#### UNIVERSITY OF PENNSYLVANIA The Wharton School International Financial Markets Spring 2013 Professor Amir Yaron

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#### **Course Objective**

The objective of this course is to provide an understanding of international financial markets and foreign exchange (FX) risks. The analysis is applied from the perspective of multinational corporations, institutional investors, and retail investors. The course explores the determination of spot and forward exchange rates, implements hedging strategies using foreign exchange instruments, and teaches about raising capital through international financial markets. Taking the perspective of investors, the course describes various tools for international investments, and the potential gains and shortcomings from international diversification and investments.

The class format, for the most part, will be based on the lecture system with several case discussions. The class assignments are *quantitative* in nature and basic knowledge of statistics is assumed.

#### **Course Requirements**

The course grade will be based on:

• <u>Two exams</u> (Midterm (M) and Final (F)) totaling 55% of the final grade. The 55% will be applied to the max[0.4\*M + 0.6\*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 book, but you may prepare an 8.5"x11" sheet (both sides) with formulas. The exams are problem oriented, rather than essay.

Midterm Exam: Wednesday, February 20<sup>th</sup>, 2013 between 6:00-8:00 pm. [no class that day] Final Exam: Friday May 3<sup>rd</sup>, 2013, between 3:00-5:00 pm.

## There are no planned make-ups.

# Unexcused absences from exams will result in a zero score. Excused absences from exams must be approved <u>prior</u> to the exam.

- <u>Seven written assignments</u> (cases) worth together 40% of the final grade [the worst grade will be down weighted to only 4% and each of the rest 6%]. Below are more details about the assignments. These assignments should be done with a group of <u>3-5 members</u>. The members of the group should stay fixed throughout the semester but can be from different sections.
- Class participation is highly encouraged and will count 5% of the final grade.

## **Reading**

- It is strongly recommended that you read *The Wall Street Journal*, and *The Economist* on a regular basis.
- Lecture notes and articles will be distributed during the semester and will be available on the class Canvas or study.net. The cost of material/cases posted on study.net will be billed separately at the end of the semester.
- The book accompanying the class is "International Financial Management" 2nd Edition, by Geert Bekaert and Robert Hodrick. The book contains also material pertaining to aspects of International corporate finance. A discounted "ebook" version of the book is also available.

## **Graded Assignments**

*Timing:* Every attempt will be made to distribute assignments two or more classes before the due date. Sometime the assignments will cover material *before* the relevant topic is actually discussed in class and will be due soon after the material is taught.

*Teamwork:* Teamwork is an important part of the learning process; each student is expected to join a <u>team</u> <u>consisting of 3 - 5 members</u>. The team will jointly prepare and submit written assignments (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: For assignments that are case-based, 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.

## Practice Problem Sets

The class Canvas contains additional practice problem sets with solutions. Throughout the semester 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 20<sup>th</sup>, 2013 between 6:00-8:00 pm.[no class on that day] Final Exam: Friday May 3<sup>rd</sup>, 2013, between 3:00-5:00 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.

#### Course web site

Updated information on the course schedule, recent handouts, and solutions to problem sets can be found on the class Canvas. It is a good idea to check the Canvas 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 <u>must</u> be made in <u>writing</u> within **two-weeks** of the day the exam or assignment is 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 and detail the reason and content for the regrade request. Any exam or assignment submitted for re-grading of a particular question will be subjected to a complete regrade.

#### **Teaching Assistants**

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 Canvas.

#### **Prerequisites**

The prerequisites for this course are FNCE 100, FNCE 101, 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 –the schedule however is **tentative**:

## FX-Markets:

1. Introduction:

International Financial Markets, Derivative Usage, Globalization and MNCs

2. The Foreign Exchange Market: Exchange Rate Behavior and Spot Markets

FX market structure, quotes, triangular arbitrage

3. Eurocurrency Markets, Forward Contracts and Interest Rate Parity

Forwards market, transaction risk, hedging

4. Forward Contracts: Valuation and Hedging

Arbitrage, market value of existing contracts

#### **FX-Derivatives**

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

Swap market, purpose of swaps, swap valuation

## Exchange rate theories/ International asset allocation

8. Exchange Rate Determination & Forecasting

Purchasing Power Parity and Exchange Rate Determination

9. Speculation and Risk Premia in Foreign Exchange Markets

Unbiased Expectations Hypothesis, carry trade, risk reversal

## 10. Quantifying Exchange Rate Risk

#### Forecasting and Value at Risk (VaR)

## 11. International Equity Portfolios

International Equity Financing, international capital markets

## 12. International Debt Financing

Debt instruments, bank loans, syndicated loans

## 13. Sovereign Debt

Throughout the course several current events, such as the recent financial crisis, Greek debt, China's exchange rate policy, etc. will be discussed –relevant material will be handed out in class.

## Classes, Assignments and Exams

Wed.	Jan. 09	First class
Mon.	Jan. 14	
Wed.	Jan. 16	
Mon	Jan. 21	No Class
Wed.	Jan. 23	Assignment #1 is due (tentative date): project groups fixed
Mon.	Jan. 28	
Wed.	Jan. 30	Assignment #2 is due (tentative date):
Mon.	Feb. 04	-
Wed.	Feb. 06	
Mon.	Feb. 11	
Wed.	Feb. 13	Assignment #3 is due (tentative date):
Mon.	Feb. 18	
Wed.	Feb. 20	Exam #1 (6-8 pm) no class
Mon.	Feb. 25	
Wed.	Feb. 27	Assignment #4 is due (tentative date):
Mon.	Mar. 04	No Class: Spring Break
Wed.	Mar. 06	No Class: Spring Break
Mon.	Mar. 11	
Wed.	Mar. 13	
Mon.	Mar. 18	Assignment #5 is due (tentative date) :
Wed.	Mar. 20	
Mon.	Mar. 25	
Wed.	Mar. 27	
Mon.	Apr. 01	Assignment #6 is due (tentative date):
Wed.	Apr. 03	
Mon.	Apr. 08	
Wed.	Apr. 10	
Mon.	Apr. 15	Assignment #7 is due (tentative date):
Wed.	Apr. 17	
Mon.	Apr. 22	

Friday May 3<sup>rd</sup> Final Exam (3:00-5:00)