Project Instructions

Institutional Finance ECO467/FIN567

Your boss shows up in your office, scratching her head, and says that she has just heard of so-and-so new financial asset or some controversial market microstructure related topic. She is very curious and she is not sure what it is and how it works. So your group will tell her that you'll research about it and give her a report. You will have to figure out on your own (1) what are the relevant questions to ask, (2) what are the relevant issues surrounding it, (3) how to answer them, and (4) how to research the particular topic. The purpose of the project is to get you start thinking on your own and learn how to design and formulate a research project on your own. Typically, in classroom settings, you're given very detailed instructions on how to do an assignment. In the real world, however, you will never be given detailed instructions on any task.

Grading rubric:

- 20% of your project grade will be based on how independently and creatively your group worked.
- 45% will be based on (1) how much you learnt and (2) how well you could convey to me and your classmates what you learnt. Your presentation (and report) needs to have substance and get into the details and nuances of the topic you choose in an organized matter.
- 30% will be based on how well you applied concepts of this class.
- 5% will be based on your in-class participation in all other groups' presentation.

You will write a report on a topic you choose and present this report in class during the last two weeks of the class. The above grading rubric applies to both your written report and the verbal presentation in class.

Possible topics are (in no particular order)

1. Dark pools
2. High frequency trading
3. The evolution of (a) trading volume and (b) the outstanding value of assets traded on exchanges vs. over-the-counter
4. Institutional details of trading interest rate swaps (or some other major asset class not covered in class).
5. Institutional details of trading foreign exchange and related assets (e.g., FX derivatives)
6. Institutional details of trading equities or fixed income from the perspective of a trader in Europe. (When we cover institutional details of equity markets or OTC traded assets, we do so from the perspective of a trader in the US. So your project can instead give us the European perspective).
7. Shadow banking
8. OTC stocks
    - Tip: you may want to analyze transaction data of OTC stocks from Wharton's WRDS
9. The life of a retail investor's order
    - Tips: Your project could include (but not required to) analyzing SEC Rule 605 and SEC Rule 606 reports.
10. Analysis of corporate bond transactions using FINRA's dataset TRACE.
11. Analysis of quote and transaction data in NMS stocks using TAQ data (available through Wharton's WRDS).

You can choose a topic of your own not listed above, but you'll have to run it by me first. Above topics are on a first-come first-serve basis (i.e. if another group chooses the same topic before yours, you'll have to choose another topic).

You will have to figure out what questions to ask regarding the topic you chose. For example, if you pick "Institutional details of trading interest rate swaps (IRS)" your report and presentation can answer questions such as (but not limited to):

1. Who are the major players? Who are the end-investors vs. intermediaries in IRSs? Why do they trade IRSs?
2. Where do IRSs trade? e.g., on what types of trading venues? Do they trade OTC? If so, how?
3. How do these trading (or quotation) venues operate?
4. How large are the different segments of interest rate swap markets (e.g., inter-dealer vs. client-dealer)? In general, how large is the IRS market (in comparison to other asset classes)?
5. How much volume do the different trading venues account for?
6. What are the transactions costs in the different venues and different segments of IRS markets? How do they compare to other asset classes?
7. What are some recent regulations affecting interest rate swaps markets?
8. What are some controversies or scandals pertaining to interest rate swaps?
9. What kind of (quote vs. transaction) data is available for interest rate swaps? i.e., is there pre-trade transparency (if so, where)? Is there post trade transparency?
10. What are some recent developments in IRS markets?
11. How do transactions clear and settle?
12. What policy changes are regulators and market participants debating and why?

Your report and presentation should inform both (a) an individual who has some basic expertise in market microstructure and (b) an individual who has very basic to no financial expertise. Part (a) means your report should get into details. Part (b) means your project needs to be very clear to everyone (e.g., define any new jargon or terminology; don't assume others know the terminology). The goal of the project is to

give you a chance to apply the tools developed in this class to deal with issues that an investor faces every day. If necessary, contact market participants, broker-dealers, or trading venues etc. to gather the information that you need.

