FUNDAMENTALS OF FINANCE

Session 1:

Welcome, Introduction to Finance and Financial Markets

Agenda

Welcome and introductions

Introduction to Finance (Chapter 1)

Financial Markets and Institutions (Chapter 2)

Recap and preview next class

Hugo Benedetti

Economist, MSc in Finance, PhD candidate in Finance

8 years in Corporate Finance/Strategic Consulting

- Boston Consulting Group
- AXA Private Equity
- American Appraisal
- Co-funded financial advisory firm
- Deloitte Corporate Finance

11 years in Entrepreneurial Finance

- Advisor to angel networks, business incubators, VC funds, non-profits
- Mentor to over 50 entrepreneur projects, most recently focused on Boston based blockchain-cryptocurrency projects

6 years of Academia

- Introduction to Finance, Corporate Finance, Entrepreneurial Finance, Econometrics, etc.
- Research in entrepreneurial finance, currently focused in cryptocurrencies

Logistics of the course (I)

- 2 lecturers, 2 parts
  - Independent evaluations (problem sets, midterm/final, class participation)
  - But content is sequential, so what you learn in part 1, you will still apply in part 2

- Summer Session 1 is extremely “condensed”
  - 1 semester in 6 weeks… only 8 classes
  - Same content, same depth, less time to absorb and process
  - Unfortunately, this means MORE work for us (you and me)
  - Pre-class reading, starting next Monday
  - Problem set due every session (first one due next Monday), including on exam days
  - Lots of in-class examples

I will:

- ask you to participate
- be redundant
- ask you to write the content (pen and paper)
- not to bore you, and we’ll take breaks as needed

Logistics of the course (II)

- Class structure
  - Review of previous class
  - Solve problem set
  - Preview of class
  - Class
    - 40% presentation by me
    - 60% discussion guided by me
  - Recap of class
  - Preview of next class

- We'll have one 15 min break and mini breaks if needed. We might evolve to two 10 min breaks

Logistics of the course (III)

- All information will be posted on Canvas.
- Please set up alarms to get notices when I publish something
- It would also be very helpful if you add your profile picture
- Name cards
- Quick survey

Good news

- Finance is very simple
  - But requires learning a new language => Need to speak finance
  - I will give you a cheat sheet with formulas

- It makes sense
  - Time value of money
  - Risk and return
  - Portfolio and diversification

- Those 3 big concepts are the core of this course

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What do financial managers do?

- Management decisions
- Management decisions regarding money
- Management of uses (capital budgeting, investment) and sources (financing) of funds (money), with the goal of maximizing company value.
  - Investment is most likely related to physical/real assets
  - Financing is most likely related to financial assets

Capital Budgeting

Which are usual sources of funds?

- Equity and Liabilities, right side of the balance sheet
- Internal resources (earnings / cash flow from the operations of the company)
- External resources (Equity issuance, debt issuance, bank financing, supplier credit, tax liabilities, etc.)

How would you choose which one to use?

- Hint?
- It depends
- Cheapest source….
- … considering cost, risk, tax and legal impact, business strategy, market conditions, etc…

To simplify, this course will focus on cost and risk

Uses of Funds

Which are usual uses of funds?

- Assets, left side of the balance sheet
- Tangible assets (fixed assets (buildings, land), machinery, supplies, inventory, cash)
- Intangible assets(R&D, marketing/advertising, patents, etc.)

How would you choose which one to use?

- Hint?
- It depends
- Greatest value creation….
- … considering value creation, risk, tax and legal impact, business strategy, market conditions, etc…

To simplify, this course will focus on cost and risk

Are the following capital budgeting or financing decisions?

a. Intel decides to spend $1 billion to develop a new microprocessor.

b. Volkswagen borrows 350 million euros (€350 million) from Deutsche Bank.

c. Royal Dutch Shell constructs a pipeline to bring natural gas onshore from a production platform in Australia.

d. Avon spends €200 million to launch a new range of cosmetics in European markets.

e. Pfizer issues new shares to buy a small biotech company.

