**Finance Department**

**Advanced Corporate Finance – MF930**

**Spring 2015**

**Syllabus**

**Instructor:** Professor Dirk Hackbarth  
**Class Time:** Fridays: 2:00-5:00pm  
**Class Location:** SMG 615A  
**E-mail:** dhackbar@bu.edu  
**Phone:** (617) 358-4206  
**Office:** SMG 564  
**Office Hours:** 4-6 pm on Mondays (or by appointment)

**Brief Description**

This is a doctoral level class on corporate finance, covering both theoretical and empirical work. Rather than explaining the underpinnings of basic corporate research (e.g., model/applications dealing with asymmetric information, agency problems, and capital market frictions), I will go deeper in understanding “how to operationalize” research on concrete topics that are central to contemporary corporate finance, such as bankruptcy, capital structure, mergers and acquisitions, the firm boundaries, investment, and much more. The class will also look at the interface between corporate finance and other research areas, such as asset pricing and banking. Among other things, the course is a blend of new approaches to modeling in corporate research (e.g., dynamic, structural models of financial policy that generate typically quantitative predictions) and new approaches to testing design (e.g., regression discontinuities and natural experiments). The goal is to give students a glimpse at the “state-of-the-art” of research in corporate finance and prepare them to do research in corporate finance using new methods and tools.

**Text and Materials**


Readings will be based on articles. Reading assignments will follow the sequence listed below. Papers antecedced by an asterisk (*) are strongly recommended and covered during lectures. The readings are nearly all available for free on the web (e.g., from JSTOR, SSRN, the journal’s website, or the author’s own website). Students can locate them using, e.g., Google Scholar.
**Grading**

- **Regular class participation:** 20%
  All students are expected to have read prior to class in detail all the papers scheduled for discussion that day. Students need to come to the classroom with their minds on the material being discussed. Just “showing up” for class does not count for class participation.

- **Referee reports and homework assignments:** 30%
  I will give guidelines regarding these assignments. On the referee reports, for example, I am looking for the students to mature on the art of writing reports. The first report will be on a paper that the professor has actually reviewed, so the students can later compare their assessment with that which decided the fate of the paper at a top journal. The second will be graded more “competitively” (as if the professor was an editor of a journal and was ranking the referees). The best report will be copied and shared with all students (remaining anonymous). Referee reports are individual work, but other assignments may be done in pairs (fostering a sense of collaboration/co-authorship).

- **Formal paper presentation and discussion (“mini AFAs”):** 20%
  One class will be dedicated to emulating an AFA-like setting where students will present and discuss papers as if they were in a professional conference. Papers will be chosen among the “hottest/newest” WPs in circulation. Some students will present (defend) the papers as if they were their own work, while others will discuss (and criticize) the papers. Presentations and discussions will be tightly timed (I will cut you off if you go overtime) and they will have to look professional. This exercise is designed for the students to demonstrate their full presentation/debating skills. This is simply a practice for the type of “ideas competition” you will see in the real world of academia.

- **Research proposal(s) (paper + presentation):** 30%
  More on this below.

All students in the classroom are expected to read the papers selected for each topic (in advance) and to participate in class discussion. Note: Auditors are expected to do all of the assignments of regular students, except the final project proposal and presentation, which are also recommended but are not required.

**Intended Audience**

This course is largely intended to help prepare students for research in the area of corporate finance. However, all PhD students with an interest in Finance, Economics, and Accounting are welcome to take it. Hopefully, this course will be stimulating enough that you will become interested in writing a thesis in corporate finance (but you don’t have to!). It should certainly prepare you to be a researcher in the area. This is sort of a “prep school-type” course, where students will get preparation for their work as academics.

**Webpage**

The course Webpage will contain this syllabus and some of the materials presented in class. The Web address is: [https://smgtools.bu.edu/](https://smgtools.bu.edu/) (SMGTools).
**Research Proposal**

For many PhD students, the most difficult part of the program is the search for a dissertation topic. To gain some experience selecting research topics, one course requirement is to prepare a proposal for a project concerning issues I discuss in class. I hope that a set of research ideas will come to you as the course progresses. This set will presumably consist of multiple ideas in different stages. While some may be little more than preliminary (but hopefully thought-provoking) idea stubs, at least one should be in a more fully-formed stage by the end of the semester. For the latter, you should target writing down a document containing:

1) One or two pages motivating the idea/research question. You want to identify a question, explain why it is important that I know more about it (i.e., its implications for research in corporate finance, policy making, etc.), and make the case that the existing literature has overlooked the issue.

