ECON 138 Financial and Behavioral Economics

Spring 2008 TTh 11am-12:30pm, 70 Evans

INSTRUCTOR

Ulrike Malmendier, 643 Evans Hall, <u>ulrike@econ.berkeley.edu</u> OH: Th 12:30-2:30pm

GSI

Erin Syron OH: 4-6pm, 608-1 Evans

SYLLABUS

This course is an advanced class in Financial Economics on topics in Corporate Finance and Behavioral Finance. Topics include:

- Corporate Financing and Moral Hazard (the "Principal-Agent Problem", the Free Cash Flow Problem, "Empire-Building"),
- Corporate Financing and Asymmetric Information (Security Issuance Decisions, esp. IPOs, Dividend Setting),
- Mergers and Acquisitions (Theory of Takeovers, Managerial Incentives and Takeovers, Value-Destruction in Takeovers),
- Corporate Governance (Separation of Ownership and Control, Allocation of Control Rights between Insiders and Outsiders, Internal Capital Markets, Superstar CEOs),
- Corporate Fraud (Earnings Manipulations).

As the topics indicate, the class is fundamentally different from the typical undergraduate class (or the typical MBA class) in Corporate Finance. A typical Corporate Finance class familiarizes the undergraduate student with corporate-finance valuation models, cash-flow statements, and concepts such as NPV, internal rate of returns, weighted average cost of capital, EVA, etc. This class, instead, is more grounded in Economics and emphasizes deeper and more theoretical analyses of corporate-finance decisions. The class will be mathematically and technically more demanding, at the cost of being less applied.

The topics are different, too. They reflect current research in Corporate Finance and Behavioral Finance, which has not yet made it into the typical (undergraduate) textbook. The most prominent example is Corporate Governance—a hot topic in policy debates as well as research, but not standard teaching material in Corporate Finance classes.

A last important difference is that the course teaches both theory and empirics. My intent is to show whether or not there is empirical support for the different theoretical approaches and what methodologies have been used to test the theories. As described below, you will be required to do some empirical homework using STATA.

Who should take this class? Only students with advanced training in micro-economics and math (and real excitement about economics!) should take this class. The class is tailored to students who are looking for a challenging (and hopefully interesting) advanced class and who might consider going to grad school in Economics or in Finance. Even if your main interest is not finance, but for example Political Economy, Institutional Economics, or Development Economics, this class might be of interest. Some of the most interesting work in Political Economy is about the regulation of financial markets and a lot of research in Development Economics focused on financing instruments such as Microcredit Institutions, which we will cover in class. Nevertheless, I also expect to see many students who are planning a career in finance, e.g. in a hedge fund or an investment bank.

Prerequisites: You need to have taken 100A or 101A. However, if you have taken 100A, it is strongly recommended that you also have taken advanced theory classes such as Econ 104 and/or have advanced training in math (e.g. Real Analysis).

The second requirement is one semester of statistics. You also need to have some familiarity with econometrics. It is highly recommended to have taken an econometrics class (140 or 141), though I will not require it.

Econ 136 is not a prerequisite either, but having taken it will make the material of this class easier to follow. Students with interest in Financial Economics are strongly encouraged to take both classes, in either order.

Finally, you will need to know (or be willing to get to know ...) STATA, which is the software we will be using for the empirical homework.

Enrollment questions: All inquiries concerning enrollment should be sent to the Economics Department's Head GSI, Jeff Butler at: <u>headgsi@econ.berkeley.edu</u>. Please do not email me about enrollment; I have no influence on the decision-making process. Thanks!

Class meeting time:	Tu and Th 11:00-12:30
	Evans 70

Section meeting time:	Section 102 DIS: Wed 9-10am, 116 Haviland
	Section 101 DIS: Wed 10-11am, 116 Haviland

<u>Remember</u>: Students on the waitlist for this class who do not show up the entire first week (Tuesday, Jan 22nd through Monday, Jan 28th) are automatically dropped from the waitlist.

Course Requirements:	Problem Sets:	30% (6 problem sets at 5% each)
	Midterms:	40% (2 midterms at 20% each)
	Final	40%

The percentages above sum to 110%. The worst 10% of the score will not count toward your grades. For example, if the worst score is on the problem sets, the problem sets will

only have 20% of weight. There is a second bonus. High-quality class participation can increase the score by at most one grade; for example, from B to B+.

