

UNIVERSITY OF PENNSYLVANIA
The Wharton School
International Finance
Spring 2008
Professor Amir Yaron

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Course Objective

The objective of this course is to provide an understanding of the international financial markets that are available to international investors and to multinational firms. Specifically, taking the perspective of a corporation engaged in international trade, we will analyze and implement hedging strategies using foreign exchange instruments and learn capital through international financial markets. Taking the perspective of an investor, the goal is to describe various tools to invest internationally and to analyze the potential gains and shortcomings from international diversification and investments.

The class format, for the most part, will be based on the lecture system. In general the class is *quantitatively* oriented and basic knowledge of statistics is assumed.

Course Requirements

The course grade will be based on:

- Two exams (Midterm (M) and Final (F)) totaling 60% of the final grade. The 60% will be applied to the $\max[0.40*M + 0.60*F, 0.2*M + 0.8*F]$, where the scores of M and F are standardized scores. This way you are provided with some insurance. Doing better on one of the exams provides some protection against a bad performance on the other exam. Each of the exams will be closed books, but you may prepare an 8.5x11 sheet (both sides) with formulas. The exams are problem oriented, rather than essay.

Midterm Exam: Wednesday, February 27th, 2008 between 6:00-8:00 pm.

Final Exam: Tuesday May 13th, 2008, between 6:00-8:00 pm.

There are no planned make-ups. Hence, unexcused absences from exams will result in a zero score in the calculation of the final grade. Excused absences from exams must be approved prior to the exam.

- Five written assignments (cases) worth together 20% of the final grade. Below are more details about the assignments. These assignments should be done with a group of 2-4 members. The members of the group can be from different sections.
- Final Project worth 10% of the final grade. This is a detailed case/project that will encompass many of the issues we covered during the semester. Further details will be given throughout the semester. The project's outcome will be presented to the class during the last week of the course.
- Class participation is highly encouraged and will count 10%.

Reading

- A customized book with readings has been prepared for the class by McGraw-Hill Primis, ISBN: 978-0-390-82037-2 it is available at the bookstore.
- A bulkpack containing the first set of lecture notes, readings, homework questions, last year's exams and additional readings is available from reprographics. Additional lecture notes and articles will be distributed during the semester. The cost of the handouts distributed in class is not included in the cost of this bulk pack and will be billed separately at the end of the semester.
- It is strongly recommended that you read *The Wall Street Journal*, and *The Economist* on a regular basis.

Graded Assignments

Timing: Every attempt will be made to distribute assignments two or more classes before the due date. They will cover material some time *before* the relevant topic is actually discussed in class and will be due soon after the material is taught. Students missing class, may pick them up in the "pick-up boxes" in the Finance Department, in Steinberg-Dietrich Hall Room 2300

Team Work: Team-work is an important part of the learning process; each student is expected to join a project team consisting of 2 - 4 members. The project team will jointly prepare and submit written assignments (assignment - case studies). All students in the group should be ready to answer questions concerning their assignment in class discussions. The individuals constituting a group must remain the same over the semester, so please choose your groups carefully.

Assignment Report: The first page of the written report (one per team) should have an executive summary with a numbered list indicating the final answer to each question for the case. Your response to the case questions should be short and to the point. All supporting material and work should be presented in clearly numbered appendices. **Late assignments will not be accepted!!** The written assignment will be discussed in class and answers will not be distributed.

Problem Sets

Throughout the semester I will assign suggested problem sets which the solutions to are available in the course bulk pack. Those will **not** be graded. I will also assign a few extra problems which are somewhat more encompassing. These problems sets are **not** graded but the teaching assistants will conduct, upon request, detailed recitations going over the solutions. I *strongly* recommend doing these problems, first, on your own, as they ensure that you can translate the material in class into problem solving format. By regularly doing these exercises you get excellent training for exams and assignments and you maximize your return from this class.

