

Wharton

UNIVERSITY OF PENNSYLVANIA

FNCE231/FNCE731 Global Valuation and Risk Analysis

Spring 2024

Preliminary and Subject to Change

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Office Hours: Wednesday 1:45-3:15 and by appointment

Course Syllabus

Learning Objectives:

In this course, you will learn how to value and analyze global risks faced by an international company. These global risks include:

- Currency effects due to cash flows denominated in foreign currency;
- Foreign relative to domestic inflation impact on costs and revenues;
- Tax implications of operating in multiple jurisdictions;
- Political risks from operating in a foreign country

Understanding how to value these risks in a global environment will require rethinking valuations as in:

- International cost of capital approaches
- Capital budgeting and company valuations incorporating cash flows that are
 - Measured in different currencies
 - At different projected inflation rates
 - Adjusted for different international tax rates
 - Facing potential political risk events
- Company valuations with different synergies based upon
 - Perspectives of the country residence of investors

In addition, you will learn how to analyze and potentially mitigate the on-going risks faced by companies in the global environment. These topics will therefore cover:

- Measuring a company's underlying currency and inflation exposure
- Global risk mitigation approaches such as
 - Hedging currency and inflation risk
 - Managing political risk
 - Minimizing the global tax burden

Who Would Benefit From This Class?

Studying the topics in this course generally benefits students who are preparing for careers that either work directly with international corporations or else value these companies or their projects. For example, understanding these topics is often useful for work in:

- Companies with operations or acquisition targets abroad
- Investment banks and consulting companies
- Private equity firms that value foreign companies
- Hedge funds with strategies based on global valuations
- Portfolio managers with investments in PE/VC/hedge funds

A. Course expectations: In order to focus upon real world problems faced by companies, this course uses many case examples. I will present some in lecture format to highlight business problems. Other cases require group write-ups or short problem set solutions and will be discussed in class. In addition, there will be two in-class midterm exams. The calendar for these cases and exams are below as well as on Canvas.

B. Overall Grading: To arrive at a final course grade, a numerical weighted average will be computed for six components: (a) 2 in-class midterm exams; (b) 3 group case write-ups or 2 group case write-ups and a short presentation on a foreign company; (c) a group capstone project which students can choose to be either be a case write-up or a foreign private equity valuation; (d) 2 problem sets, and (e) course participation. Also, two of the write-ups and one problem set include a short computer simulation.

All assignments may be done with a group, or individually, according to your preference.

The numerical weighted average will be calculated as follows:

1. Midterm Exams (2 total): 40% => 20% each
2. Write-ups and/or presentation (3 total): 27% => 9% each
3. Capstone Project (1 total): 15%
4. Problem Set (2 total): 8%=> 4% each
5. Class Participation: 10%
6. Extra Credit: No points; may only matter for students between course letter grades

Details on these components are given below.

1 Exams (40% of grade)– There are two in-class midterm exams. Summary reviews of the topics covered will be presented in a lecture format during the class period before each exam.

2. Regular Write-ups (27% of grade)– Three of the business cases require write-ups addressing both qualitative and quantitative issues. As with actual practice in business, all of the cases are written to focus on issues, not answers, and as such may be ambiguous. There are often no “right answers” to cases, just good arguments and bad arguments for taking particular actions or decisions. There is sometimes a limited amount of quantitative information on which to make a decision and thus it may be impossible to compute a precise numerical answer.

For one of these assignments, the “Foreign Company Analysis” in the list below, there is a spreadsheet analysis for a foreign company along with a brief (5 minute) presentation. This assignment counts the same as the write-ups.

The lowest grade among these four potential assignments will be dropped so that only 3 write-ups or 2 write-ups and a presentation matter for the grade. Therefore, you may choose not to turn in one of these assignments.

3. Capstone Project (15% of grade)– To synthesize the topics you will have learned throughout the semester, there will be a group capstone project at the end of the course. Students may choose whether to submit an extended case write-up (“The Return of LaFarge”) or a valuation project of a Private Equity company involved in foreign markets. This project submission can be done in a group but cannot be dropped.

4. Problem Sets (8% of grade)– Three of the business cases only require submitting the answers to some objective quantitative questions in the form of “problem sets.” The lowest grade for the problem set assignments will be dropped and you may therefore choose not to turn in one assignment so that only 2 problem sets matter for the course grade.

5. Class participation: There are two components to the participation grade.

(a) Attendance (7% of grade): Attendance counts 70% towards the participation grade.

(b) Discussion (3% of grade): A discussion grade will count 30% towards the participation grade. The discussion grade will generally depend upon your willingness to give answers when called upon (whether right or wrong) and also your willingness to volunteer to help discuss case questions. A participation grade will be posted twice a semester on Canvas as “check”, “check+” or “check –”.

6. Extra Credit: No extra credit is given on group cases or exams. Extra credit may be given on some other grade components such as problem sets. This credit is not included in the calculation of the final course grade. However, if a student’s course grade falls in between a letter grade at the end of the semester, the extra credit may help move the final grade to the higher level.

C. Groups - To submit assignments, you will be asked to form a “Group” through Canvas. *The maximum number of students permitted in a group is 4.*

The group sign-up procedure will be covered in detail during class.