Many types of firms, we mostly care about 1

Corporations:

- Business organized as a separate legal entity owned by shareholders.
- The shareholders do not directly own the business's real assets (factories, oil wells, stores, etc.). Instead they have indirect ownership via financial assets (the shares of the corporation).
- A corporation is legally distinct from the shareholders. Therefore, the shareholders have **limited liability** and cannot be held personally responsible for the corporation's debts.
- Closely held (few owners) or public (more than 2,000)
- Board of Directors
- Separation of ownership and control
- Agency problem

Agency problem

Conflict of interests between parties in the corporation:

- Owners want to maximize value
- Do managers want the same?

Solutions to agency problem

- Monitoring
- Contracting/Incentives

Agency costs:

- Costs of solving the problem (monitoring or incentives)
- Loss of value from agency problems

Corporate Governance

- Laws, regulations, institutions, and corporate practices that protect the interests of shareholders and other investors.
- Legal requirements, fiduciary duty of managers
- Board of directors, represent the interests of shareholders
- Activist shareholders
- Outside investors (risk of takeover/acquisition)
- Media

Objective of the firm

- Potentially infinite, as each shareholder could have own private objectives
- Shareholders can propose at shareholder meetings, but unless specified in the bylaws of the company, the Board of Directors decides
- Board of Directors (in the US) has the fiduciary duty to protect the interest of the shareholders and maximize shareholder value
- What else would you consider?
- How can the market help to “self-regulate” those objectives?

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Overview of financial markets

Ultimately, all resources are directly or indirectly owned by people.

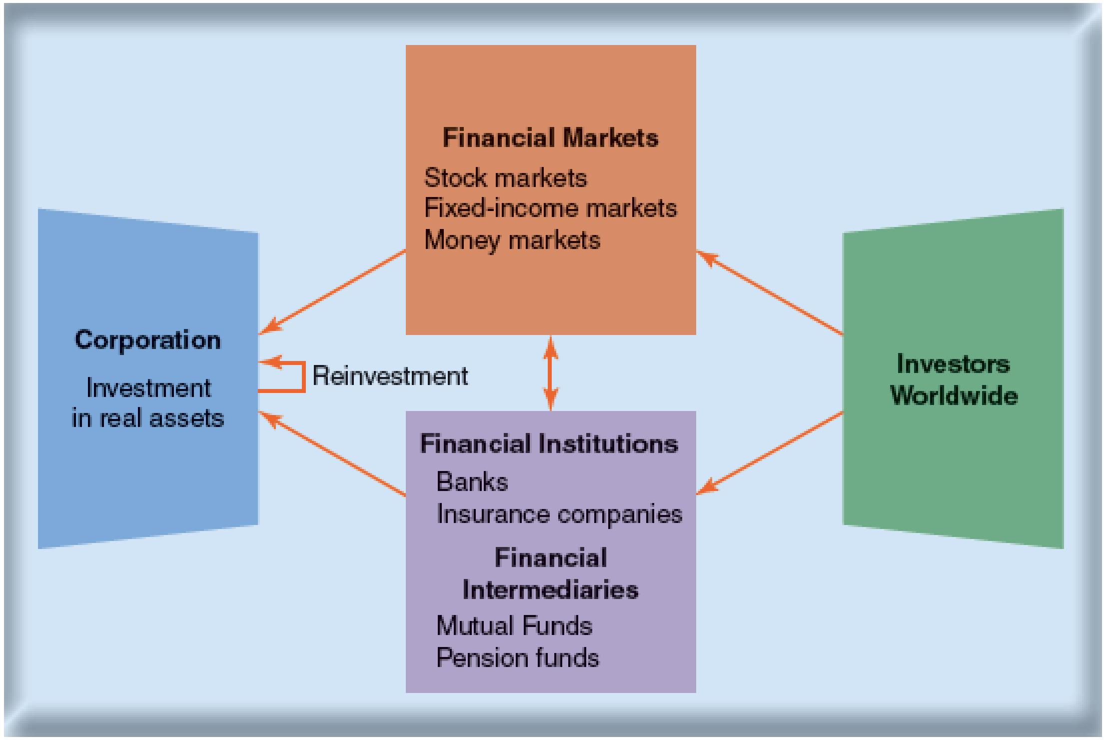
If a company raises capital or debt, someone has to provide those funds