Important Dates

Midterm Exam: Wednesday, February 27th, 2008 between 6:00-8:00 pm.

Final Exam: Tuesday May 13th, 2008, between 6:00-8:00 pm.

The exams **are** comprehensive and more details concerning the material covered in the two exams will be announced in class and posted on the web page.

Finance Drop Date: January 28th, 2008.

Course web site

Updated information on the course schedule, recent handouts, and solutions to problem sets can be found on the class-web-page, at <http://savage.wharton.upenn.edu/FNCE-219>.

It is a good idea to check this page regularly during the semester. You will find solutions to problems sets, answers to FAQ, last-minute announcements, and other useful material on this page.

Regrading Policy

All re-grade requests must be made in writing within **two-weeks** of the day the exams or assignments are returned. The exam or assignment should be placed in my mailbox in the Finance Department. I will then pass it to the TA responsible for grading. The written request for re-grading must be specific. Any exam or assignment submitted for re-grading of a particular question will be subjected to a complete regrading.

Teaching Assistants

Review sessions will be held periodically throughout the term. These sessions are optional and their availability will partly be determined by their demand. These sessions should provide an opportunity to ask questions about the course material and problem sets. The name of the teaching assistants and their office hours will be distributed during the first week of class and will be posted on the web page.

Prerequisites

The prerequisites for this course are FNCE 101 or ECON 4, FNCE 100, STAT 101.

Course Outline

This class is about the international financial markets and their financial instruments. The central theme is currency exchange rates and related derivative securities. The class will adopt the perspective of international investors as well as the perspective of internationally active firms. I expect to spend approximately a week on each of the numbered subsections listed below:

1. Overview - International and European Monetary Systems

International monetary system, Derivative Usage, European monetary union

2. Exchange Rate Behavior and Spot Markets

Manipulating exchange rates, FX market structure, arbitrage

3. Eurocurrency Markets, Forward Contracts and Interest Rate Parity

4. Forward Contracts: Valuation and Hedging

5. Currency Futures

Futures markets, hedging and speculating with futures

6. Currency Options

Put-call parity, hedging with options, option pricing issues, Black-Scholes model

7. Currency and Interest Rate Swaps

Examples and motivations for swaps, swap valuation

8. International Equity Portfolios

Equity markets, international diversification

9. Purchasing Power Parity and Exchange Rate Determination

10. Expectations, Forward Rates and Interest Rates

Unbiased Expectations Hypothesis, carry trade, risk reversal

11. Quantifying Exchange Rate Risk

Forecasting and Value at Risk (VaR)

12. Syndicated Loans and Short Term Euronotes

In addition several current event topics such as the Euro, Argentina Peso crisis, etc., are treated at various points in the semester. These and other notes will be handed out in class.

Classes, Assignments and Exams

Wed. Jan. 16	First class
Mon. Jan. 21	No Class
Wed. Jan. 23	
Mon. Jan. 28	Assignment #1 is due (tentative date), project groups are fixed
Wed. Jan. 30	
Mon. Feb. 4	
Wed. Feb. 6	
Mon. Feb. 11	
Wed. Feb. 13	Assignment #2 is due (tentative date)
Mon. Feb. 18	
Wed. Feb. 20	
Mon. Feb. 25	
Wed. Feb. 27	Exam #1 (6-8 pm) no class
Mon. Mar. 3	
Wed. Mar. 5	Assignment #3 is due (tentative date)
Mon. Mar. 10	No Class: Spring Break
Wed. Mar. 12	No Class: Spring Break
Mon. Mar. 17	
Wed. Mar. 19	
Mon. Mar. 24	
Wed. Mar. 26	Assignment #4 is due (tentative date)
Mon. Mar. 31	
Wed. Apr. 2	
Mon. Apr. 7	
Wed. Apr. 9	Assignment #5 is due (tentative date)
Mon. Apr. 14	
Wed. Apr. 16	
Mon. Apr. 21	
Wed. Apr. 23	class-presentations
Mon. Apr. 28	class-presentations

Tuesday May 13 **Final Exam (6:00-8:00)**

FREQUENTLY ASKED QUESTIONS ABOUT THE COURSE AND THEIR ANSWERS

A. Exams:

1. What if I have another midterm exam scheduled for time as the midterm for this course? First, see if the other course has planned make-ups as this class does not. Let me know of such conflicts in the first two-weeks of class.

