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**University of Pennsylvania  
The Wharton School  
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SH-DH 2327

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**International Financial Markets**

**FNCE 219/719  
Fall 2019**

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

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

For many firms, exchange rates are primarily viewed as risks affecting operational and financial positions that need to be managed. Currency risk management is one of the class' main focuses.

For investors, currencies as well as international equity and bond markets represent opportunities that complement domestic investments. The class studies currency investment strategies such as carry trades, momentum and fundamental approaches. 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 studies these from a finance perspective.

The target audience includes financial officers, banking, consulting, and investors.

FNCE 219/719 builds on skills acquired in introductory finance, economics and statistics classes. However, some initial review of major concepts used is provided. The class format, for the most part, is lecture-based, with several case discussions. Class assignments are quantitative in nature.

Office hours: Monday 1:30 to 3:00 pm, or by appointment

Webpage: <http://finance.wharton.upenn.edu/~jermann/teaching.html> (Canvas has a link to the class webpage)

## Prerequisites

The following introductory courses are recommended but not required

For 219: FNCE 100, FNCE 101 or ECON 102, STAT 101

For 719: FNCE 611(or 612), 1 cu of Corporate Finance

FNCE 613 or 615, at least 0.5 cu of Macroeconomics

## Materials

- A customized book with readings has been prepared for this class by McGraw-Hill, 2017 version, ISBN-13: 9781307070668, it will be available at the bookstore.
- 2 chapters from the book *International Finance Theory into Practice* by Piet Sercu are available on Canvas through Study.Net Materials.
- Lecture notes, additional readings, assignments, homework questions and answers, and other material will be made available on the class webpage. You may want to print lecture notes beforehand and bring them to class.

## Course Requirements

- **Mid-term Exams:**
  - Tuesday, October 8, in class
  - Tuesday, November 26, in class.

Each exam counts for 30% of the final grade. Unexcused absences from exams will result in a zero score in the calculation of the final grade. Excused absences from exams require approval prior to the exam. Exams are closed book, but you may prepare a letter sized sheet (8.5 by 11-inch) with your notes (on both sides).

- **Four Group Assignments** count together for 15% of the final grade; the lowest assignment score will be dropped. Each student is expected to join a project group consisting of 3-4 members. The project groups will jointly prepare and submit written assignments. The individuals constituting a group must remain the same over the semester. To help reduce problems due to free-riding etc., group members will be asked near the end of the term to evaluate the participation of the other group members. This confidential evaluation may affect the individual grade obtained for the assignments.

Assignments will be available on the class webpage at least one week before they are due. LATE ASSIGNMENTS WILL NOT BE ACCEPTED. The written assignments will be discussed in class and answers will not be distributed.

- **Four Individual Assignments** count for 15% of the final grade. Individual assignments contain questions and problems that students work out and hand in individually.

- **Class participation**, 10% of the final grade. Particularly during the discussion of assignments, you are expected to actively participate through comments and questions.

### **Re-grading exams and graded assignments**

Any request for re-grading must be submitted in writing within two weeks from the date the exams or assignments have been returned. The exam or assignment should be placed in my mailbox in the Finance Department or given to me in class.

### **Homework problem sets**

Several problem sets will be assigned during the semester and you will be given the answers to these. The purpose of these exercises is to give you the opportunity to make sure you fully understand topics covered in class. By regularly doing these exercises you get training for exams and assignments and you will maximize your return from this class. These problem sets will not be graded, and you should feel free to work in groups.

## Course Outline

### FX basics

1. Introduction: Derivative usage
2. Spot Foreign Exchange Markets  
    Manipulating exchange rates, FX market structure, arbitrage
3. LIBOR, Forward Contracts and Interest Rate Parity  
    Forward valuation, hedging with forwards, Non-deliverable Forwards

### Derivatives

4. Currency Futures: Futures markets, hedging and speculating with futures
5. Currency Options  
    Put-call parity, hedging with options, option pricing issues, Black-Scholes model, implied volatility, risk reversal
6. Currency and Interest Rate Swaps  
    Examples and motivations for swaps, swap valuation, counterparty credit risk

### Currency investments / Cryptocurrencies

7. Exchange Rate Theories and Evidence: Purchasing power parity, balance of payments
8. Trading and Risk Premia in Foreign Exchange Markets:  
    Uncovered interest parity, carry trade, value, momentum
9. International Stocks and Bonds: Markets, diversification, hedging FX risk
10. Cryptocurrencies: Bitcoin, stablecoins, investing in cryptocurrencies

Several current event topics are covered at various points in the semester.

## Calendar

Tue, Aug 27	
Thu, Aug 29	
Tue, Sept 3	
Thu, Sept 5	
Tue, Sept 10	Individual Assignment #1 discussed. <b>Assignments are due by 3pm the day before</b>
Thu, Sept 12	
Tue, Sept 17	Group Assignment #1 discussed
Thu, Sept 19	
Tue, Sept 24	
Thu, Sept 26	Individual Assignment #2 discussed
Tue, Oct 1	
Thu, Oct 3	
Tue, Oct 8	<b>Mid-term Exam 1 — in class</b>
<i>Thu, Oct 10</i>	<i>No Class: Fall Break</i>
Tue, Oct 15	
Thu, Oct 17	Group Assignment #2 discussed
Tue, Oct 22	
Thu, Oct 24	
Tue, Oct 29	
Thu, Oct 31	Individual Assignment #3 discussed
Tue, Nov 5	
Thu, Nov 7	
Tue, Nov 12	Group Assignment #3 discussed
Thu, Nov 14	
Tue, Nov 19	Individual Assignment #4 discussed
Thu, Nov 21	
Tue, Nov 26	<b>Mid-term Exam 2 — in class</b>
<i>Thu, Nov 28</i>	<i>No Class: Thanksgiving</i>
Tue, Dec 3	
Thu, Dec 5	Group Assignment #4 discussed

The class webpage will include a more detailed schedule.