehand and bring them to class.

  • The lecture notes are designed to be self-contained, but it is going to extremely helpful to have a textbook for reference. A customized eBook has been made available for you at https://create.mheducation.com/shop/ You may enter the ISBN #: "9781307962192" in the "Looking for New materials Area". Payment is by credit card, and you will get an email with the information about how to access the eBook. If you encounter any issues purchasing the eBook, technical assistance is available at McGraw-Hill's support line 1-800-331-5094, press 2, press 2 (Create), press 1.

Financial Times/WSJ accounts
International markets and the space of cryptocurrencies are constantly changing. You are welcome to bring what you read in the news media to the class! If you haven't already done so, please make sure you have active subscriptions to Financial Times and WSJ. For FT, please go to https://faq.library.upenn.edu/business/faq/45307 and click "Create Account". For WSJ, please go to https://faq.library.upenn.edu/business/faq/45188 and click "Create Account."

Course Requirements
  • This course does not have a final exam. Your grade will depend on your performance in the two midterm exams, three individual assignments, and one case study.

  • **Mid-term Exams:** Each exam counts for 35% of your final grade. Unexcused absences will result in a zero score. Excused absences from exams require approval prior to the exam (please email Prof. Li). The weight of excused exams will be evenly distributed to the other exams and assignments. Exams are closed book, but you may prepare a letter-sized sheet (8.5-by-11 inch) with notes on both sides.
    - The first midterm exam is on Monday, ***February 26***, during class time.
    - The second midterm exam is on Monday, ***April 1***, during class time.

- **Three individual assignments** count for 20% of the final grade. Individual assignments contain problems that students work out and submit individually. I will drop the lowest grade of these assignments, i.e., only the top two individual assignment grades will count towards your final grade (each for 10% of your final grade). Late submission will NOT be accepted.
  - The first assignment is due on Wednesday, ***February 7***.
  - The second assignment is due on Wednesday, ***March 11***.
  - The third assignment is due on Wednesday, ***April 3***.

- **One case study (individual work)** counts for 10% of your final grade. You will be expected to prepare a document of no more than 5 pages on the business model of a DeFi company. The list of companies and detailed guidance on the case study will be published via Canvas announcements shortly after Midterm 2 (in early April). Late submission will NOT be accepted.
  - The case study is due on Monday, ***May 6***.

- ***A summary of important dates***:
  - The first assignment due on February 7.
  - The first midterm exam is in-class on February 26.
  - The second assignment is due on March 11.
  - The second midterm is in-class on April 1.
  - The third assignment is due on April 3.
  - The case study is due on May 6.

- **Re-grading exams and assignments:** Any request for re-grading must be submitted by email to Prof. Li <u>within one week</u> from the date the exams or assignments are returned. The exam or assignment should be placed in my mailbox in the Finance Department or given to me in class.

Academic Integrity
No member of the class may engage in or tolerate academic fraud, such as cheating, plagiarism or lying. I believe strongly in giving certain liberties to students, and in return I expect honest and honorable conduct, including compliance with the University of Pennsylvania's Code of Academic Integrity. You may discuss problem sets and exams with your classmates (after completing them), but you may not use materials obtained from students who took this course in previous years. You must follow all the exams instructions very carefully and only use the explicitly permitted resources.

Sharing any material from this course – including, but not limited to, slides, exam questions, and exam solutions – with anyone not in your section will be considered a violation of the University's Code of Academic Integrity. This includes posting such material to any other website. Any such violation will result in a failing grade.

Calendar (preliminary)

	MW	Topic	Exam/Assignment Due
Session 1	M 1/22	Overview and exchange rate	
Session 2	W 1/24	Spot exchange rate markets	
Session 3	M 1/29	Spot exchange rate markets	
Session 4	W 1/31	Forwards, LIBOR, interest rate parity	
Session 5	M 2/5	Forwards, LIBOR, interest rate parity	
Session 6	W 2/7	Forwards, LIBOR, interest rate parity	Assignment 1
Session 7	M 2/12	Forwards, LIBOR, interest rate parity	
Session 8	W 2/14	Purchasing power parity	
Session 9	M 2/19	Currency futures	
Session 10	W 2/21	Currency futures	
Session 11	M 2/26	Midterm 1 covers Session 1 to 10	Midterm 1
Session 12	W 2/28	International stock markets	
Session 13	M 3/11	International bond markets	Assignment 2
Session 14	W 3/13	Carry trade	
Session 15	M 3/18	Interest rate and currency swaps	
Session 16	W 3/20	Interest rate and currency swaps	
Session 17	M 3/25	Interest rate and currency swaps	
Session 18	W 3/27	Currency options	
Session 19	M 4/1	Midterm 2 covers Session 1 to 18	Midterm 2
Session 20	W 4/3	Currency options (advanced topics)	Assignment 3
Session 21	M 4/8	Currency options (advanced topics)	
Session 22	W 4/10	Cryptocurrencies (case study guide)	
Session 23	M 4/15	Cryptocurrencies	
Session 24	W 4/17	Cryptocurrencies	
Session 25	M 4/22	Cryptocurrencies	
Session 26	W 4/24	Cryptocurrencies	
Session 27	M 4/29	International monetary system	
Session 28	W 5/1	International monetary system	
	M 5/6		Case