University of Pennsylvania The Wharton School Professor Amir Yaron

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SH-DH-2325

International Financial Markets Spring 2017

Course Overview

This class provides a rigorous treatment of international financial markets. The class focuses on (i) financial instruments for hedging and speculation, and (ii) risks and benefits in investing in international financial markets. In particular, the course examines foreign exchange markets, related derivative securities, hedging strategies using foreign exchange instruments, and investments in financial capital markets. Topics include asset allocation, asset pricing models and portfolio performance evaluations in international markets, currency forwards, futures, options, and swaps, carry trades, international fixed income and sovereign debt. This course focuses on the financial theories and empirical evidences that are useful for investment decisions and hedging decisions, while emphasizing how worldwide recent events and current trends are reshaping financial markets. The course should be valuable from the perspective of the individual investor, the corporate financial manager, and the investment manager. 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 Materials and Webpage

- Required: Lecture notes in pdf format will be posted on Canvas.
- Required: Assignments and datasets are to be posted on Canvas.
- Optional: Additional reading materials are to be posted on Canvas.
- \bullet Optional: Bekaert & Hodrick, International Financial Management, 2^{nd} edition, Pearson.

Office Hours and TA

- My Office hours are on Wednesdays 5:00-6:00pm or by appointment at SH-DH 2325.
- The TAs for this class will be announced separately. They will hold weekly office hours. In addition one of the TAs may conduct optional recitations for helping with problem sets, midterm, and final exams. Time and location will be announced on Canvas.

Course Requirements

• Lectures:

- Lectures are on Mondays and Wednesdays.
- Section FNCE-219-A: 10:30-12:00am JMHH 265.
- Section FNCE-719-A: 1:30-3:00pm JMHH 265.
- Section FNCE-219-B: 3:00-4:30pm JMHH 265.

• Readings:

- I will post the lecture notes for each class, at the latest, on the day before the class. Reading the first few slides will be helpful.
- I will post additional reading materials on Canvas. These research papers and newspaper articles could be useful in providing background information or adding some depth to the materials covered in class.

• Assignments:

- There are five problem sets, totaling 30% toward your final grade. Here is a list of problem sets with *tentative due dates* in parentheses:
 - 1. DenCarr. (02/01/2017)
 - 2. Futures Hedging. (02/20/2017)
 - 3. AIFS. (03/15/2017)
 - 4. Disney. (04/05/2017)
 - 5. Empirical Analysis of International Returns: Alpha, Beta, and R^2 , PPP-Momentum. (04/24/2017)
- Problem sets are to be done in groups with no less than two and no more than four students.
- Each problem set must be handed in to the TA before 5pm of the due day.
- Late assignments will not be accepted.
- In addition, several individual problem sets will be given as practice (with some possibly required to be handed in).

• Exams:

- The midterm will be given on Monday February 27th, 6-8PM, No class on that day.
- The final will be given on **Thursday May 4th, 3-5PM**.
- Both exams are closed-book. Students will be allowed to bring one 8.5"×11" two-sided sheet of notes into the midterm and two sheets of such notes into the final.

- There are no planned make-ups. Unexcused absences from exams will result in a zero score. Excused absences from exams must be approved **prior** to the exam.

• Grades:

- The final grade will be determined according to the following weighting scheme:
 - * 15% Class participation
 - * 30% Problem sets
 - * 55% Exams: score is applied to the highest of [0.50M+0.50F] or [0.3M+0.7F]
 - * Regrades must be submitted with a written explanation no later than two weeks after assignment/exam is returned.

Course Calendar

Week	Mo	Class	Topic	Wk	Class	Topic
1				1/11	1	Introduction
2	1/16		No class	1/18	2	Exchange Rates
3	1/23	3	Forward Rates	1/25	4	Forward Rates 2
4	1/30	5	Hedging	2/1	6	Futures
5	2/6	7	Futures-2	2/8	8	Futures-3
6	2/13	9	Option 1	2/15	10	Option 2
7	2/20	11	Option 3	2/22	12	Options 4
8	2/27	No Class	Midterm Exam-evening	3/1	13	Swaps
9	3/6		No Class	3/8		No Class
10	3/13	14	Swaps 2	3/15	15	Swap 3
11	3/20	16	Parity Conditions & BoP	3/22	17	Forward Premia & UIP
12	3/27	18	Sovereign Debt	3/29	19	Sovereign Debt
13	4/3	20	International Investments	4/5	21	Carry trades
14	4/10	22	International Equity	4/12	23	International Equity
15	4/17	24	International Returns	4/19	25	International Bond Portfolio
16	4/24	26	Black-Litterman-Model	4/26	27	Review

Course Schedule (Tentative)

- 1. Introduction
- 2. Market for Exchange Rates
- 3. Arbitrage across currencies
- 4. Forward Rates-definition and market structure, covered interest rate parity
- 5. Valuation and Hedging with Forward Rates
- 6. Speculation with Forward Rates
- 7. Futures markets
- 8. Futures-dynamic hedging and speculation
- 9. Options-market structure, put-call parity
- 10. Hedging with Options
- 11. Options, The Black-Scholes Model and Exchange-Traded Options
- 12. Options, speculation and pricing
- 13. Volatility models
- 14. Swaps, market structure and pricing
- 15. Swaps, hedging and P&L
- 16. VAR
- 17. Parity conditions and exchange rate determination
- 18. Balance of payment approach and PPP
- 19. Uncovered interest parity, forward/risk premia, and carry trades
- 20. Sovereign Debt
- 21. Sovereign Debt & Greece and Europe, China
- 22. International Investing MVF and home bias
- 23. Evaluating investment performance
- 24. International returns: Alpha, beta, and R^2
- 25. International Bond portfolios

- 26. The Black-Litterman Asset Allocation Model
- 27. Review