



## **FBE 630. FUNDAMENTALS OF CORPORATE FINANCE**

**Professors John G. Matsusaka & Oguzhan Ozbas**

**Spring 2018**

**Wednesdays 3:00 pm – 5:50 pm**

### **SYLLABUS**

#### **Overview**

This course provides a rigorous introduction to fundamental concepts in corporate finance. The goal of the course is to familiarize students with central ideas underpinning research in corporate finance and develop an ability to frame phenomena in terms of existing theory. By the end of the course, students will have a working knowledge of the main tools of corporate finance research, and be equipped to begin independent research. The second class in the sequence, FBE 631, explores a variety of applications of fundamental principles to contemporary issues in finance. This class begins with the neoclassical and tradeoff models, moves to agency problems and asymmetric information, then security design and control rights, and financial intermediation.

#### **Learning Objectives**

- Become familiar with central theoretical ideas underpinning research in corporate finance.
- Become familiar with the central scholarly papers that form the foundation for modern corporate finance.
- Become familiar with the main empirical findings in the literature.
- Understand the limitations as well as strengths of core concepts in the field, and the areas where our understanding is most tenuous.
- Develop the ability to formulate and solve mathematical models in the field.
- Develop the ability to interpret and critique empirical evidence in the field.
- Develop the skill to summarize and present research findings.

#### **Course Methods**

Class meetings are organized around lectures that develop models and discuss empirical results. Some papers will be presented by students in order to help develop presentation skills and create a participatory environment. There is a weekly homework assignment that focuses on modeling. Working through models

has several benefits: it develops a deeper understanding of the underlying theory, prepares the student for independent theoretical research, and provides a foundation for empirical research.

### **Prerequisites**

Students must have completed one semester of doctoral level microeconomics, ideally GSBA 602. Students should also have completed or be currently enrolled in a second-semester microeconomics class that covers game theory, information economics, and contracting, ideally GSBA 612.

### **Grades**

Grades will be assigned on the following basis:

Homework	30%
Final exam (May 4, 2-4pm)	50%
In-class presentations and participation	20%

At times this class will follow a standard lecture format, but we will also approach learning in a variety of other ways. Your responsibilities are:

1. Attend class, learn the lecture material.
2. Read the assigned papers.
3. In-class presentations.
4. Complete homework assignments.
5. Attend the Finance Seminar when the paper is in the area of corporate finance, and be prepared to discuss the paper the following class.

### **Teaching Assistant**

The teaching assistant is Chong Shu: [Chong.Shu.PhD@marshall.usc.edu](mailto:Chong.Shu.PhD@marshall.usc.edu). Chong is a doctoral student in finance who is working on his dissertation. He will be grading homework and going over the solutions at a time to be arranged.

### **Contact Information**

Please do not hesitate to contact either instructor if you have questions about the class. Email is convenient: [matusak@usc.edu](mailto:matusak@usc.edu) and [ozbas@usc.edu](mailto:ozbas@usc.edu) or drop by our offices if we are there.

### **Class Notes Policy**

Notes or recordings made by students based on a university class or lecture may only be made for purposes of individual or group study, or for other usual non-commercial purposes that reasonably arise from the student's membership in the

class or attendance at the university. This restriction also applies to any information distributed, disseminated or in any way displayed for use in relationship to the class, whether obtained in class, via email or otherwise on the Internet, or via any other medium. Actions in violation of this policy constitute a violation of the Student Conduct Code, and may subject an individual or entity to university discipline and/or legal proceedings.

### **Students with Disabilities**

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to one of the instructors as early in the semester as possible. DSP is located in Grace Ford Salvatori Hall 120 and is open 8:30 a.m.-5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.

### **Statement on Academic Integrity and Conduct**

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own. All students are expected to understand and abide by these principles. *SCampus*, the Student Guidebook, contains the Student Conduct Code in Section 11.00, while the recommended sanctions are located in Appendix A. Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: <http://www.usc.edu/student-affairs/SJACS/>. Failure to adhere to the academic conduct standards set forth by these guidelines and our programs will not be tolerated by the USC Marshall community and can lead to dismissal.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* <http://equity.usc.edu/> or to the *Department of Public Safety* <http://capsnet.usc.edu/departments/departments-public-safety/online-forms/contact-us>. This is important for the safety of the whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report or can initiate the report on behalf of another person. *The Center for Women and Men* <http://engemannshc.usc.edu/cwm/> provides 24/7 confidential support, and the sexual assault resource center webpage <https://sarc.usc.edu/reporting-options/> describes reporting options and other resources.

