Financial Management and Environmental Accounting (ESM 279)
Bren School of Environmental Science & Management
University of California, Santa Barbara
Spring 2022

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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 expect students to attend every class. I will provide a short “current events” reading before each class. I expect students to come to class prepared to discuss it.

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 six 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 on the following Friday by 11:59 pm. At the beginning of Monday’s class, we will have a short group discussion about the homework assignment.

Exam: There is a take-home exam between Weeks 6 and 7.

Group presentations: Students will work in groups to develop a presentation on a topic related to green investing. The topics are listed, below, under Weeks 7-9. I will assign students to topics once the class enrollment has stabilized. Students will give a 20-25 minute presentation with slides on their assigned topic and then lead a 10-15 minute discussion. Slide decks should be submitted by June 3, the last day of instruction.

Times and Dates

Class meets Monday and Wednesday, 2:00-3:15 pm, Bren 1424.
Homework assignments will be due on the following Thursdays: April 8, April 15, April 22, April 29, May 6, and June 3.
There is a take-home exam that I will distribute on Thursday, May 5. It is due before the start of class on Monday, May 9. There is no final exam.
The group presentation slide decks are due on June 3.

Course Grades

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

Copyright

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Schedule

Week 1

March 28. Overview of the Course and Introduction to Financial Management (RWJ Ch. 1)

March 30. Discounted Cash Flow Valuation (RWJ Ch. 5)

Week 2
April 4. Interest Rates and Bond Valuation (RWJ Ch. 6)

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

Week 3

April 11. Equity Markets and Stock Valuation (RWJ Ch. 7)

April 13. Returns from Capital Market Investments (RWJ Ch. 10)

Week 4

April 18. Risk and Return (RWJ Ch. 11)

April 20. Risk and Return (RWJ Ch. 11)

Week 5

April 25. Financial Statements and Cash Flow (RWJ Ch. 2)

April 27. Working with Financial Statements (RWJ Ch. 3)

Week 6

May 2. Net Present Value and Other Investment Criteria (RWJ Ch. 8)

May 4. Capital Budgeting (RWJ Ch. 9)

May 5. Take-home exam distributed

Week 7

May 9. Take-home exam due before the beginning of class

May 9. Cost of Capital (RWJ Ch. 12)

May 11. Student presentations

• What are the global trends in ESG investing?
• What are the motivations of ESG investors?

Week 8

May 16. Student presentations

• What criteria are used to identify ESG investment opportunities?
• What criteria are used to identify ESG investment opportunities?
May 18. Guest lecture by Professor Roland Geyer

Week 9

May 23. Student presentations
  • How are ESG funds designed?
  • How does the financial performance of ESG funds compare to traditional funds?

May 25. Student presentations
  • Does ESG investing yield environmental gains? What is the evidence?
  • Can we rely on private capital markets to address environmental and social problems?

Week 10

May 30. Memorial Day (no class)

June 1. Wrap up