Financial Management and Environmental Accounting (ESM 279)
Bren School of Environmental Science & Management
University of California, Santa Barbara
Spring 2020

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Course Objectives
The main question addressed in this course is: what motivates companies to be environmentally-friendly? We will examine this question from three perspectives under the guiding principle that the main objective of companies is to maximize the market value of the existing owners’ equity. First, we will study how the market value of a firm is determined and how investors can manage risk by owning equity in a portfolio of companies. Key supporting topics include cash flow valuation, interest rates, and bond and equity markets. Second, we will take a closer look at the financial management of a company to understand how it makes investment decisions. We will examine how companies use information in balance sheets and income statements for financial planning, how they make long-term financing decisions, and how they determine their mix of debt and equity. Third, we will consider if environmental goals are compatible with a company’s objective to maximize equity value. The answer depends, in part, on the motivations of investors, which brings us to the last topic of the course: green—or, more broadly, Environmental, Social and Governance (ESG)—investing. We will examine how ESG investment opportunities are identified, how ESG funds are constructed, the performance of ESG funds relative to traditional funds, and the evidence on whether ESG investing yields environmental gains.

After taking this course, you will
- Be able to use basic tools of financial analysis
- Understand how financial instruments (loan, bonds, stocks) work
- Know how investors tradeoff risk and return
- Be able to use information from financial statements to evaluate investment decisions
- Understand how companies do financial planning
- See how green investing can motivate companies to be good environmental stewards

Course Materials

Course Requirements
Class meetings: I will record lectures in advance of the Tuesday and Thursday 12:30-1:45 pm class meetings. I expect all students to have viewed the lecture before the meeting, and come prepared to participate in a discussion of the material.
Readings: The readings are optional. My lectures will cover what I consider to be the most important topics. You are encouraged to do the readings if you want to reinforce your understanding of the material presented in lectures and gain exposure to additional topics.

Homework assignments: There will be five short homework assignments. You may work on the assignments with others; however, you are responsible for writing your own answers, in your own words. Assignments will be posted by the end of the week (Thursday or Friday) and due at the start of class the following Thursday. At the beginning of Thursday’s class, we will have a short group discussion about the homework assignment.

Exam: There is a take-home exam between Weeks 7 and 8.

Group presentations: Students will work in groups to develop a 5-page issue brief on a topic related to green investing. The topics are listed, below, under Weeks 9 and 10. I will assign students to topics once the class enrollment has stabilized. We will have discussion of the topic on assigned days led by the corresponding student group. Groups will distribute their brief at least 24 hours prior to the class discussion.

Times and Dates
Class meets Tuesday and Thursday, 12:30-1:45 pm, via Zoom. Links for lectures and class meetings will be posted on Gauchospace.
Homework assignments will be due on the following Thursdays: April 16, April 23, April 30, May 7, and May 14.
There is a take-home exam that I will distribute on Friday, May 15, and due by 5 pm on Tuesday, May 19. There is no final exam.

Course Grades
Course grades will be based on homework assignments (30%), the take-home exam (45%), and the group brief and discussion (25%).

On-line Format
At my previous job (at Oregon State University), we did a lot of on-line instruction. From my experience, it takes years to perfect an on-line course. Switching to this format over the period of weeks means the course will be far from perfect. I appreciate your patience and understanding. I have decided to pre-record the lectures and use the class meetings for discussion. My hope is that this can minimize the inevitable problems with the technology. When I record the lecture, I can work through any problems that arise without having all of you waiting on me. The downside is that this will reduce spontaneous discussion, which is in many ways the best part of a live class. I hope to recover some of this in the class meetings, which will be all discussion. As you watch the lectures, please write down any questions and then bring those up in discussion. As the course proceeds, we can evaluate how the format is working and make adjustments as needed.

Schedule

Week 1

March 31. Technology Dry Run

April 2. Overview of the Course and Introduction to Financial Management (RWJ Ch. 1)
Week 2

April 7. Discounted Cash Flow Valuation (RWJ Ch. 5)

April 9. Interest Rates and Bond Valuation (RWJ Ch. 6)

Week 3

April 14. Interest Rates and Bond Valuation (RWJ Ch. 6)

April 16. Equity Markets and Stock Valuation (RWJ Ch. 7)

Week 4

April 21. Returns from Capital Market Investments (RWJ Ch. 10)

April 23. Risk and Return (RWJ Ch. 11)

Week 5

April 28. Risk and Return (RWJ Ch. 11)

April 30. Financial Statements and Cash Flow (RWJ Ch. 2)

Week 6

May 5. Working with Financial Statements (RWJ Ch. 3)

May 7. Net Present Value and Other Investment Criteria (RWJ Ch. 8)

Week 7

May 12. Capital Budgeting (RWJ Ch. 9)

May 14. Costs of Capital (RWJ Ch. 12)

May 15. TAKE-HOME EXAM DISTRIBUTED

Week 8

May 19. TAKE-HOME EXAM DUE BY 5 PM (NO CLASS)

May 21. Capital Structure (RWJ Ch. 13)

Week 9

May 26. Student-led Group Discussion

• What are the global trends in ESG investing? What are the motivations of ESG investors?
• What criteria are used to identify ESG investment opportunities?

May 28. Student-led Group Discussion

• What criteria are used to identify ESG investment opportunities?
• How are ESG funds designed?

Week 10

June 2. Student-led Group Discussion

• How does the financial performance of ESG funds compare to traditional funds?
• Does ESG investing yield environmental gains? What is the evidence?

June 4. Wrap up