International Finance

IBUS/FIN-463 Spring 2015 (3 credits)  
Professor Michel A. Robe  
E-mail: mrobe@american.edu  
Phone: (+1) 202-885-1880  
Office: Kogod T-41  
Office Hours: Tu 9AM-noon + appointment  
Home page: http://www1.american.edu/academic.depts/ksb/finance_realestate/mrobe/463index.html

Prerequisites

Core finance course (FIN-365) + its own prerequisites; knowledge of spreadsheets.

This course’s demands on students’ economic intuition and algebraic skills are, I have been told, the highest in any undergraduate finance course at Kogod (the next most demanding course is arguably FIN-465, an elective on Derivatives that I also often teach). Yet, the only formal prerequisite is to have obtained a grade of C or better in Business Finance (FIN-365). Although there is no GPA requirement, past experience suggests that successful IBUS / FIN-463 students had a minimum 3.0 average (both overall and in their major).

Derivatives (FIN-465) is NOT a prerequisite for IBUS/FIN-463. Having already taken FIN-465, of course, should prove quite helpful during class discussions of currency derivatives and cross-currency swaps. I have therefore structured the present course so that, by the time of the first exam and cases, students who have not taken FIN-465 should face a level playing field with students who have done so.

Prior knowledge of mathematical statistics is also important – it is hard to talk about currency-related risks without referring to standard deviations, or to talk about cross-hedging without knowing how to compute (and use) correlations. I therefore urge students to look up a statistics primer uploaded on the course website.

For both group cases, proficiency with Excel is critical. The first case, due ten days after Spring Break, involves downloading and manipulating a large amount of information on FX and interest rates. Doing so requires using the Kogod Finance & IT Lab’s Bloomberg terminals. Students who do not have prior experience with Bloomberg should register for one (or two!) 1.5-hour custom sessions organized by Professor Octavian Ionici, the lab’s Director.

Learning Outcomes

This course’s objective is to introduce undergraduate students to the financial aspects of international decision-making. Individuals skilled at understanding, identifying, measuring, pricing and hedging economic and financial exposures to exchange rate movements continue to be in demand at Main Street companies, on Wall Street and elsewhere – in the corporate world as well as among policy and decision makers. IBUS/FIN-463 provides those skills.

The relevance IBUS/FIN-463 extends to areas that, at first sight, might seem far removed from finance. For example, a person unfamiliar with risks related to exchange rate (FX)
movements is unlikely to be made responsible for pricing a consumer good at a multinational. By successfully completing IBUS/FIN-463, students can ensure that they are not this person.

In short, this course will expose students to material that any player in the international area – not only a banker at Deutsche Bank or a trader at PIMCO but also a marketing analyst at Unilever – will find useful.

The course includes deeper coverage of some tools that are familiar from the introductory finance course (Business Finance), plus many new tools not seen elsewhere in the curriculum. Logically, the study of the international financial environment in which individuals and corporations operate, and of how exchange rate levels get determined, should precede the study of how financial managers do or ought to behave in this environment. The course is organized accordingly. It provides self-contained studies of the main instruments used by foreign-currency traders and of the exchange rate determination process, before covering the concepts necessary to tackle FX risk measurement and management, international capital budgeting, international financing (including swaps), and – as time allows – international portfolio diversification.

A mid-term and final exams help ensure that students know and understand the material. Because one of the learning outcomes is to be able to use the material in actual business life, students shall carry out the analysis of two group cases. As well, part of the in-class performance evaluation is based on solving in-class mini-cases that are also based on real situations and data.

**Outline**

In the first part of the course, we start by examining the mechanics of the foreign exchange market. We cover the spot compartment of the market extensively. We also place a strong emphasis on forwards, as these contracts are the main tools used to hedge exchange rate risk. Because futures and options are covered in Derivatives (FIN-465), we mostly look at currency futures and options through the prism of briefly explaining how FX futures differ from forwards and why the two types of contracts are used for similar yet distinct purposes. Finally, we analyze FX swaps, contrast the latter with currency swaps (a.k.a. cross-currency interest-rate swaps), and discuss how to value a forward contract between the trade and contract expiration.

In the first part of the course, we will have taken the spot exchange rate as given and shown how the prices of foreign exchange forwards (through covered interest rate parity), futures and options are related to that spot rate. In the second part of the course, we shall answer the question of where the spot exchange rates come from. Specifically, we shall discuss models of spot exchange rate determination, Forex market efficiency (including the concept of uncovered interest rate parity and practice of “carry trades”), and exchange rate forecasting. We shall also present an overview of the international monetary system. In particular, we discuss the merits and drawbacks of various exchange rate regimes, including fixed rates, crawling pegs, currency boards, currency unions (such as the European EMU), etc.
In the third part of the course, the framework developed in the first two parts is used to tackle the issue of exchange-rate risk measurement and management. We contrast nominal and real exchange rate risks. We show how to measure a company's transaction and economic exchange-risk exposure; argue whether transaction exposure should be systematically hedged away and discuss various hedging techniques; and analyze how to best control economic exposure. As time allows, we shall discuss accounting exposure and political risk management.

