Exchange Rates and International Finance

Fall 2013
Instructor: Timothy James Bond (TJ), Ph.D
Teaching Assistant: TBA

COURSE OVERVIEW

This course has two objectives. The first is to provide an overview of the concepts, history, and analytic models needed to understand exchange rates and global financial markets. The second is to provide a "laboratory" setting, modeled on actual practices in major investment institutions, so that students can learn to apply their knowledge to the practical questions and problems they are likely to face throughout their careers.

The course will require a wide range of skills. To succeed in the "laboratory", students will need to draw upon their presentation and communications skills. Understanding some of the analytic techiques discussed in the course will require mathematical skills, discussed below.

Course Topics and Issues

The topics addressed include international asset pricing and portfolio choice; tactical asset allocation; the foreign exchange market; exchange rate determination and valuation; the markets for global equities, bonds and their derivatives; alternative asset classes; open-economy macro models; inefficiencies in global financial markets; the evaluation of investment performance; and the role of international institutions such as the International Monetary Fund.

The course will also discuss several key issues of the present day, using both models and case studies. These issues include financial crises and recoveries, quantitative easing and its impact on asset prices; investing in emerging markets; and the future liberalization of China's financial account and its impact on global and regional financial markets.

The Investment Laboratory

The class will run a paper portfolio, composed of investments across countries and across asset classes (equity, bond, foreign exchange, and money markets). Each week, the class will hold a meeting of the "investment committee", to review developments in global markets, discuss key themes that could affect the portfolio, and accept or reject proposed investments. Individual and team presentations, as well as participation in class discussions, will be key in this part of the course and will form an important part of the course grade.

Textbook

The primary textbook is Eun and Resnick, *International Financial Management*, 6th edition (2011).

Supplemental readings will also be assigned, including selected chapters from the following two books:
1. *The New Market Wizards: Conversations with America's Top Traders* by Jack D. Schwager.
2. *Active Portfolio Management: A Quantitative Approach for Providing Superior Returns and Controlling Risk*, by Richard Grinold and Ronald Kahn.

Prerequisites

Students should have taken courses in finance and macroeconomics. Some of the topics of this course cannot be fully understood without mathematical tools, including matrix algebra and differential equations. The course will briefly review the mathematical tools that are needed.

Course Assessment

Grade will be based on a midterm exam, a final exam, and participation in the investment laboratory. Students will need to present a minimum of three investment ideas to the class (this will involve a three-minute presentation and the preparation of 3-4 presentation slides, including an analysis of valuation and position sizing). Students will also participate in two team presentations on topics assigned by the instructor.

SYLLABUS

Class 1. Introduction to the course. Globalization of financial markets, the emergence of key international investment institutions, and the importance of global “themes” as drivers of asset prices, and the need for a global approach—even for investors in domestic financial markets. Brief overview of recent issues that have shaped world economy and financial markets, including the global financial crisis, European debt crisis, global imbalances, and the impact of the emergence of China.

Class 2. Portfolio choice in the international context. The international capital asset pricing model. The Black-Litterman model. Reading: Black and Litterman (1992) Global Portfolio Optimization, Financial Analysts Journal. Eun and Resnick, Chapter 15.

Class 3. International portfolio choice continued. International benchmarks, exceptional returns, and value added. The information ratio and the fundamental law of active management. Issues in portfolio construction. Reading: Grinolds and Kahn, Chapters 5-6.

Class 4. National income accounting and the balance of payments. Reading: Eun and Resnick, Chapter 1. Overview of global capital markets. International banking and capital adequacy standards. International money and bond markets. Credit ratings and credit rating agencies. The development of an offshore market for the renminbi. Reading: Eun and Resnick, Chapters 11 and 12.

Class 5. The foreign exchange market and exchange rate determination. Overview of the foreign exchange market. Exchange rate quotations. Interest rate parity relationships.

Futures, forwards, and swaps. Reading: Eun and Resnick, Chapters 5 and 6.

Class 6. Foreign exchange determination and valuation. The Mundell-Fleming model. Expectations and exchange rate dynamics. Exchange rate overshooting. Reading: Eun and Resnick, Chapter 6. Dornbusch, Rudiger, 1976, Expectations and Exchange Rate Dynamics, *Journal of Political Economy*.

Class 7. Foreign exchange determination and valuation. The monetary model of exchange rates. Exchange rates and inflation. Relative and absolute purchasing power parity. Reading: Eun and Resnick, Chapter 7.

Class 8. Empirical results in exchange rate modeling. Exchange rate valuation and fundamental equilibrium valuation models. Assessing fair value for the major currencies. Exchange rate forecasting and technical analysis. Reading: Eun and Resnick, Chapter 8.

Class 9. History of the international financial system. The gold standard, the Bretton Woods system, and the period of floating exchange rates. Fixed versus floating exchange rates. Investing under different financial regimes. Reading: Eun and Resnick, Chapter 2.

Class 10. *Midterm examination*

Class 11. Overview of world equity markets. The optimal international portfolio. The benefits of international diversification. The home bias effect. International banking and capital adequacy standards. International money and bond markets. Credit ratings and credit rating agencies. Reading: Eun and Resnick, Chapter 13.

Class 12. International evidence on market efficiency. Cointegration of global stock prices and bond yields. Stock prices in simple macro models. Cross-border tests of market openness and integration. Readings: Grinolds and Kahn, Chapters 10 and 20.
x
Class 13. Tactical asset allocation in the international setting. Research on the role of tactical asset allocation. Cointegration of global stock and bond prices. Integrating views and forecasts into the investment process. Reading: Grinolds and Kahn, Chapters 18-19.

Class 14. Foreign exchange risk management. Types of foreign exchange risk exposure. Foreign exchange risk and portfolio construction. Operating exposure, economic exposure, and translation exposure. Currency risk management in investment portfolios. Hedging with forwards, futures, and options. Brief overview of the value-at-risk approach. Reading: Eun and Resnick, Chapters 8-9.

Class 15. Financial crises. Overview of financial crises since 1980s. Financial crises and asset prices. Recoveries after financial crises. “Early warning” systems to predict financial crises. Readings: Reinhart, Reinhart, and Rogoff, 2012. "Debt Overhangs: Past and Present," NBER Working Papers 18015, National Bureau of Economic Research. Reinhart, 2012: "A Series of Unfortunate Events: Common Sequencing Patterns in Financial Crises," CEPR Discussion Papers 8742, C.E.P.R. Discussion Papers.

Class 16. Resolving debt crises in developed and developing markets. The Brady Plan. Economic growth and international investing. The performance of emerging equity markets and “frontier” markets. Reading: Eun and Resnick, Chapter 18