Requirements and Suggestions for NBA543 Financial Markets and Institutions Group Projects

W. B. Bailey

The project requires groups to study a specific question related to the topics covered by this class. The output of the project will be a written document and a presentation during the last week of class. To support the presentation and write-up, collection and analysis of an original data set is essential. Furthermore, you must motivate your research question and your interpretation of your evidence using the ideas, theories, and result that we will discuss in class. Following are some details.

1. Forming groups

The project is to be done in groups rather than individually. While I cannot determine the precise parameters of the groups until I know how many students are enrolled, I anticipate groups of 3 to 6 students making 10 to 20 minute presentations to the class. My preference will be for students to figure out whom they want to work with, but I may assign students to groups, or to partially completed groups, to smooth the process of group formation. I will announce in class a deadline by which time groups should be complete.

There are two days of presentations in the last week of class. I will set a deadline for each group to tentatively select a topic and give me a title or very short description. I will then attempt to arrange the presentations in a logical way across the last two days of class.

2. Examples of topics

Following are some suggested topics. These are only suggestions. You are welcome to work on another topic may that may better suit your interests, but you are encouraged to discuss it with me first to assure that the topic is suitable.

a. Financial market structures
1. Collect a sample of data on initial public offerings (IPOs) of stocks. Document the return from offering price to first traded price. Try to explain the different performance across stocks with company-specific and market-wide variables.

2. Look for evidence that differential corporate governance structures lead to different corporate performance. For example, as implied by one of the articles in the course packet, compare the performance of U.S. and Canadian banks. Evaluate based on stock trading and accounting variables, stock market reactions to banking industry shocks, credit-worthiness, or other criteria.

3. Use intraday data to explore the relationship between several related price series. For example, obtain ten or fifteen days of intraday prices, volumes, and quotes for a stock which trades both in New York and Toronto, or trades in different forms (index futures versus SPY or QQQ basket, or mutual fund). Use statistical analysis to see which market leads or lags in various dimensions. Discuss the significance of your results in light of the different structures of the markets you are comparing.

b. Pricing

4. Describe a recent innovation in financial markets, evaluate it quantitatively, and discuss why the innovation was introduced, what purposes it serves, its importance for the economy, and its future. For example, explain how weather derivatives are priced, obtain relevant data, compare hypothetical and actual prices, and go on to discuss the origins, purposes, and likely future of this class of product.

5. Conduct a fundamental analysis to value a common stock. Collect stock price, cash flow, and other relevant data with which to forecast cash flows and develop a risk-adjusted discount rate for a risky asset. Produce an estimated stock value series to compare to the actual price history. Discuss implications of your results for theories of stock market efficiency. Given the complexity of this task, it may make sense to work on a relatively simple company. Shares in a natural resource producer, like BP Prudhoe Bay Royalty Trust, are a good example.

6. Repeat the classic "excess volatility" test with price, discount rate, and dividend data for a specific stock. Pick a stock for a relatively simple company (for example, a utility or a natural resource producer) and
see whether you can "explain" the volatility of its share price with such factors as the volatility of its dividend yield, discount and interest rates, or firm-specific factors (for example, the price of gold in the case of a gold mine). Discuss the significance and limitations of your results.

7. Test the profitability of alternative technical analysis trading rules based on percentage filters, moving averages, other “technical analysis” indicators, or macroeconomic indicators. Pick individual stocks, futures contracts, or other securities that interest you, and look at trading over intervals of minutes, hours, days, weeks, or months. If you find evidence that there may be a profitable trading rule, try to explain with risk premiums from other markets. For example, if trading profits from Ford stock are positively correlated with returns on strongly procyclical junk bonds, it is evidence that your trading strategy may not violate market efficiency.

8. Document the premiums or discounts on closed-end mutual funds. Discuss the variety of potential explanations for premiums and discounts, then try to test which story fits reality best. For example, if you think closed-end fund discounts are driven by irrational factors, see if they correlate with such indicators as odd lot stock-trading volume, volume and price changes from small cap stocks, and other indicators of small investor activity.

c. The macro-economy and financial markets

9. Do a "case study" of the monetary policy of an interesting country. For example, describe and document the success or failure of monetary reforms in a South American country. Include such variables as inflation, interest rates, stock prices, and measures of real activity. Another possibility is to describe and document the policies, policy changes, and experiences of a country with an interesting or unique problem, such as a relatively small economy with large trade flows (Hong Kong, Singapore, Taiwan) or a country which depends on natural resource exports (Australia, Canada).