In the fourth part of the course, we turn to the impact of the international environment on corporate financing and capital decisions. We start by looking at international financial markets – international loan, bond and equity markets. Instruments such as Samurai bonds, ADRs and debt-for-equity swaps (who are nothing like FX or currency swaps) are covered. Armed with this knowledge, we turn to capital budgeting in an international context. In particular, we discuss the choice of discount rates for international investments, the cost of capital for an international firm and NPV computations in local vs. foreign currencies. Finally, we tackle cross-currency interest rate swaps in terms of the financing of international operations.

As time allows, we shall end the course by discussing international portfolio diversification.

**Course Materials**


The textbook is available from the bookstore. Other than a reorganization of the materials and a thorough update of the Figures and of some Examples, there are not many significant differences between the past three editions (E&R5, 6 or 7) – it is fine to use any of those. Additional materials, including the latest updates to key statistics as well as discussions of current events that directly relate to the material we cover, will be handed out in class.

In addition to the textbooks and transparencies, I have prepared a reading packet (RP) containing additional materials. These materials are based primarily on other, more specialized textbooks and articles, and are available online through the class home page. RP materials shall be discussed in class and may appear on the exams. The reading packet does not include articles from academic and practitioner-oriented journals. Copies of such articles (including key papers from the three top field journals: *Journal of International Money and Finance, Journal of International Economics* and *Journal of International Business*) have instead been grouped in a second, “in-depth” library packet (LP). Whereas the RP is exam material, the LP is not. Rather, the LP is meant to round out interested students' awareness of important issues faced by practitioners.

Starting COB Friday, papers from both the RP and the LP may be downloaded directly from an Online Library accessible through the class home page.
International Finance is an especially dynamic area, and students are therefore urged to follow current developments in the press. This includes reading the following publications: The Economist (weekly, www.economist.com, mostly pay site) and Financial Times (www.ft.com, free registration). The Wall Street Journal (www.wsj.com, pay site), Barron’s, Euromoney and Value Line’s Investment Surveys are other good sources of investment news. Other newspapers may also be useful for the purpose of the class, but often lack significant amounts of relevant information.

While I encourage students to keep abreast of financial news, exam questions will NOT require that students be knowledgeable of current affairs – unless, of course, that information has been discussed and analyzed in class.

Transparencies

The lectures will be based partly on transparencies. Except for the first lecture, I shall make these transparencies available on the Web as the class progresses. Transparencies for every lecture can be downloaded COB the Friday before (i.e., Fridays at 5 PM). You may wish to print a paper copy of the relevant transparencies before each class to help in note taking.

Course Requirements and Grading

Grading is on a curve. The weights for the final grade are as follows:

\[
\text{Max } [25\% \text{ mi-term} + 30\% \text{ final} \quad \text{OR} \quad 30\% \text{ mi-term} + 25\% \text{ final}] \\
+ 2 \text{ times } 20\% \text{ for group cases} + 5\% \text{ class participation}
\]

The exam questions shall be from what has been covered in class: material in E&R that is not at least alluded to in class will not show up on exams. The mid-term and final exams shall be in-class and closed-book, though each student may bring in a calculator and one A4 “cheat sheet.” This sheet may contain anything the student wishes, but must be hand-written by him/her (no photocopying). For the mid-term exam, which will take place on the Tuesday before Spring Break, only one side of the sheet may be filled. The final exam is not cumulative, yet both sides of the “cheat sheet” may be filled.

Because I wish to emphasize and develop practical skills, students shall also complete two cases (analytical problems) that use actual data. To reflect how most companies conduct business, students shall form groups to handle these assignments. Groups shall comprise three to five students – no fewer, no more. Groups shall e-mail their composition to me by the first week of February. Once groups have formed, their composition is not allowed to change. I reserve the right to handle all group-related problems.

General suggestions for preparing the assignment shall be included with the latter. Each group is to return its written answers and the supporting Excel spreadsheets by e-mail:
Case #1: second Tuesday after Spring Break by 2 PM
Case #2: last day of the final-exams period by 5 PM.

Please do check all files sent to me for **viruses** and worms. Infected submissions will lead to a grade of 0 – for all group members.