People could contract directly with the company, but that could be cumbersome

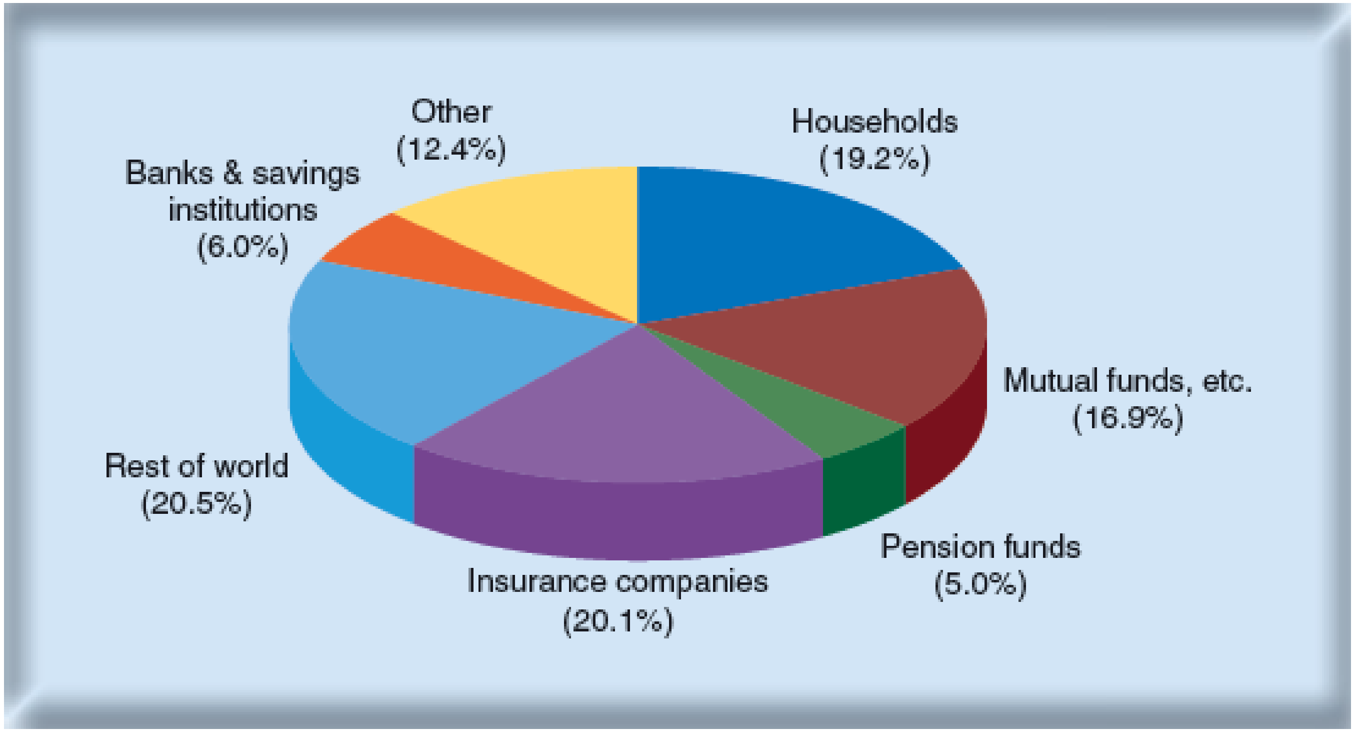
Intermediaries facilitate that contracting

