International Capital Markets Finance 606: 60 Fall Semester 2015

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This course provides an overview of the foreign exchange market, investing in financial and real assets across national borders, and managing the extra dimension of risk that results from investing in or borrowing foreign currencies. I will strive in every class to provide some current context to what we are studying.

We will study the development of the current global "financial architecture." For decades following World War II the US dollar served as the foundation for the global financial system. Then on January 1, 1999 the euro made its debut. A significant amount of world trade is now denominated in euros, and so, the euro increased in global importance at the expense of other reserve currencies.

We will study how different countries manage the external values of their currencies. Some governments tie their currencies to a major currency, such as the USD, the yen, or the euro. Other countries let their currencies float. There are significant macroeconomic implications to the choice of currency regime. Flexible currencies can provide the "safety valve" as countries adjust to economic shocks or the excesses of fiscal and monetary policies. Fixed exchange rates can create asset or inflation bubbles that eventually burst. We will also discuss how the real exchange rate is a measure of how competitive a country is in the global market.

We will study the basics of foreign exchange rate determination, including the concepts of purchasing power parity, covered interest arbitrage, and interest rate parity. What are the relationships between interest rates, inflation, and exchange rates? And what does comparing the price of a Big Mac across countries tell us?

We will study how multinational companies deal with foreign currency risk. There are risks when a contract has been signed, but not completed. There are risks associated with the loss of competitiveness. And there are many risks for companies that choose to build or buy factories in foreign countries. We will study the tools companies use to hedge their currency exposure.

We will study how firms acquire capital from foreign markets. A company can issue debt or stock in foreign markets. They can also borrow from a foreign bank. How is each of these transactions accomplished? We will look at some recent examples of these deals.

Our final topic will be to study how capital budgeting decisions are made when there is foreign currency risk. We will relate the parity rules studied earlier to the real, as opposed to financial, investment decisions global firms make.

I.) Learning Objectives.

- a.) Learn the various ways governments manage exchange rates, including the gold standard, and the consequences of those choices for national economic policies.
- b.) Master balance of payments accounting, especially how national economic policies and markets for goods, services, real assets, and financial assets adjust to international imbalances.
- c.) Learn how the currency forwards market works and the significance of forward market equilibrium conditions.
- d.) Understand the key relationships between inflation, nominal interest rates, real interest rates, and exchange rates. Master the concept of real exchange rates and its role as an indicator of a potential currency crisis.
- e.) Master how multinational firms use forwards, interest rate swaps, currency swaps, forward rate agreements, and other risk-sharing tools to hedge currency risk.
- f.) Understand how multinationals use global stock and bond markets to acquire capital. Learn the basics of euro-currency loans, euro-medium term notes, and American Depository Receipts.
- g.) Learn the basics of international capital budgeting, including the linkage between inflation differentials and the investment choices global firms make.

II.) Text: *Global Money Markets and Institutions*, which is a customized text based on *International Financial Management* by Eun and Resnick, 7th edition, McGraw-Hill publisher. The customized book can be sold back to the bookstore at the end of the semester.

Also, please register with the CFA Institute for their daily news summary called "smartbrief." The smartbrief provides a daily summary of financial news, some of which we will discuss in class. The link is <u>https://www.smartbrief.com/cfa/</u>.

III.) Course Requirements and Grading Scale.

The course will have two exams and a group project. The exams will be problem solving and some essays.

Homework problems, and perhaps a small project, will be assigned from time to time. These assignments will count toward your final semester grade.

The dates for the mid-term exams are approximate.

For grading:

Exam 1: 30.0%. Exam 2: 30.0%. Project: 30.0% Homework/small project: 10%. The grading scale:

 $\begin{array}{l} A: \, 91 - 100. \\ B+: \, 86 - 90. \\ B: \, 81 - 85. \\ C+: \, 75 - 80. \\ C: \, 70 - 74. \\ D: \, 60 - 69. \end{array}$

Some Possible Project Topics:

- a.) Choose a global company and report on how it hedges currency risk.
- b.) Germany and Japan have two of the oldest populations on earth. Why does Germany grow but Japan does not?
- c.) Compare investment results across different currencies.
- d.) Which countries are the most competitive in the global economy? Which are the least competitive?
- e.) What are the key indicators of a currency/sovereign debt/banking crisis? Which countries are most vulnerable to a crisis?
- f.) What are the economic growth prospects for Africa?
- g.) Will the new regulations affecting large global banks (Basel III) prevent another global financial crisis, or will they just drain banks of profits?
- h.) When will global inflation increase, or is deflation more likely? Develop a measure of global capacity utilization and relate it to the world business cycle.
- i.) Estimate some econometric models for a couple major and emerging currencies using the methodology described in Chapter 6.
- j.) A topic of your choice, which I must approve.
- IV.) General Comments:
- a.) There will be some pages in several chapters that I will assign, but not cover in class.
- b.) The university policy is that attendance is required. I do not take attendance.

c.) No computers, tablets, cell phones, or devices of any kind can be used in class.

d.) You cannot use a phone to make calculations during an exam. You must use a calculator such as an HP or TI.

e.) If you send an email to me, please put your class in the subject line.

