FIN 3711 International Financial Management

Semester 1, AY2024 – 2025

Contact Information
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Course Description

This course is designed to provide students with data analysis tools and conceptual frameworks for analysing 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; digital currencies; 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 a short-run open-economy Keynesian model
- Visualise 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 discussions. During the lecture, students are expected to ask questions and make comments.

The mandatory materials covered in class will finish by Week 9, with the second test on week 10. After that there is only the group project due on Week 13. Lectures from Week 11 to 13 are topical and not tested. Examples include Cryptocurrencies, global inflation/recession, war on supply chains.

You should also remain up-to-date with news in international finance in the popular press. I recommend *The Economist* and *Financial Times* for this.

Prerequisites and Enrollment

This course assumes familiarity statistics (DSC2008 or equivalent) and finance (FIN2004 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. Developing Terminology: 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 an in practice. This portion of the class is not indicative of the course.

II. Describing Institutions: Institutions play a paramount role in how an economy operates. These details are often country specific, so a reference of broad guidelines will be provided, instead of focusing on individual countries. However, we will have generic description of banks and central banks that apply internationally.

III. Data Analysis: 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 visualisation. 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. Model Building: This is a large portion of the class. A model is a mathematical description of a simplistic, stylised 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 optimisation.

Programming. 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 industry these days. It is a good idea to familiarize yourself with this software before entering the workforce. If you choose to learn R through this module, 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.

AI Policy. The use of AI is encouraged in this class for homeworks and studying. But while it can be a powerful tool, it is important to remember that not all information obtained from AI is necessarily factual. Any information obtained from AI sources should be thoroughly checked and verified before use, and you will bear the responsibility for it.

AI is a tool, but one that you need to acknowledge using. Please include a paragraph at the end of any assignment that uses AI in a "reference'-type section, explaining what you used the AI for and what prompts you used to get the results. Failure to do so is in violation of academic honesty policies listed at the end of this syllabus.

Note that tests in this class will not permit the use of AI. Some tips on using AI:

- If you provide minimum-effort prompts, you will get low-quality results. You will need to refine your prompts in order to get good outcomes. This will take some experimentation and domain knowledge being able to evaluate what is a good outcome.
- Don't trust anything it says. If it gives you a number or fact, assume it is wrong unless you either know the answer or can check with another source. You will be responsible for any errors or omissions provided by the tool.
- Be thoughtful about when this tool is useful. Don't use it if it isn't appropriate for the case or circumstance.

Overall, using AI is a skill in itself. If you are interested to get started, here is a guide. Use cases for AI in this class may include:

- Improving your writing for assignments and project reports.
- Making study materials and sample questions for yourself based on class materials.
- Finding reference information or definitions for new unfamiliar terms (make sure to ask the AI for a citation so you can reference the primary source.)

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) 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 do not have time to cover in class. You are not responsible for the material in the textbook that is not covered 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 supplementary and optional textbooks. These are for reference only and will only apply to specific portions of the class.

Textbook

No textbooks are required in this class, but you may find them helpful. You can use any textbook edition newer than what is listed here.

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: 978-1-292-01955-0 ISBN-10: 1-292-01955-7
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 a paper-free course. The course website has all the course documents, including the syllabus, course schedule, lecture slides, and readings.

Grading

Your course grade is based on your overall performance in the class and weighted as follows:

Assignment 1	10%
Assignment 2	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. All homework must be submitted as a single PDF and named as your student ID number (e.g. “A1028010” or “E1082012”). If multiple files are submitted, only the PDF file will be graded. Group submissions need only be uploaded by one student in the group. Names and student IDs of all members must be on the PDF for verification.

Late homework is not accepted under any circumstances. Late group projects will be penalized by 20 percentage points per day, additive (rather than multiplicative. E.g. 2 days late = 40% total penalty, not 36%).

Assignments

For this module, there will be a total of 3 assignments to be completed on an individual basis. They are designed to take less than 3 hours to complete. At the end of the semester, 2 assignments will be chosen at random to fulfil grading requirements.

Tests

There are two tests in this course. Each test consists of three sections: True/False, Multiple Choice, and Short Answer. The syllabus covered for Test 2 is cumulative. That is, Test 2 will cover topics that were covered in Test 1 and any topics thereafter.

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 unexcused makeups for either test. If for a valid reason (e.g. family emergency or accident) you cannot take a test and the Undergraduate Office verifies the situation, I will make arrangements for a makeup on a case-by-case basis. Make ups for planned (foreseeable) excuses will be scheduled before the class’s scheduled test. Where possible, planned excuses which is not made known to me at least one week prior to the test date will not be honoured. (e.g., If you know since week 1 that you will miss Week 5 due to a case competition, you must let me know before Week 4. If you miss the test and tell me afterwards, you will receive a zero for the test.)

Tests are taken synchronously during class time as listed on the course schedule.

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 test 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 penalise 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. Groups are to be between 4-5 students. At the end of class in Week 13, each group member may submit an evaluation of other group members 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. Groups will be paired off and the paired group is expected to critique on the presenting group. This will be factored into the overall project grade as well.

Honour and Academic Honesty

Since students may not take tests at the same time, it is important that students do not discuss the rests until all students have completed 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.

Artificial Intelligence (AI) tools such as ChatGPT do not require specialist knowledge to use. Many of these AI tools are commonly used in social media, for example, to create content and disguise and refine content created from programmes like ChatGPT. We understand that students will be drawn to using these AI tools, as they would for any other electronic aid.

However, to be clear, normal academic rules still apply. As noted in the Code of Student Conduct: *"The University takes a strict view of cheating in any form, deceptive fabrication, plagiarism and violation of intellectual property and copyright laws. Any student who is found to have engaged in such misconduct is subject to disciplinary action by the University."*

With respect o AI tools (e.g., ChatGPT and image generation tools), your instructor will clarify whether the use of these tools as inputs into your assignment development process is acceptable. AI is a technology that requires skill to use, and knowledge about when and how to use it. if you use ChatGPT or any other such AI tool in your work, you must provide a proper representation of how you used the tool and what prompts you used to generate output. Failure to cite its use constitutes academic misconduct.

Further, as with any information source, be aware that minimal efforts yield low quality results. You will need to refine your work and fact check the output, as you would double-check information from any source. Further, you should be selective in how and when you use such tools instead of using it for each and every assignment you create.

To summarise:

1. Always check with your instructors on what are the permitted uses of AI tools
2. Have a discussion at the start of a course about the use of AI
3. Where permitted, acknowledge your use of AI
4. You remain responsible for the quality of your work and its appropriate representation
5. Failure to follow the above steps can lead to a concern about plagiarism (academic dishonesty)

As always, you have the obligation to make clear to the assessor which is your own work, and which is the work of others. Otherwise, your assessor is entitled to assume that everything being presented for assessment is entirely your own work. This is a minimum standard.

Additional guidance can be found at:
Admission Condition: http://www.nus.edu.sg/registrar/administrative-policies-procedures/acceptance-record#NUSCodeofStudentConduct
NUS Code of Student Conduct: http://nus.edu.sg/osa/resources/code-of-student-conduct
Academic Integrity Essentials: https://libguides.nus.edu.sg/new2nus/acadintegrity#s-lib-ctab-22144949-4
Guidelines on the Use of AI Tools For Academic Work:
https://libguides.nus.edu.sg/new2nus/acadintegrity#s-lib-ctab-22144949-3