FIN 3115/3711: International Financial Management
Semester 2, 2020-2021
Ben Charoenwong

<u>Contact Information</u>
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Class Time: Wednesdays, 12:00 pm – 3:00 pm
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Course Description

This course is designed to provide students with data analysis tools and conceptual frameworks for analyzing international financial markets and capital budgeting. This course will be especially helpful for a student pursuing a career in international banking, global asset management, or corporate finance in a multi-national corporation. The course covers the following topics: foreign exchange markets; models of exchange-rate determination; international investments; currency risk management; international capital budgeting; and political risk in Asia.

After introducing international financial markets, the class can be split into two parts. First, we take the role of an investment manager considering investing in different countries. Second, we take the perspective of a CFO deciding to finance new ventures in different countries.

By the end of the course, I expect students to be able to:

- Derive the impact of monetary and fiscal policy on the international goods and financial markets
- Construct cogent arguments and predictions based on the appropriate (Keynesian or Classical) economic model
- Visualize financial and economic data in a meaningful way based on economic concepts
- Identify different relevant sources of risk in an international investment portfolio
- Relate a firm's international pricing decision with its financing decisions
- Calculate the cost of capital for international projects, ventures, or mergers and acquisitions.

Course Format

Most of the class will be lecture-based with intermittent case discussions. When covering cases, I will clearly articulate the objectives and takeaway. During lecture, I expect you to ask questions and make comments; at times, I will also cold-call to ensure students in class have ensure an equal opportunity to contribute to the discussion. You will benefit from preparing readings before class.

You should also remain up-to-date with news in international finance in the popular press. By a long shot, *The Economist* has the best analysis. *The Financial Times* is next best. *The Wall Street Journal is okay.*

Prerequisites and Enrollment

This course assumes familiarity statistics (DSC2008 or equivalent) and finance (FIN2004 or equivalent), and some exposure to macroeconomics (BSP2001 or equivalent). We will hit the ground running with mathematical economic models of international financial markets, all building upon fundamentals from statistics and finance courses. We will build intuition for the macroeconomy along the way. If you feel unsure whether your experiences qualify, please feel free to reach out to me prior to registering for the class.

Components of the Course

This class will have 4 different components.

I. <u>Developing Terminology:</u> Although this is boring, it is necessary. We start the course by developing the basic definitions and concepts that we will use throughout the course and in practice. This portion of the class is not indicative of the course.

II. <u>Describing Institutions:</u> Institutions play a paramount role in how an economy operates. These details are often country specific, so I will provide a reference of broad guidelines, but we will not spend too much time on individual countries. However, we will have generic description of banks and central banks that apply internationally.

III. <u>Data Analysis:</u> Given the vast amount of data available, this component of the course will develop your ability to convert data into insight. To do this, we will use the help of models in interpreting patterns in the data. Through the lens of an economic model, you will be able to navigate the sea of data, focusing on relevant datasets and techniques. Along the way, you will also learn how to present relevant statistical findings to support or refute a coherent argument. You will also do a fair amount of data visualization. However, we will not spend much time discussing technical aspects like overfitting models and estimation. Those topics are better suited for statistics and econometrics courses.

IV. <u>Model Building:</u> This is a large portion of the class. A model is a mathematical description of a simplistic, stylized economy. Economists make positive (compared to normative) statements based on intuitions and results from models. We will spend a large fraction of time explicitly building models to derive economic intuitions. Your goal should be to master how these models work, and to be able to extrapolate from the model to understand how the real world works.

Since all models require some sets of assumptions, I will also develop tests of certain models to determine where a model is useful and where it is not. We will cover models of investment management, market efficiency, exchange rate determination, interest rate determination, and optimal firm financial policy.

Use of Math

Math is used in this class. Math is a tool, a means to an end. It is used to develop your intuition. It provides rigor, logic, and power to the analysis we do. By power I mean that results will emerge from the use of math that would not emerge if we did the analysis without math.

Some students have intuition that is well enough developed that they do not need to use math to develop their intuition. Fewer students are in this category than think they are. Some students will get caught in the math and never make it to the final goal of improved economic intuition. Hopefully, you will be a student who uses math as a crutch, like training wheels on a bike; math will be something to help you progress, but also something you are able to later discard in practice.

