Corporate Finance – ECONS4280

Summer 2022

Edward Shore
Email: eps2148@columbia.edu
Office Hours: TBD

Course Description

This course presents the foundations of corporate finance. We will discuss how various financial assets and projects are valued, and how those valuations depend on certain critical assumptions about human behavior. We will draw on evidence from the behavioral finance/economics literature to shed light on how standard models of financial valuation struggle to explain certain observable phenomena in financial data. We will explore the options firms face when deciding to finance investments. We will investigate the parameters that determine a firm's financing decisions. We will discuss the agency implications of modern firm structure and the impact they have on market efficiency, which will reoccur as a common theme throughout the course. Finally, we will discuss whether financial markets encourage or discourage 'bad behavior' by firms, and how efficient markets really are!

Course Materials

Textbook: 'Principles of Corporate Finance' – Brearley, Myers, and Allen, henceforth referred to as **BMA**.

Additional Readings: Topic specific, all optional

Notes: Lecture Slides will be available **after class**.

Class Preparation and Participation

This class will be an *in-person* class: that means that there will not be an option to attend via Zoom, and the lectures will not be recorded.

This class will be interactive and, I hope, fun! I promise to do my utmost to make this an interesting and entertaining class, that gives you a solid grounding in the fundamentals of corporate finance.

To make this vision a reality, I anticipate, and expect, participation by students in class discussions and exercises. As a result, ***Laptops will not be allowed during class***. If you want evidence for the negative impact of laptop use on learning, see this paper. ***There is no acceptable excuse for laptop use, except a written explanation from the Disability Office or a licensed Physician***. IPads are okay, so long as they are only used for notetaking.

Grading

There will be 5 graded assignments and a single final exam. The graded assignments will correspond to the 5 'Super-Topics' noted below, and will be graded from 0-6. A grade of 6 denotes a perfect submission, and a grade of 1 suggests you handed in a blank page with your name on it. **Late submissions will receive 0**. The final will cover all the material covered in the course. You will have at least four days to complete assignments, and extensions will be granted only under exceptional circumstances (medical or family emergency).

Grades will be composed of participation (20%), graded assignments (30%), and the final (50%). Participation will be graded based on attendance and communication in class. Given the truncated nature of the course *there will be no midterm*. The final will be open book (I am not interested in testing your memory!), and you are free to use a calculator. The final exam will be a take-home exam.

Topics

Super Topic 1: Risk-free world

- Topic 1: Introduction
    - Reading
        - Chapter 1 BMA
        - *'The Nature of the Firm' – Ronald Coase (1937)*
    - Questions
        - What is Corporate Finance?
        - What is a Corporation?
        - … what is finance??
        - Why is this course important?

- Topic 2: Time Value of Money
    - Reading
        - Chapters 2-3 BMA
    - Questions
        - Why is value 'time-dependent'?
        - What is present value?
        - What are interest rates?
        - What are these financial instruments?
            - Bonds
            - Annuities
            - Perpetuities

- Topic 3: Net Present Value
    - Reading
        - Chapters 5-6 BMA
    - Questions
        - What is the value of an investment project?
        - What is the Internal Rate of Return?
        - What is capital rationing?

Super Topic 2: Risky world

- Topic 4: Expectation formation
    - Reading
        - This article by [Thomas Sargent]
    - Questions
        - How do we form expectations?
        - How do we model expectations?
            - Rational Expectations
            - Behavioral Economic Expectation formation
        - Why are expectations important?

- Topic 5: Risk and Return
    - Reading
        - Chapter 7 BMA
    - Questions
        - Why are we compensated for risk?
        - What determines compensation for risk?
        - Why should we diversify?
        - What is alpha vs. beta risk?

- Topic 6: Valuing stocks - CAPM
    - Reading
        - Chapters 4 and 8 BMA
    - Questions
        - What gives stocks value?
        - What is the CAPM model?
        - What are some alternative methods of valuing stocks?

Super Topic 3: How companies finance themselves

- Topic 7: Overview
  - Reading
    - Chapter 14 BMA
  - Questions
    - What are the sources of capital that firms can draw from?
    - How do ‘public’ firms differ from ‘private’ firms?
    - Are all countries the same when it comes to financing?

- Topic 8: Equity financing
  - Reading
    - Chapters 15-16 BMA
  - Questions
    - What is Private Equity?
    - What is an IPO?
    - What is ‘payout policy’?

- Topic 9: Debt financing
  - Reading
    - Chapters 17-18
  - Questions
    - How do companies issue debt?
    - Who controls company debt?
    - What are the tax implications of debt vs. equity?

- Topic 10: Modigliani-Miller
  - Reading
    - *TBD*
  - Questions
    - What is Modigliani-Miller?
    - Why is it so famous?
    - Is it true?

Super Topic 4: Agency Problems

- Topic 11: The separation of ownership and control
  - Reading
    - *TBD*
  - Questions
    - What is an agency problem?
    - Why is the separation of ownership and control important?

- Topic 12: Corporate governance
  - Reading
    - Chapter 33 BMA
  - Questions
    - How can corporate structure ameliorate agency problems?
    - What are ‘stock options’?
    - Why does corporate governance vary so much internationally?

Super Topic 5: The Efficiency of Markets

- Topic 13: The Efficient Market Hypothesis
  - Reading
    - Chapter 13 BMA
  - Questions
    - What is an efficient market?
    - What is the efficient market hypothesis?
    - Should we believe in the efficient market hypothesis?
    - What does behavioral finance/economics tell us about the efficiency of markets?

- Topic 14: Market efficiency and Corporate Responsibility?
  - Reading
    - *TBD*
  - Questions
    - Do financial markets encourage or discourage ‘bad behavior’?
    - Do markets price in the risks associated with climate change?