Students may prefer to form a group early in the semester and keep with that group throughout. Alternatively, students may prefer to submit some assignments individually or to join a different group during the course of the semester. You may make these changes through Canvas. *You do not need my permission to change teams.*

Course Materials, Submissions, and Other Basic Information:

All course materials will be accessible through the Canvas site. All submissions will be done on the IEMAV site (accessible through Canvas). The table below summarized the due dates and submission buttons on IEMAV.

| Assignment | Type | Due Date* | Location |
|----------------------------------|---------------------------|------------------|-----------------|
| 1. Great Eastern Toys: Hong Kong | Write-up & Simulation* | Feb 1 | IEMAV |
| 2. Livingston Chemicals | Problem Set & Simulation* | Feb 8 | IEMAV |
| 3. Expose' | Write-up & Simulation* | Feb 15 | IEMAV |
| Midterm #1 | During Class Exam | Feb 22 | In Class |
| 4. Global Cost of Capital at AES | Problem Set | Mar 14 | Canvas |
| 5. Foreign Company Analysis | "Write-up" (Presentation) | Mar 21 | IEMAV |
| 6. International WACCs | Problem Set | Mar 28 | Canvas |
| 7. AES Tiete | Write-up | Apr 4 | Canvas |
| Midterm #2 | During Class Exam | Apr 11 | In Class |
| 8. Private Equity/ La Farge | Capstone Project | Apr 18 | Canvas |

** Simulations are due by 8:30 AM to allow me time to prepare for class*

Reading material:

a. *Cases:* All copyrighted cases are available for purchase through Study.Net. All non-copyrighted cases are available on Canvas under Files/Case Materials/Free Cases.

b. *Lecture Notes, Slides, Additional Reading:* All these material are posted on Canvas. Slides will be posted prior to the class in which they are discussed.

Prerequisites: A thorough knowledge of Corporate Finance (FNCE 100 or FNCE611) is assumed.

Re-grade procedure:

1. Please write a brief explanation of why you believe a question on your assignment or exam was improperly graded. *Send an email to me with this explanation along with a scanned copy of your assignment.* The assignment will be reviewed by the TAs and me. I will then inform you about whether the grade has been changed and the reason why.
2. Requests for regrades may be submitted to me *only up to two weeks* after the graded assignment or exam has been returned to you or made available for your pickup.
3. Please note that regrades will cover the entire assignment and therefore may potentially result in lowering the grade.

Course Topics by Class

Note: For dates of each Class numbers, please see class calendar under Canvas.

Part 1: Global Cash Flow Risk Analysis

Module 1. Overview: Why is Global Risk Valuation Different?

Class Number: 1- Overview

Readings: Lecture Notes, Chapter 1 and Chapter 2

Readings: Royal Dutch Shell Case

Module 2: Interest Parity and Hedging Cash Flows with Forwards

Class Numbers: 2 to 3 - Interest Rate Parity and Hedging with Forwards

Readings: Lecture Notes, Chapter 3

Module 3: Hedging Cash Flows with Options

Class Numbers: 4 – Hedging with Options

Readings: Lecture Notes, Chapter 4

Class 6. Great Eastern Toys Case Discussion

Module 4: Managing Risk with Cash Flow Uncertainty

Class Numbers: 5 – Hedging Long Term Cash Flows

Readings: Lecture Notes, Chapter 5

Class 8. Livingston Chemical Case Discussion

Module 5: Real Exchange Rate Risk and Exposure

Class Numbers: 7 – PPP and Real Exchange Rate Risk

Readings: Lecture Notes, Chapter 6

Guest Speaker on Global Private Equity

Class 9: Alex Ready, Cambridge Associates (tentative)

Module 5 (cont.): Real Exchange Rate Risk and Exposure

Class Numbers: 9 – Exchange Rate Exposure

Readings: Lecture Notes, Chapter 7

Class 10. Expose’#1 (Jaguar) Case Discussion

Module 6: MIDTERM – Part 1 Summary

Class 11. Midterm Review

Readings: Old Exams on Canvas

Class 12. MIDTERM 1

Part 2: Global Valuation

Module 7: Shareholders Risk Perspectives Across Borders

Class Numbers: 13: International Portfolio Risk

Readings: Lecture Notes, Chapter 2 revisited

Class 14. AES Globalizing the Cost of Capital Discussion

Module 8: International Cost of Capital

Class Number 15: International Cost of Capital Lectures

Readings: Lecture Notes, Chapter 8

Class 16. Foreign Company Analysis Discussion

Module 9: International Taxes, Corporate Fund Flows, and Inversions

Class Number 17: International Taxes Lectures

Readings: Lecture Notes, Chapter 9

Readings: International Tax Notes HBS

Class 18. International WACCs Discussion

Module 10: International Capital Budgeting

Class Number 19: International Budgeting Lecture

Readings: Lecture Notes, Chapter 10

Class 20. AES Tiete Case Discussion

Module 11: International Valuation

Class Number 21: International Valuation Lecture

Readings: Lecture Notes, Chapter 11

Module 12: MIDTERM – Part 2 Summary

Midterm Review (Recorded Asynchronously)

Class 22. MIDTERM 2

Guest Speaker on Global Valuation

Class 23: Carla Nunes Duff&Phelps MD (tentative)

Module 13: COURSE SUMMARY – Capstone Case

Class 24. Private Equity Projects and LaFarge Discussion