We will use mathematics up to multivariate calculus.

Analytical Tools

Some of the homework assignments require running regressions, plotting, and using optimization. Although all the analyses can be done in Microsoft Excel, I recommend using the software package R for these purposes. R is free, open-sourced, and used extensively in both industry and academia. It is a good idea to familiarize yourself with this software before entering the workforce. If you choose to learn R through this course, I strongly urge you to work through the tutorial documents prior to the start of class. That said, even with resources available, there is a learning curve to R. Do not be discouraged if initially it seems arduous. It gets easier. You may also use any other language (like Python) that you are comfortable with.

Course Material

a) Class Notes: Lecture notes contain necessary tools for the course. If you master these you can do well in the class. However, the lecture notes alone are not in themselves sufficient. Much of the explanations will be done in class and on the board. Bring the relevant lecture notes to class every time, but you should still take your own notes in class.

b) Readings: For some classes, I assign academic and/or news articles. Academic articles are the primary source of knowledge. I assign these because some of the material I am teaching you is cutting-edge, right at the frontier of research, and has not made it into popular textbooks.

   The news article I assign are mainly opinion and analysis pieces in order to develop your skills as an informed consumer of news and apply class concepts to the real world.

c) Text: The text does two things. First, it provides alternative explanations of what is in notes, though often for a simpler version of the model. For some students, it seems to help to start with the text for background and then move to the lecture notes. If you feel the lectures go too fast, I encourage you to read the relevant portions of the book before class to get some background.

   Second, the text covers topics I don't have time to cover in class. You are not responsible for the material in the textbook that I do not cover in class; the materials covered in the lecture notes suffice. That said, you will get a more complete understanding of the course material by reading the book. You do not need to bring the book to class. I refer to the textbook as KOM. Given the broad range of this class, I also list supplemental (optional) textbooks. These are for reference only and will only apply to specific portions of the class.

Textbook

Krugman, Obsfelt, and Melitz, *International Economics: Theory and Policy*, 10th Edition.
        ISBN-13: 978-1-292-01955-0
        ISBN-10: 1-292-01955-7

Supplementary (Optional) Textbooks

Corporate Finance Reference: Berk and DeMarzo. Corporate Finance: The Core. 4th Edition.
        ISBN-13: 978-1-292-15833-4
        ISBN-10: 1-292-15833-6
Investments Reference: Bodie, Kane, Marcus, Jain. Investments.
        ISBN-13: 978-007-126228-6
        ISBN-10: 007-126228-8
Macroeconomics Reference: Abel, Bernanke, and Croushore. *Macroeconomics*. 9th Edition.
        ISBN-13: 978-0134167398
        ISBN-10: 013-416739-2
R Reference: Grolemund and Wickham. R for Data Science. 1st Edition.
        ISBN-13: 978-1491910399
        ISBN-10: 149-191039-9
        Note: There is a free online-version available at http://r4ds.had.co.nz/index.html.

Handouts

This is mostly a paper-free course. The course website has all the course documents, including the syllabus, course schedule, lecture slides, and readings. I may occasionally pass out short articles of interest for use in discussions.

Grading

Your course grade is based on your overall performance in the class (homework, tests, class participation, and the group project). The following percentage weights are used to form your overall course average:

Individual Homework	10%
Group Homework	10%
Test 1	20%
Test 2	30%
Group Project	20%
Participation	10%
Total	**100%**

Submission Policy

All homework and projects must be submitted by the relevant due date. Written group homework must be submitted as a single PDF. If multiple files are submitted, only the PDF file will be graded. <u>Late homework is not accepted under any circumstances</u>. Late group projects will be penalized by 20 percent per day, additive (rather than multiplicative. E.g. 2 days late = 40% total penalty, not 36%.).

Homework

Details regarding the write-ups (e.g. page limits, types of analyses), are in each homework assignment document. You only need to answer questions that are asked. Page limits are strictly enforced. Extraneous pages will be ignored.

There will be 3 individual assignments and 3 group homework assignments. Groups must be between 4-5 students.