V.) Course Schedule.

Week 1: September 2.

Course introduction.

Chapter 2: The International Monetary System.

- a.) Classical gold standard.
- b.) Bretton Woods and the reasons behind its breakdown.
- c.) IMF exchange rate regime taxonomy and examples of each regime.
- d.) History of Eurozone and "Optimal Currency Areas."

Week 2: September 9.

Chapter 3: The Balance of Payments.

- a.) Components of BOP accounts.
- b.) Government policies that narrow Current Account imbalances.
- c.) Emphasis on dynamic adjustment qualities of BOP framework.
- d.) Defending overvalued and undervalued currency in a fixed rate regime.
- e.) Does US consume too much or does ROW save too much? Arguments on both sides.

Project groups due.

Week 3: September 16.

Chapter 5: The Foreign Exchange Market.

- a.) Direct and indirect quotes.
- b.) Forward markets.
 - i.) Bid/ask spreads.
 - ii.) Forward points.
 - iii.) Forward discount & premium, including link to interest rate differentials.

Week 4: September 23.

Chapter 6: International Parity Relationships and Forecasting Foreign Exchange Rates.

- a.) Interest Rate Parity and Covered Interest Arbitrage.
- b.) Uncovered Interest Rate Parity and carry trades.
- c.) Purchasing Power Parity, including absolute and relative PPP.
- d.) Real exchange rates, deviations from PPP, and link to BOP crises.

Week 5: September 30.

Chapter 8: Management of Transaction Exposure.

- a.) Types of exposure to currency fluctuations.
- b.) Reasons to hedge currency exposures and reasons not to hedge.
- c.) Forward and money market hedges.

Week 6: October 7.

Exam 1: chapters 2, 3, 5, and 6.

Week 7: October 14.

Chapter 9: Management of Economic Exposure.

- a.) Significance of market structure and elasticity.
- b.) Hedging operating risk.
 - i.) Matching strategies.
 - ii.) Flexible sourcing, market diversification, and link to PPP.
 - iii.) Product differentiation.

Week 7: October 14...continued. First project update due.

Week 8: October 21.

- Chapter 11: International Banking and Money Market.
 - a.) LIBOR.
 - b.) International capital market borrowing: foreign vs euro transactions.
 - c.) Eurocurrencies, eurocurrency creation, euro commercial paper, and eurocredits.
 - d.) BIS data on foreign commercial paper borrowing by currency.

Chapter 12: International Bond Market.

- a.) Foreign bonds versus euro bonds.
- b.) Global bonds, euro MTNs, and dual currency bonds.
- c.) BIS data on international bond market borrowing by currency and type of debt offering.

Week 9: October 28.

Chapter 13: International Equity Market.

- a.) Benefits of cross listing.
- b.) ADRs.
 - i.) How they are created.
 - ii.) Total rate of return decomposed into local market and currency returns.
- c.) Discussion of empirical findings on benefits of cross listing.

Week 10: November 4.

Chapter 14: Interest Rate and Currency Swaps.

- a.) Logic and mechanics of vanilla interest rate swaps.
 - i.) Everyone wins. Is there a free lunch?
- b.) Logic and mechanics of generic currency swap.
 - i.) Why would a borrower pay a higher interest rate than is available in its home market?

Week 11: November 11.

Chapter 17: International Capital Structure and the Cost of Capital.

- a.) The International CAPM.
- b.) Why does the cost of capital differ between countries?
- c.) The effect of cross listing on the cost of capital: empirical studies.

Second project update due.

Week 12: November 18.

Chapter 18: International Capital Budgeting.

a.) Linking the semester together: NPV and the Parity Rules.

Week 13: November 25. No class. Thanksgiving.

Week 14: December 2. Exam 2: chapters 8, 9, 11, 12, 13, 14, 17, and 18.

<u>Week 15: December 9.</u> **Project submission and presentations**.