Markets provide a centralized platform to exchange resources

Overview of financial markets

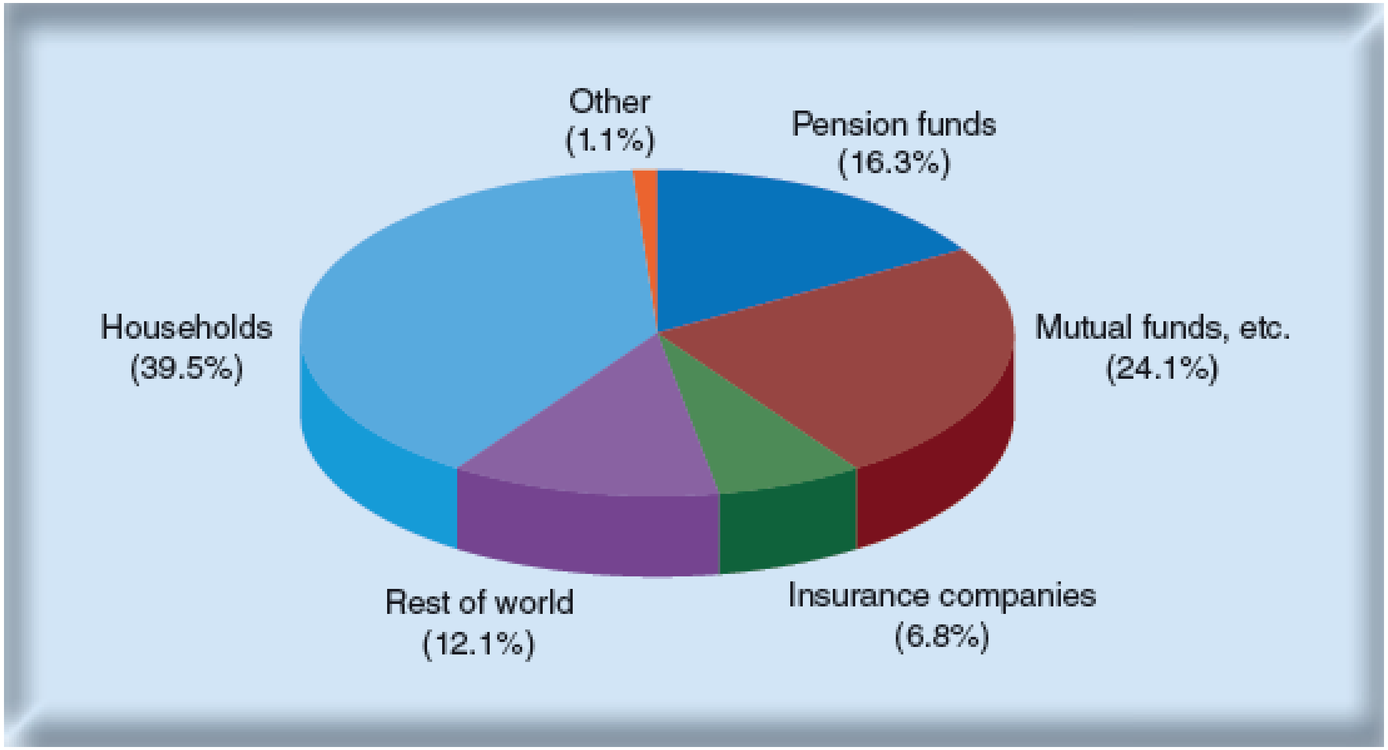


Holding of corporate and foreign bonds (2012)



Source: Board of Governors of the Federal Reserve System, Division of Research and Statistics, *Flow of Funds Accounts*, Table L.212 (**www.federalreserve.gov**).

Holding of corporate equity(2012)



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Recap of today

- What is the role of a financial manager?
- What is the agency problem?
- Who are the players in the financial market?

Preview

- Lots of reading. Chapters 1-4 (114 pages)

- Problem set due at the beginning of the class
  - Available tomorrow on Canvas

- Next class:
  - Financial accounting and measuring performance