## READINGS

The following list is provisional and may be modified as the semester progresses. Required readings will be identified as we go. Asterisks indicate readings to be discussed in class.

Week	Topic	Due
Mar. 7	Neoclassical model + Tradeoff model	
Mar. 21	Taxes & bankruptcy	HW 1
Mar. 28	Agency problems	HW 2; presentations
Apr. 4	Asymmetric information	HW 3; presentations
Apr. 11	Security design: cash flow	HW 4
Apr. 18	Security design: control rights	HW 5
Apr. 25	Financial Intermediation	HW 6
May 4	FINAL EXAM	

### Part I. Capital Structure: Debt versus Equity

#### 1. Neoclassical Model and Tradeoff Model

\*E. F. Fama & M. H. Miller, *The Theory of Finance*, Dryden Press, 1972, Chapters 1, 2, .  
[Neoclassical model. Book is out of print but can be downloaded at  
[http://faculty.chicagobooth.edu/eugene.fama/research/.](http://faculty.chicagobooth.edu/eugene.fama/research/)]

R. G. Rajan and L. Zingales, "What Do We Know About Capital Structure? Some Evidence from International Data," *Journal of Finance*, December 1995. [Stylized facts.]

F. Modigliani and M. H. Miller, "The Cost of Capital, Corporation Finance, and the Theory of Investment," *American Economic Review*, June 1958. [The classic article.]

F. Modigliani and M. H. Miller, "Reply to Heins and Sprenkle," *American Economic Review*, September 1969. [Simpler proof using the risk-class method.]

M. H. Miller, "Debt and Taxes," *Journal of Finance*, May 1977. [Fundamental article.]

\*G. Andrade & S. N. Kaplan, "How Costly is Financial (not Economic) Distress?," *Journal of Finance*, October 1998.

\*J. R. Graham, "How Big Are the Tax Benefits of Debt?," *Journal of Finance*, 2000.

H. Almeida & T. Philippon, "The Risk-Adjusted Cost of Financial Distress," *Journal of Finance*, December 2007. [Risk-adjusted estimates.]

J. Blouin, J.E. Core, and W. Guay, "Have the Tax Benefits of Debt Been Overestimated?," *Journal of Financial Economics*, 2010. [Improved simulations; earnings mean reverting.]

J.H. van Binsbergen, J.R. Graham, and J. Yang, "The Cost of Debt," *Journal of Finance*, 2010 . [Using 1986 TRA to trace out marginal cost functions.]

R. Elkamhi, J. Ericcson, and C.A. Parsons, "The Cost and Timing of Financial Distress," *Journal of Financial Economics*, 2012. [Broader conception of bankruptcy cost.]

V. Maksimovic and J. Zechner, "Debt, Agency Costs, and Industry Equilibrium," *Journal of Finance*, 1990. [Industry equilibrium model.]

A. Korteweg, "The Net Benefits to Leverage," *Journal of Finance*, 2010.

## 2. *Security Choice: Agency Problems & Asymmetric Information*

\*M. C. Jensen and W. H. Meckling, "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure," *JFE*, 1976. [Asset substitution.]

\*S. C. Myers, "Determinants of Corporate Borrowing," *Journal of Financial Economics*, 1977. [Debt overhang/underinvestment.]

D. W. Diamond, "Reputation Acquisition in Debt Markets," *Journal of Political Economy*, August 1989. [Reputation as a solution.]

\*S. C. Myers and N. S. Majluf, "Corporate Financing and Investment Decisions When Firms Have Information that Investors Do Not Have," *Journal of Financial Economics*, 1985. [Asymmetric information/adverse selection.]

S. A. Ross, "The Determinants of Financial Structure: The Incentive Signalling Approach," *Bell Journal of Economics*, 1977. [Signaling.]