Problem Sets may be done in groups of up to 4 students. They will typically be due on Tuesdays in class. No late homework will be accepted.

Textbook: As mentioned above, there is no undergraduate textbook yet that presents the topics of this class in a suitable way. As a result, we will primarily rely on the handouts I am handing out in class. However, I will point to the relevant chapters in:

Ivo Welch, A First Course in Corporate Finance (2006)

The book will be available for free from my course website; I will provide you with the link and password in lecture 2 (if not before via email).

In addition you can order the book from <u>http://www.lulu.com/content/1756518</u> for \$39.99. This price is pretty much just the printing costs, and recommendable to avoid the hassle of printing out hundreds of pages.

For advanced students, I will also point out the relevant chapters in the following text (as a reference book): *Jean Tirole*, The Theory of Corporate Finance (2006).

This is one of the best advanced texts in corporate finance theory. It also has a couple of good discussions of more recent research, including empirical work. The problem is that it is primarily aimed at graduate students. Large parts of the book are verbal and very easy-to-read descriptions of financial institutions and phenomena; I definitely recommend those parts. Other parts, however, are harder-to-follow theory. In class, we will discuss these topics in a much simplified setting. For most advanced students, it may still be useful to see the treatment in Tirole. But it is perfectly fine to rely on my handouts. I will also indicate the original articles (and sometimes hand them out).

Schedule of Classes:

Below is a <u>very preliminary</u> schedule of the topics we will cover in class. I expect there to be a lot of changes to this schedule as we move along. I will distribute updated lists of topics covered as time goes on. The numbers behind the textbook name refer to chapters and subchapters.

Basics

Lecture 1 (January 22). Modigliani-Miller Theorem (Welch 16.1-16.3)

Lecture 2 (January 24).

Modigliani-Miller (II): Payout Policies (Tirole 2.1, 2.2) Modigliani-Miller (III): Tax Distortions (Welch 16) (Tirole 2.5.1)

Corporate Financing and Moral Hazard

Lecture 3 (January 29). Incentive Misalignments between Shareholders and Managers (Welch 24; Tirole 1.1 and 1.2) Financing Capacity: Credit Rationing (Welch 18) (Tirole 3.1, 3.2, and 3.5) <u>Problem Set 1</u> posted on web Lecture 4 (January 31). Financing Capacity: Credit Rationing (*continued*)

Lecture 5 (February 5). Financing Capacity: Debt Overhang (Welch 18) (Tirole 3.3) Problem Set 1 due in class

Lecture 6 (February 7). Financing Capacity: Costly State Verification (Tirole 3.7)

Lecture 7 (February 12). The Benefits of Diversification (Welch 8) (Tirole 4.1, 4.2) <u>Problem Set 2</u> posted on web

Lecture 8 (February 14). Group Lending and Microfinance (Tirole 4.6)

Lecture 9 (February 19). The Free-Cash Flow Problem (Welch 13) (Tirole 5.6) <u>Problem Set 2</u> due in class

No Lecture (February 21). $\underline{1^{st} Midterm}$

Corporate Financing and Asymmetric Information

Lecture 10 (February 26). The Lemons Problem (Welch 18) (Tirole 6.1, 6.2.1)

Lecture 11 (February 28). Market Timing (Welch 11) (Tirole 6.2.2, *Application 1*)

Lecture 12 (March 4). IPOs (Welch 21.3) (Tirole 6.2.2, *Application 1* and Tirole, 6.3, *Application 9*) <u>Problem Set 3</u> posted on web

Lecture 13 (March 6). Pecking-Order Financing (Welch 21.2) (Tirole 6.2.2, *Application 3*)

Lecture 14 (March 11). Dividend Policies (Welch 19) (Tirole 6.3, *Application 7*) <u>Problem Set 3</u> due in class

Mergers & Acquisitions Lecture 15 (March 13).

