FINANCIAL ECONOMICS

220: 393

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Spring 2014

Office Hours
Monday 10:30-11:45 AM
Wednesday 11:00-11:45 AM
Other times by appointment

Prerequisites: (Upper-Level Elective) 220:320 Intermediate Microeconomics and 220:322 Econometrics

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Texts:

Thomas E. Copeland, J. Fred Weston, and Kuldeep Shastri, *Financial Theory and Corporate Policy*, 4th Edition, Pearson and ***Student Solutions Manual for Financial Theory and Corporate Policy***

Richard A. Brealey, Stewart C. Meyers, and Franklin Allen, *Principles of Corporate Finance*, 11th Edition, McGraw-Hill and *Student Solutions* (available at NJ Books in a binder version with chapters 2-5, 7-9, 13, 20, 21)

Basis of Evaluation: Announced quizzes and econometric assignments will determine your grade. There will be no hourly or final examinations, **nor will any extra credit work be provided.** An absence at a quiz, for whatever reason, counts as a 0. However, you may drop your two lowest grades—**except the last quiz**. **Under no circumstances will a make-up be given for a quiz. Dropping two grades substitutes for make-ups.** There will be approximately ten quizzes and four econometric assignments. An average grade between 85 and 100 is an "A," between 80 and 84, a "B+," between 75-79, a "B," between 70-75, a "C+," between 65 and 69, a "C," between 55-64, a "D," and less than 55, an "F."

Time Required for Class Preparation: You are responsible for preparing the assignment before class. **The average time required to complete an assignment properly is 3 to 4 hours—less time and you are less likely to do well—less than 2 hours and you are unlikely to pass.** Simply reading the assignment will not insure your passing the course. Additional time is required to master financial analysis. Remember Ann Landers' observation, "Opportunities are usually disguised as hard work so most people don't recognize them."

Learning Goals: This course focuses on several learning goals adopted by the Department of Economics.

Economic Literacy – Students who complete Financial Economics should understand and be able to articulate, both orally and in writing, the core principles, concepts and theories that form the foundation of modern financial analysis and research. See the course outline below for a list of these principles, concepts, and theories. **In this course, we use collaborative group learning to master the essential tools of financial economics and problem solving. Groups present and discuss their solutions with the class.**

Economic Numeracy – Students who complete Financial Economics should be familiar with the tools, techniques and methods of empirical financial economics. **In this course we show how the basic tools of financial economics can be applied to data. Notably, we estimate asset-pricing models, and we apply event study methods to banking data around several recent failures of systemically important financial institutions to see how markets evaluate size and risk-taking among surviving institutions.**

Economic Citizenship – Upon completion of Financial Economics, students should be able to apply their understanding of core concepts and quantitative tools to analyze and research real world problems and to evaluate alternative policy proposals dealing with finance and financial markets. **In this course we focus on financial institutions during the recent crisis and public policy adopted during the crisis.**

Schedule of Assignments

CWS denotes Copeland, Weston, and Shastri, *Financial Theory and Corporate Policy*
BMA denotes Brealey, Meyers, and Allen, *Principles of Corporate Finance*

Note: The problems assigned below prepare you for class. They are required but not collected in class.

I. The Theory of Finance

Students who have not yet requested or used apps.rutgers.edu, request access at https://netid.rutgers.edu/

A. Capital Markets, Consumption and Investment

Class 1
CWS, Chapter 1 (Problems 1.1-1.6)

B. Time Value of Money

1. Discounting

Class 2
BMA, Chapter 2 (Select a variety of end-of-chapter problems to insure your mastery.)

2. Valuing Bonds

Class 3
BMA, Chapter 3 (Problems 1-4, 8, 9, 11, 15, 16). Request access to apps.rutgers.edu at https://netid.rutgers.edu/. Practice logging on.

C. Investment Decisions: The Certainty Case

Class 4
CWS, Chapter 2 (Problems 2.1, 2.3, 2.6, 2.8)
BMA, Chapter 4 (section 4.2) (Problems 1-7)
BMA, Chapter 5 (Problem 10)

1. Shareholder Wealth Maximization

Class 5 – Satellite Computer Lab

2. Capital Budgeting Techniques

Jensen-Meckling Utility Maximization Problem (available on Sakai resources) based on Michael C. Jensen and William H. Meckling, 1976, "Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure," *Journal of Financial Economics* 5, 305-360 [especially 305-319, 328-330] (available at the online library reserve)

D. Agency Problems: Ownership Structure

1. Measuring Performance with Tobin's *q* Ratio

Class 6
Research Assignment 1 due at the start of class

2. Measuring Performance with Stochastic Frontier Methods

Class 7
Randall Morck, Andrei Shleifer, and Robert W. Vishny, 1988, "Management Ownership and Market Valuation: An Empirical

Analysis," *Journal of Financial Economics* 20, 293-316 (available at the online library reserve).