2) Once you motivate your research question, you need to think about the economics of your inquiry. This would take 1-2 pages. For example, what are the tradeoffs involved? What kinds of corporate actions/consequences do they entail? Should I expect to verify them using real-world data? How to design an identification strategy for empirical testing? Should I check the idea via simulations? What are the methods you use and why?

3) Anticipating the results: Based on priors, what results should be expected? (What if I find something else?) Discussing this should take a few paragraphs.

4) Add a literature review. In this profession, it is important that you recognize (and give credit to) those who did prior research in the area you want to do your first paper. Do a fair (not aggressive, but still critical) review of the literature in no more than three pages. The emphasis should be on establishing your case that the “void” in the literature is worth pursuing. Try to organize the papers in a compare/contrast format. Like all you do in the paper, use this to motivate the importance of your research question.

5) Take a page or two to discuss “implementation issues” such as data availability, sample construction, programming (computer capacity) needs, replicability, etc.

6) Have some preliminary results for us to discuss. These can be empirical results, simulations/calibrations, or anything that gives us “hope” that this is more than a bunch of nice-sounding ideas that will never see the light of day.

7) The last part of the requirement regarding this assignment is a presentation of your research idea. I am not expecting a paper that is going straight to a top journal. On the other hand, I expect the student to present something that shows that he/she was thoughtful, hardworking, and capable of coming up with a potentially fruitful research idea. I expect that the presentation will help all of these elements transpire. Accordingly, it is important that you prepare well for this last task of the course. I (the professor) will be judging you as a potential job candidate at a good research school.

Students may propose to work on a joint proposal with another student in this doctoral course, subject to instructors’ prior approval. It is also advisable (and expected) that students are communicating with me about their plans for the final project through the semester. Finally, conforming to requirements now being adopted by some outlets, all programs and data should be made available so results can be reproduced. (Put and turn in copies of the relevant files in a USB drive or CD.)
LIST OF TOPICS AND READING MATERIALS

1. Investment Under Uncertainty I (Foundations of Real Options)


2. Investment Under Uncertainty II (Applications of Real Options)


3. **Game Theory and Real Options**


4. **Capital Structure, Credit Risk, and Debt Structure**


5. **Dynamic Capital Structure and Dynamic Corporate Finance**


6. **Interactions between Financing and Investment**


7. **Boundaries of the Firm and Mergers and Acquisitions**


8. **Bankruptcy and Financial Restructuring**


9. **Empirical Methods I (DID)**


10. **Empirical Methods II (RDD)**


11. Asset Pricing, Corporate Finance, and Distress Risk


12. Dynamic Financial Contracting


**LECTURE SCHEDULE**  
(Note: Tentative and subject to change)

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<thead>
<tr>
<th>Date</th>
<th>Subject</th>
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<tbody>
<tr>
<td>Jan. 23</td>
<td>To Be Rescheduled (External Seminar/Conference)</td>
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<tr>
<td>Jan. 30</td>
<td>Course Introduction / Investment Under Uncertainty</td>
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<tr>
<td>Feb. 06</td>
<td>Capital Structure, Credit Risk and, Debt Structure</td>
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<td>Feb. 13</td>
<td>Dynamic Capital Structure and Dynamic Corporate Finance</td>
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<td>Feb. 20</td>
<td>Interactions between Financing and Investment</td>
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<td>Feb. 27</td>
<td>Boundaries of the Firm and Mergers and Acquisitions</td>
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<tr>
<td>Mar. 06</td>
<td>Bankruptcy and Financial Restructuring</td>
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<td>Mar. 13</td>
<td><strong>No Class (Spring Break)</strong></td>
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<td>Mar. 20</td>
<td>Mini-AFAs</td>
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<td>Mar. 27</td>
<td>Dynamic Financial Contracting</td>
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<td>Apr. 03</td>
<td>Corporate Finance and Asset Pricing</td>
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<td>Apr. 10</td>
<td>Distress Risk Pricing</td>
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<td>Apr. 17</td>
<td>Empirical Methods</td>
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<td>Apr. 24</td>
<td><strong>Presentation of Project Proposal</strong></td>
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