Tests

There are two tests in this course. Each test consists of three sections: true/false, multiple choice, and short answer. Test 2 is cumulative. That is, Test 2 covers both topics that were covered in Test 1 as well as topics that were not covered in Test 1.

For test 1, students are allowed ONE (1) A4-sized, single-sided sheet of notes. For test 2 , students are allowed to bring ONE (1) A4-sized, double-sided sheet of notes. A non-graphing calculator is allowed on both tests. Only NUS approved calculators are allowed. Be sure that you know how to use your calculator before you take the tests. Calculator user manuals are not allowed in the tests. Exam proctors (myself included) are not expected to know how to use your calculators.

There is no makeup for Test 1. If for a valid reason (e.g. family emergency or accident) you cannot take Test 2 and the Undergraduate Office verifies the situation, I will make arrangements for a makeup.

Regrades

It is important for everyone to understand my re-grade policy. You will receive written answers to the midterm and final exams. If, after you have read the answers, you feel you were unfairly graded, you may submit your request for a re-grade to me in writing. All requests must be made within one week of the date the assignment or exam is returned.

Requests for a re-grade must include a written description of why you feel you are entitled to more. Your entire assignment will be re-graded, your score can go up or go down, and you will receive a written reply from me explaining why changes were made or not made. I am tough on re-grades, because otherwise the system will reward the complainers and penalize those that spend their time in more productive ways.

Class Participation

During lectures, I will raise questions to the class as well as field questions regarding any material I cover. During case discussions, it is important to introduce your analysis. This might involve constructively challenging other opinions, assumptions, or analyses. It may also involve adding additional observations or institutional knowledge that offer new insight. You will benefit more from this class if you are able to expose your own viewpoints or conclusions to the critical evaluation of the class.

Class participation is an opportunity to ask questions to enhance your understanding and demonstrate your analysis of the class material. Offering insightful comments is the best, asking questions or answering questions incorrectly is okay, and remaining silent is the worst.

Group Project

There will be a group project that involves submitting a written report and an oral presentation for the class. The written report is due prior to Week 13, and presentations will take place on Week 13. Like for the group homework, groups are between 4-5 students. At the end of class in Week 13, each group member will be expected to confidentially rate the other members of the group based on contribution.

Projects may be in asset management or corporate finance. By Week 7, each group will submit a single page, 1.15 spacing, 12-point Times New Roman font proposal for the group project. I will provide feedback on project proposals, including whether to continue or change topics.

The project write-up must be a 1.15-spaced, 12-point Times New Roman-font, single PDF file, with up to a maximum of 10 pages, including tables and figures, but excluding the cover page, appendices, and references. The project write-up is due prior at the beginning of Week 13, prior to the presentation.

All groups will be given equal time to present. I will determine the order of presentation. Each group will also be assigned to two critique groups, who will critique the write-up and presentation. The overall project grades will reflect both your colleagues' and my critiques. Although comments are required from the critique groups, all students are expected to actively participate in the presentation.

Honor and Academic Honesty

Since students do not take tests at same time it is important that students do not discuss the tests until all students have taken the tests. This includes discussing the difficulty of the test. To engage in such a discussion will be a violation of the academic code. If someone begins to discuss a test with you and you have not completed the work, you are required to immediately inform them of the situation and terminate the conversation.

Academic integrity and honesty is essential for the pursuit and acquisition of knowledge. The University and School expect every student to uphold academic integrity & honesty at all times. Academic dishonesty is any misrepresentation with the intent to deceive, or failure to acknowledge the source, or falsification of information, or inaccuracy of statements, or cheating at examinations/tests, or inappropriate use of resources.

Plagiarism is 'the practice of taking someone else's work or ideas and passing them off as one's own' (The New Oxford Dictionary of English). The University and School will not condone plagiarism. Students should adopt this rule - You have the obligation to make clear to the assessor which is your own work, and which is the work of others. In case of any doubts, contact me directly.

Additional guidance is available at
http://www.nus.edu.sg/registrar/adminpolicy/acceptance.html#NUSCodeofStudentConduct

Online Module on Plagiarism, http://emodule.nus.edu.sg/ac/