Class 8
Research Assignment 2 due at the start of class

E. The Theory of Choice: Utility Theory Given Uncertainty

1. Axioms of Choice under Uncertainty
2. Utility Functions
3. Risk Aversion
4. Stochastic Dominance
5. Mean and Variance as Choice Criteria

Class 9
CWS, Chapter 3, pp. 45-59, 62-65 (Problems 3.3, 3.4, 3.5, 3.8)

Class 10
Research Assignment 3 due at the start of class

F. State Preference Theory

1. Uncertainty and Alternative Future States
2. Pure (Arrow-Debreu) Securities
3. Complete Capital Market
4. No-Arbitrage Profit Condition
5. Economic Determinants of Security Prices
6. Optimal Portfolio Decisions
7. Efficient Set with Two Risky Assets
8. Firm Valuation, Fisher Separation Principle, and Optimal Investment Decisions

Class 11
CWS, Chapter 4 (Problems 4.2, 4.3)

G. Objects of Choice: Mean-Variance Portfolio Theory

1. Measuring Risk and Return for a Single Asset
2. Measuring Portfolio Risk and Return
3. Efficient Set with Two Risky Assets
4. Efficient Set with One Risky and One Risk-Free Asset
5. Optimal Portfolio Choice: Many Assets
6. Portfolio Diversification and Individual Asset Risk

Class 12
CWS, Chapter 5, 101-121 (5.6, 5.7)
BMA, Chapter 7 (background)

Class 13
CWS, Chapter 5, 121-141 (5.9, 5.11)
BMA, Chapter 8, 186-192

H. Market Equilibrium: CAPM and APT

1. Efficiency of the Market Portfolio
2. Derivation of the CAPM
3. Properties of the CAPM

Class 14
CWS, Chapter 6, 147-158 (6.1-6.5)
BMA, Chapter 8, 192-195

4. Use of the CAPM for Valuation 5. Applications of the CAPM for Corporate Policy 6. Empirical Tests of the CAPM 7. The Market Risk Premium 8. Empirical Market Line 9. Arbitrage Pricing Theory 10. Empirical Tests of the Arbitrage Pricing Theory	**Class 15** CWS, Chapter 6, 159-176 (6.6-6.11) BMA, Chapter 8, 195-199 **Class 16** CWS, Chapter 6, 176-188 (6.12, 6.13) BMA, Chapter 8, 199-203 (8, 21)
I. Market Efficiency: Theory and Evidence	**Class 17** BMA, Chapter 13 (1-7, 13, 18, 20, 21, 22) **Class 18** Albert A. Cannella, Jr., Donald R. Fraser, and D. Scott Lee, 1995, "Firm Failure and Managerial Labor Markets: Evidence from Texas Banking," Journal *of Financial Economics* 38, 185-210 (available at the online reserve)
J. Using Asset Pricing Models to Measure Risk	**Class 19** Rebecca S. Demsetz and Philip E. Strahan, 1997, "Diversification, Size, and Risk at Bank Holding Companies," *Journal of Money, Credit, and Banking* 29, 300-313.
K. Event Studies Based on Asset Pricing Models	
1. Too-Big-to-Fail	**Class 20** Maureen O'Hara and Wayne Shaw, 1990, "Deposit Insurance and Wealth Effects: The Value of Being 'Too Big to Fail,'" *Journal of Finance* 45, 1587-1600.
2. Take-Over Discipline and Interstate Banking	**Class 21** Yaron Brook, Robert Hendershott, and Darrell Lee, 1998, "The Gains from Takeover Deregulation: Evidence from the End of Interstate Banking Restrictions," *Journal of Finance* 53, 2185-2204.
3. Personal Use of Corporate Jets by CEOs	**Class 22** David Yermack, 2006, "Flights of Fancy: Corporate Jets, CEO Perquisites, and Inferior Shareholder Returns," *Journal of Financial Economics* 80, 211-242.

L. Pricing Contingent Claims: Option Pricing Theory and Evidence	**Class 23** CWS, Chapter 7 (Problems TBA)
	Class 24 CWS, Chapter 7 (Problems TBA)
1. Deposit Insurance as a Put Option	**Class 25** R.S. Grossman, 1992, "Deposit Insurance, Regulation, and Moral Hazard in the Thrift Industry: Evidence from the 1930's," *American Economic Review* 82, 800-821.
2. Bank Charter Value vs Option Value of Deposit Insurance	**Class 25** M.C. Keeley, 1990, "Deposit Insurance, Risk, and Market Power in Banking," *American Economic Review* 80, 1183-1200.
II. Capital Structure	**Class 27** CWS, Chapter 15, 557-564, 594-604 [in the Custom Textbook, Ch. 11, 365-372, 402-412]
A. Modigliani-Miller Irrelevance Theorem	
B. Agency Problems in Involving Equity and Debt	**Class 28** John J. McConnell and Henri Servaes, 1995, "Equity Ownership and the Two Faces of Debt," *Journal of Financial Economics* 39, 131-157.