\*M. C. Jensen, "Agency Costs of Free Cash Flow, Corporate Finance and Takeovers," *American Economic Review*, May 1986. [Free cash flow problem.]

\*R. Stulz, "Managerial Discretion and Optimal Financing Policies," *Journal of Financial Economics*, 1990. [Attempt to formalize FCF idea.]

J. Zwiebel, "Dynamic Capital Structure under Managerial Entrenchment," *American Economic Review*, 1996. [Endogenous debt in free cash flow environment.]

## 3. *Evidence*

\*I. Shyam-Sunder and S. C. Myers, "Testing Static Tradeoff Against Pecking Order Models of Capital Structure," *Journal of Financial Economics*, 1999. [Tradeoff versus pecking order theory.]

\*E. F. Fama & K. R. French, "Financing Decisions: Who Issues Stock?," *Journal of Financial Economics*, June 2005. [Evidence against the "pecking order" theory.]

M. T. Leary & M. R. Roberts, "Do Firms Rebalance Their Capital Structures?," *Journal of Finance*, 2005. [Evidence for tradeoff model with adjustment costs.]

J. Graham & C. Harvey, "The Theory and Practice of Corporate Finance: Evidence from the Field," *Journal of Financial Economics*, 2001. [What managers say they do.]

I. Welch, "Capital Structure and Stock Returns," *Journal of Political Economy*, 2004. [Capital structure changes driven by stock price changes.]

I. Strebulaev, "Do Tests of Capital Structure Theory Mean What They Say?," *Journal of Finance*, 2007.

I. Strebulaev & B. Yang, "The Mystery of Zero-Leverage Firms," *Journal of Financial Economics*, 2013.

## **Part II. Security Design/Financial Contracting**

### *4. Assigning Cash Flow*

R. Townsend, "Costly State Verification," *J Economic Theory*, 1979. [First CSV paper.]

\*D. Gale and M. Hellwig, "Incentive-Compatible Debt Contracts: The One-Period Problem," *Review of Economic Studies*, 1985. [Easier to understand than Townsend.]

P. DeMarzo and Y. Sannikov, "A Continuous-Time Agency Model of Optimal Contracting and Capital Structure," *Journal of Finance*, 2006. [Dynamic security design.]

P. DeMarzo and M. Fishman, "Optimal Long-Term Financial Contracting," *RFS*, 2007.

### *5. Assigning Control Rights*

S. J. Grossman and O. Hart, "The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration," *Journal of Political Economy*, 1986. [First paper using 'residual rights of control'.]

O. Hart and J. Moore, "Property Rights and the Nature of the Firm," *Journal of Political Economy*, 1990. [The other foundational paper.]

\*P. Aghion and P. Bolton, "An 'Incomplete Contracts' Approach to Financial Contracting," *Review of Economic Studies*, July 1992. [Application of control rights to security choice.]

O. Hart and J. Moore, "A Theory of Debt Based on the Inalienability of Human Capital," *Quarterly Journal of Economics*, 1994, 841-879.

M. Dewatripont and J. Tirole, "A Theory of Debt and Equity: Diversity of Securities and Manager-Shareholder Congruence," *Quarterly Journal of Economics*, 1994.

6. *Financial Intermediation*

D. Diamond, "Financial Intermediation and Delegated Monitoring," *Review of Economic Studies*, 1984. [Monitoring rationale]

D. Diamond and P. Dybvig, "Bank Runs, Deposit Insurance and Liquidity," *Journal of Political Economy*, 1983. [Liquidity rationale]

R. Rajan, "Insiders and Outsiders: The Choice between Informed and Arm's-Length Debt," *Journal of Finance*, 1992.

S. Hanson, A. Shleifer, J. C. Stein, R. W. Vishny, "Banks as Patient Fixed-Income Investors," *Journal of Financial Intermediation*, 2015. [A theory of what banks do.]