Takeovers: Stylized Facts and Introduction to Takeover Theory (Welch 21.6) (Tirole 11.1-11.2)
Lecture 16 (March 18). Takeover Defenses (Welch 24.3) (Tirole 11.3-11.4) <u>Problem Set 4</u> posted on web
Lecture 17 (March 20). Takeovers and Shareholder Free-riding (Welch 24.3) (Tirole 11.5.1-11.5.2)
Lecture 18 (April 1). Takeovers and the One-Share One-Vote result (Welch 24.3) (Tirole 11.6) <u>Problem Set 4</u> due in class
No Lecture (April 3). 2 nd Midterm
Lecture 19 (April 8). Takeovers and Empire-Building (Welch 12.7, 18.3, 20.8, 24.2) (Tirole 11.5.2.1 and 11.8) Papers for Lectures 20 and 21 distributed in class
Lecture 20 (April 10). Takeovers and Managerial Hubris (Welch 12.6, 18.6) (Roll, 1986; Heaton, 2002; Malmendier and Tate, <i>forthcoming</i>)
Lecture 21 (April 15). Multiple Bidders (Tirole 11.7; Malmendier and Moretti, 2006) <u>Problem Set 5</u> posted on web
Corporate Governance Lecture 22 (April 17). Corporate Governance Institutions (Welch 24) (Tirole 1.3-1.9 and 8.1)
Lecture 23 (April 22). Monitoring: early performance, free performance, designated monitor (Welch 24) (Tirole 8.2) <u>Problem Set 5</u> due in class
Lecture 24 (April 24). Market Monitoring (Welch 24) (Tirole 8.3) <u>Problem Set 6</u> posted on web
Lecture 25 (April 29). Investor Activism (Welch 24) (Tirole 9.1-9.2)

Lecture 26 (May 1)

Allocation of Control Rights (Welch 24) (Tirole 10.3, Superstar CEOs)

Lecture 27 (May 6)

Allocation of Control Rights II (Welch 24) (Malmendier and Tate, Superstar CEOs)

Corporate Fraud

Lecture 28 (May 8) – Last lecture! Earnings Management (Welch 13) (Tirole 7.2) Conclusions <u>Problem Set 6</u> due in class

Final exam: Tu, May 20, 8-11am

FAQ:

- 1. Are problem sets required?
 - Yes, problem sets are an integral part of the course and an important part of the grade. They are designed such that everybody should be able to get most points. (The points also indicate the difficulty of the question.) If you get substantially fewer points, this is a warning sign you should come and see me! But do not get frustrated. It is normal if you find the exercises hard! If you can only get half of an exercise done, just write that part done. This way you can get partial credit. Afterwards, by reading the solution to the problem set, you will pick up the rest.
- 2. How important is attending class and reading the book?

You will need to do both. As mentioned above, the book can be tough to read and even an advanced undergraduate student may have difficulties. It is my job to explain and simplify in class! Moreover, the book does not cover all of the recent research topics and very little empirical work.

I will distribute handouts of my slides during class to help you take better notes and will post them afterwards on the web with corrections in case there were some mistakes. However, the handouts are not comprehensive: they do not include graphs and go quickly over certain topics that the book covers in more detail.

- Is it OK if I hand in the problems sets late? Unfortunately, it is not ok. The GSI will not accept problem sets turned in late. Sorry.
- 4. Can I work on the problem sets with other people?

Yes, you can and should. I strongly recommend that you form study groups with other people. In fact, one of the strongest reasons why we require problem sets is precisely the fact that you get to work on economics problems with other people, you discuss with them, and learn from the intuition of others. Nevertheless, we expect that you will write and turn in your own solution to the problem set. After you discuss with other people, you should make sure that you can write your own solution.

5. What if I disagree with the grading of an exam?

If we have miscounted points on the midterms or final, tell us immediately and we will correct. If you think that we have inappropriately scored an answer, submit a complaint in writing to me. I will then re-grade your test from beginning to end. Please keep in mind that this may decrease your final grade; in fact, I have done so several times in the past. But still you should feel free to submit complaints.

6. Who should I talk to if I have a question?

The GSIs should be your primary contact for questions related to the problem sets or the exams. Our GSI, Erin Syron, will hold regular office hours (see above). If you would like to talk to me, feel free to come see me during office hours. I am happy to discuss issues of economic substance, questions inspired by the lectures, and suggestions for your future studies.

7. I am not able to take exams in the normal time because of disability. What should I do?

Come talk to me. You will need to provide some documentation, and we will arrange a suitable accommodation.

Most importantly, I hope to share my enthusiasm for Financial Economics with all of you, and to give you a good preparation for graduate school or other post-school plans.