In order to approximate business practice, where an individual's performance evaluation reflects not only the opinion of supervisors but also that of peers, group members shall evaluate one another. Each group member's **grade on a case** will thus reflect overall group performance and other members' opinions. Evaluation sheets are provided at the end of this handout.

To help students prepare for the exam, several **practice sets with solutions** shall be handed out. They will **not be graded**, but students are strongly encouraged to try hard to solve them and to e-mail me to discuss any problems that they may encounter in doing so. One of the best self-tests for a student of his or her command of the material before a case or the exams is whether he or she can handle the questions of the relevant practice sets. **Questions on the exam** cover the reading material, not the cases, and are very similar to those in the practice sets.

**Class Participation**

**Class participation** is important and shall be explicitly rewarded (5% of the total grade). Effectively, the class participation grade may change a grade near a cutoff. While I do not “fine” occasional **tardiness**, a pattern of repeated unexplained late arrivals shall negatively impact the class participation grade.

The course grade computation formula is designed to not penalize students legitimately unable to attend one or more sessions. **If a student has a valid excuse** for not coming to class, however, then s/he should let me know (see also the pandemic info below). Understandably, **job search or other obligations** may occasionally conflict with class. It is each student’s responsibility to find out from his/her classmates what has been missed during the absence.

Students' individual **class participation grade** shall be based largely on the quality of their contribution to the discussion – students are **not** expected to "compete for air time" by engaging in minor discussions. This being said, students should **not** refrain from asking clarifying questions or from demanding back-up data/logic to assertions made (whether by myself or by a class mate).

**Honor Code**

By registering for the class, students promise to abide by the American University Honor Code. Additional information about the Code (including definitions of plagiarism, use of sources including the Internet, and the adjudication process) can be found in a number of places including [http://www.american.edu/academics/integrity](http://www.american.edu/academics/integrity).
Cases: Because I have taught *International Finance* at Carnegie Mellon, McGill, and Kogod, solutions or solution keys to the group assignments may exist. Any use of, or reference to, existing solutions (whether written by me, by former students or by anyone else) is prohibited. Students within a group shall be judged, partly, by how well they work together. Members of any given group, however, shall not collaborate with any other group or person.

Exam: The MT and Final exams shall be closed book, subject to the caveat in the previous section. Naturally, students are not allowed to collaborate with anyone during the exam.

Failure to respect these requirements shall be considered a severe violation of the University Honor Code and dealt with accordingly.

**Collaboration**

As explained above, students within a group will be judged, partly, by how well they work together. In contrast, it goes without saying that students are not allowed to collaborate with any other person during the final exam. Failure to respect these requirements shall be considered cheating and dealt with accordingly.
**Pandemic Planning (University statement)**

In the event of a declared pandemic (influenza or other communicable disease), American University will implement a plan for meeting the needs of all members of the University community. Should the University be required to close for a period of time, it is committed to ensuring that all aspects of its educational programs will be delivered to AU students. These may include altering and extending the duration of the traditional term schedule to complete essential instruction in the traditional format and/or use of distance instructional methods. Specific strategies will vary from class to class, depending on the format of the course and the timing of the emergency.

I shall communicate class-specific information to students via AU e-mail or Blackboard. In turn, students are required to inform me immediately by email of any absence due to illness.

Students are responsible for checking their AU e-mail regularly and keeping themselves informed of emergencies. In the event of a declared pandemic or other emergency, students should refer to the AU Web site (www.prepared.american.edu) and the AU information line at (202) 885-1100 for general university-wide information, and contact me (the Dean’s office) for course- (KSB)-specific information.

**Academic Support and Disability Support Services**

If you experience difficulty in this course for any reason, please don’t hesitate to consult with me. In addition to the resources of the Finance department, a wide range of services is available to support you in your efforts to meet the course requirements.

**Kogod Center for Business Communications** (x-1920, KSB 101):
To help improve your writing for the cases, you may contact the Kogod Center for Business Communications. You may get advice for any type of business communication, including memos, reports, individual and team presentations, and PowerPoint slides. Hours are flexible and include evenings and weekends. Go to http://kogod.american.edu/bizcomm and click on "make an appointment", visit KSB 101, or e-mail cbc@american.edu.

**Academic Support Center** (x3360, MGC 243):
ASC offers study skills workshops, individual instruction, tutor referrals, and services for students with learning disabilities. Writing support is available in the ASC Writing Lab or in the Writing Center, Battelle 228.

**Disability Support Services** (x3315, MGC 206):
DSS offers technical and practical support and assistance with accommodations for students with physical, medical, or psychological disabilities.

If you qualify for accommodations because of a disability, please notify me in a timely manner with a letter from the Academic Support Center or Disability Support Services so that we can make arrangements to address your needs.