What to submit and when

1. By **1:30PM Monday September 29, 2025**, fill out your chosen topic and the date/slot you want to present on in the GoogleSheets spreadsheet I shared with you.

   You will have to log onto googlesheets using your princeton.edu email. I can track any changes made to the spreadsheet.

2. The written report is due by 1:30 PM the day of your presentation. Submit it on Canvas.

3. Presentation slides

   (a) Submit it on Canvas by 11:59 PM the day **before** of your presentation (e.g., if you present on Monday Nov 24, slides need to be submitted on Canvas by 11:59 PM on Sunday Nov 23).

   (b) Also, bring it in hard-copy to class for me to take notes on.

   (c) Bring it on a flash-drive to class as a backup.

Presentations The presentations will be approximately 50-55 minutes in length. Your group must practice your presentation before-hand to make sure you don't run out of time. Typically, both me and other students will ask lots of questions during presentations. Thus, please be prepared to answer questions (that is, leave time in your presentation time for questions). If you don't get many questions, have enough material to fill your entire presentation time. You do not have to know the answer to every question. You can say you don't know the answer, or try to think out loud and have a discussion about it.

Make the topic your own. Some of the topics are in the areas of my research specialization and thus I know a lot about. Other topics (especially, some of the ones students select on their own), I don't know anything about and am excited to learn

them from you. In all cases, I may ask both very basic and more challenging questions. Hence, please, make a genuine effort to learn as much as you can about your chosen topic and convey to us what you learnt in your own words. I may pick one of the group members randomly to ask my questions.

Additional suggestions: (1) try to make your presentation interesting and fun, (2) give an outline at the beginning of your presentation, (3) include a summary at the end of your presentation.

Written Report The written report is essentially the written version of your presentation but more well explained and with slightly more details such as references and computer codes (if any). (similar to my written lecture notes vs. what I present in class). The report can be anywhere between 5-20 pages (not including appendices or computer codes if there are any). There is no hard page number requirement. Since the presentation is 50-55 minutes, I imagine you'll need at least 10 pages to make the written version of your presentation.

If you analyze data, please, submit your computer code (e.g., Python or Stata code). In your code, next to each command, include a comment explaining what the line of the code does. If you end up analyzing some data, I encourage you to do so using Python even if you don't know how to use Python. Because Python is one of the most widely used programming languages in the finance industry. (But you don't have to use Python, other programming languages are fine). Your computer codes should be such that your analysis is reproducible (e.g., if I run your code, I should be able to reproduce the results in your report). For example, even the parts of the code that import external files need to be documented in the code.

Analyzing data is NOT AT ALL necessary to get a good grade on the project (for some project topics, there is no need to analyze data). However, if you do end up analyzing data and the data analysis work is very substantial, I will give 20% extra credit to reflect that analyzing data, cleaning data etc. might be very time consuming. If you end up choosing a topic that is primarily about analyzing data (topics 8, 9, 10, 11), please, do so at your own risk because just cleaning the data, for example, might not be trivial.

You must provide detailed sources (i.e., references/citations) for any facts and any information discussed in your report. This is important. At the end of your report

there should be a bibliography. I will check these references. In your research, try to use primarily authoritative sources (e.g, academic papers which can be searched via scholar.google.com, reports and studies from regulatory bodies (e.g., SEC, BIS) or industry associations (FINRA, SIFMA), books, reports/websites directly from trading venues).

Peer evaluation for group projects Each student will evaluate their group members at the end of the semester. You will submit an evaluation for both projects collectively (i.e., not a separate evaluation for each project). Each student's group project score will be adjusted to reflect these evaluations. The peer evaluation form will be posted on the course website and you will be responsible for turning it in on the date of your last group assignment. The adjustment is as follows. Your peer evaluation scores will be converted into a percentage score. To calculate your total project grade, I will deflate (multiply) the score your group receives on the project by the percentage score from your peer evaluations.