10. Look at the relationship between stock returns, real activity, and inflation. However, look at an interesting situation which has not been covered in class. Examples might include civil war U.S. or a developing country with high, volatile inflation. Document the relationship with statistical analysis of data you have collected. Interpret your results, and relate them to the existing evidence on the U.S.
d. Innovation, regulation, and crisis

11. Study the true value of the deposit insurance U.S. financial institutions enjoy. Pick institutions which differ widely (for example, an S+L, a money center bank, a regional bank) and use the option pricing model to estimate the true value of the put option the deposit insurance represents. Contrast across banks and time periods. For inspiration, see the study by Ronn and Verma in the 1986 Journal of Finance.

12. Study the effect of major financial cataclysms on the banking industry. Select events, such as the collapse of Continental Illinois or Penn Square, the crashes of 1929 or October 1987, the Hunt Brothers episode in the metals market, crash of the Japanese stock market in 1990, or the impact of the Asian Crisis on Korean or Thai banks. Examine the impact of the events by looking at market and accounting data for relevant banks. Describe and interpret what you find.

13. Study the impact of regulatory changes and economic news on money and bond market yield spreads. For example, document the impact of U.S. banking regulation changes and crises on the yield spread between Eurodollar deposits and Treasury bills, or the effect of Japanese events on the Euroyen/Gensaki spread. Another example would be to study the impact of changing economic conditions and economic shocks on the spread between BAA and AAA U.S. corporate bond yields, or the spread between LDC debt and U.S. Treasury debt yields. Yet another example: track the spreads between Eurosterling, Euromark, Eurofranc, and Euroecu yields during the EMS crisis of the early 1990s. Moving away from the fixed income markets, conduct a study of the impact of Reg FD or Sarbanes-Oxley on some aspect of the equity markets such as valuation or responses to corporate disclosures.

3. Grading

As indicated in the course description, this project is worth 30 points out of each student’s total of 100 points for the class. 5 points of those 30 points will be assigned based purely on attendance: each student must attend both sessions of presentations. Ordinarily, the balance, 25, of the points will be assigned based on the quality and originality of the group’s write up and presentation. However, irresponsible behavior as an individual member of a group may also affect your grade: a “peer evaluation” system (to
be detailed later) allows group members to vote on the behavior of other group members. If a majority of group members give a particular individual a poor grade, this can lead to the loss of a maximum of 15 points for that individual.

4. What’s the point of all this?

In a narrow sense, this project compels you to apply the ideas and tools you learn in the course to understanding an interesting country, trading rule, regulation, or other aspect of the workings of financial markets and institutions. More broadly, it is good practice in researching ideas or current events, creating a compact “pitch” to inform and convince others, and dealing with questions, comments, and criticism in front of a live audience.

5. Required format

A. Write-up
Each group submits a hard copy of its presentation at the start of the class session in which they are scheduled to present. The hard copy should be typed and double spaced on one side of the paper only. Pages are to be stapled together and submitted without plastic or paper covers, folders, or binders. There is no minimum length requirement as you are encouraged to describe your ideas, methods, and conclusions as concisely as possible. Indeed, a paper copy of your complete Power Point presentation, plus short appendices with details of articles, data, and analysis, is more than acceptable. As described in the syllabus, a revised presentation is due later.

B. In-class presentation
As indicated above, the format (that is, number of students per group and number of minutes for the presentation) will be determined later based on enrollment. Each group should determine who among them presents different parts of the pitch, answers questions, and so on. You are welcome to divide up this task in whatever way you feel will be effective. Time limits will be adhered to strictly, and “Q&A” will occur only after the end of the formal presentation. To avoid wasting time setting up laptop computers for each group, presentations will use ordinary overhead transparencies only. No laptops are allowed. If, however, the particular classroom we are assigned contains a built-in computer
system that works effectively, it may be possible for groups to use presentation decks stored on a memory stick.

6. A reminder

As indicated at the top of this handout, the project requires you to use data to address a question. Use of databases compiled by my former students in previous semesters is not acceptable, as is use of data you have prepared for another class. Use of the data I compiled for the spreadsheet assignments is not acceptable, as is virtual repetition of spreadsheet assignments. An entirely descriptive report or summary of published research or news articles is not acceptable. Papers that grossly violate these or other terms of the assignment will receive no credit.