2. What can I bring to the exam? Students may bring to the exam an 8½ x 11 crib sheet, with writings on front and back. In addition, students should expect to bring a calculator and writing utensil. Calculations and work should be shown on the exam sheet. Scratch paper will be provided during the exam upon request.

3. Will there be any review sessions? Pre-exam review sessions will generally be given the day before the exam.

B. Assignments:

1. What is the nature of the "Assignments?" Of the six written assignments, five are cases involving analysis of hedging and/or costs of financing. Some assignments require computer analysis of financial data.

2. How should the assignments be prepared? The written assignments will be prepared in groups of at least 2 and at most 4 students (the groups may cross the three sections). The individuals constituting the groups must remain the same over the semester.

3. Where can I find the assignments? The cases and the accompanying questions as well as the computer projects will be distributed throughout the course and will be available on the course web-site.

4. When are the assignments due? The precise dates on which the assignments are due will be announced at least one week before. However, the course outline above gives a **very tentative schedule**. *Note:* This schedule is subject to change!

5. My group-mates are in a later section than I am (e.g., I am in the 10:30 section and they are in the 1:30 PM section.) When is the assignment from our team due? You can hand the assignment in no later than the **beginning of the class in the latest section in which a team member is present**.

7. Can I hand in assignments late? The assignments are discussed in detail in class. Therefore, **late assignments cannot be accepted**

7. What if I know I can't be in class on the day of the assignment? What do I do? Assignments can always be handed in early in my mailbox in the Finance Department. **Please do not email assignments to me.** Due to technical difficulties, they have sometimes not been received or have gotten lost.

C. Hand-Outs

1. Will you be handing out answers to exams and assignments? The answers to the exams and practice questions are part of the bulkpack. The answers to the assignments will be discussed thoroughly in class and will not be distributed.

2. How do I get something that has been handed out if I miss class? All remaining copies of hand-outs will be placed in the "pick-up" boxes in the Finance Department once class is over. So please check these "pick-up" boxes if you miss class. Furthermore, all hand-outs will be placed on the course web-site.

3. Where are the "pick-up" boxes located? To get to the boxes, enter the Finance Department at 2300 SH-DH (ask the information desk downstairs if you don't know how to get there.) On your right you will see the Receptionist's desk. On your left you will see a bookshelf with the "Pick-Up" boxes. Please look in all boxes labeled Professor Yaron, Finance 219 (ignore any possible section number on the boxes).

D. Regrades

1. What is your regrade procedure? These procedures have been adopted to protect the rights of all students.

a. Please write a brief explanation of why you believe your paper has been incorrectly graded. For an exam, please explain why your answer differs from that on the answer sheet. Give the original paper and your explanation to me or else place it in my mailbox. I will then give the paper and explanation to the TA responsible for grading and he/she will discuss the regrade request with me. After we have come to a decision about your request, the regraded assignment will be given back with an explanation.

b. Written assignments and exams may be submitted for regrading **only up to 10 days** after the graded assignment/exams have been distributed. After that, no regrades will be considered. This is to provide consistency in grading over the course of the semester.

c. The TAs and I reserve the right to regrade the *entire* assignment or exam, which can result in a lower grade. (It has happened.)

d. The TAs and I will not regrade the assignment with the student present.

E. Sitting in Different Sections

1. I have an occasional time conflict during the section in which I am registered. Can I sit in the lecture of another section? **Yes.**