## **Instructor Profile**

### **John G. Matsusaka**

#### *Education*

B.A. Economics, University of Washington  
M.A., Ph.D. Economics, University of Chicago

#### *Professional*

Charles F. Sexton Chair in American Enterprise, 2009-  
Professor of Finance and Business Economics, USC Marshall School, 1991-  
Professor of Business and Law, USC Law School, 2004-  
Professor of Political Science, USC, 2005-  
Executive Director, Initiative & Referendum Institute at USC, 2004-  
Vice Dean for Faculty and Academic Affairs, USC Marshall School, 2007-2013  
Visiting Scholar, Booth School of Business, University of Chicago, 2017  
John M. Olin Visiting Professor of Economics, GSB, University of Chicago, 2001  
Visiting Associate in Economics, California Institute of Technology, 2000  
Visiting Scholar, Anderson School, UCLA, 1996  
National Fellow, Hoover Institution, Stanford University, 1994-1995

#### *Other Professional*

Consultant on corporate governance, Council of Economic Advisors, Executive Office  
of the President, Washington D.C., 2002

#### *Research in Finance and Governance*

"Can Shareholder Proposals Hurt Shareholders? Evidence from SEC No-Action Letters,"  
with O. Ozbas and I. Yi, WP, 2018.

"Opportunistic Proposals by Union Shareholders," with O. Ozbas and I. Yi, WP, 2017.

"A Theory of Shareholder Approval and Proposal Rights," with O. Ozbas, *Journal of Law,  
Economics, and Organization*, 2017.

"When Are Outside Directors Effective?," with R. Duchin and O. Ozbas, *Journal of  
Financial Economics*, 2010.

"From Families to Formal Contracts: An Approach to Development," with K. Kumar,  
*Journal of Development Economics*, 2009.

"Decision Processes, Agency Problems, and Incomplete Information: An Economic  
Analysis of Capital Budgeting," with A. M. Marino, *Review of Financial Studies*, 2005.

"Internal Capital Markets and Corporate Refocusing," with V. Nanda, *Journal of Financial  
Intermediation*, 2002.

"Corporate Diversification, Value Maximization, and Organizational Capabilities," *Journal  
of Business*, 2001 [Merton Miller Prize for "most significant paper."]



## **Instructor Profile**

### **Oguzhan Ozbas**

#### *Education*

B.S. Industrial Engineering, Boğaziçi University  
M.S. Industrial Administration, Carnegie Mellon University  
Ph.D. Financial Economics, Massachusetts Institute of Technology

#### *Professional*

Associate Professor of Finance and Business Economics, USC Marshall, 2002-  
Visiting Associate Professor of Finance, Koç University, 2011-2012, 2013-2015  
Treasury Associate, Ford Motor Company, Dearborn, MI, 1995-1998

#### *Other Professional*

Consultant to the Corporate Affairs Division, Organisation for Economic Co-operation and Development on the proxy advisory industry, Paris, France, 2014-15

#### *Research in Corporate Finance and Governance*

“Can Shareholder Proposals Hurt Shareholders? Evidence from SEC No-Action Letters,” with J. Matsusaka and I. Yi, WP, 2018.

“Opportunistic Proposals by Union Shareholders,” with J. Matsusaka and I. Yi, WP, 2017.

“A Theory of Shareholder Approval and Proposal Rights,” with J. Matsusaka, *Journal of Law, Economics, and Organization*, 2017.

“Disclosure of Status in an Agency Setting,” with A. Marino, *Journal of Economic Behavior and Organization*, 2014.

“Corporate Diversification and the Cost of Capital,” with R. Hann and M. Ogneva, *Journal of Finance*, 2013.

“Club Deals in Leveraged Buyouts,” with M. Officer and B. Sensoy, *Journal of Financial Economics*, 2010.

“Costly External Finance, Corporate Investment, and the Subprime Mortgage Credit Crisis,” with R. Duchin and B. Sensoy, *Journal of Financial Economics*, 2010.

“Evidence on the Dark Side of Internal Capital Markets,” with D. Scharfstein, *Review of Financial Studies*, 2010.

“When Are Outside Directors Effective?,” with R. Duchin and J. Matsusaka, *Journal of Financial Economics*, 2010.

“Integration, Organizational Processes, and Allocation of Resources,” *Journal of Financial Economics*, 2005.