Corporate Finance

Prof. Pedro Saffi

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Session 1 - What is Corporate Finance?

UNIVERSITY OF CAMBRIDGE
Judge Business School

Roadmap

- Overview
- What is Corporate Finance?
- The two big questions of Corporate Finance.
- How are firms organized?
- Agency costs.

Basic Questions

- Corporate Finance focuses on two problems:
- What should firms spend their money on?
    - Investment Decisions
- Where should their get the money from?
    - Financing Decisions

Where to Spend Money On?

- Answer depends on the value of our investments.
- This value comes from future cash-flows. But these are:
  - often uncertain,
  - and often occur at different points in time.
- How to find the value today of future (uncertain) cash-flows?
  - Use expectations of future flows, discounted to today.
  - Discounting: what is the risk of these future cash-flows?

No Free Lunch

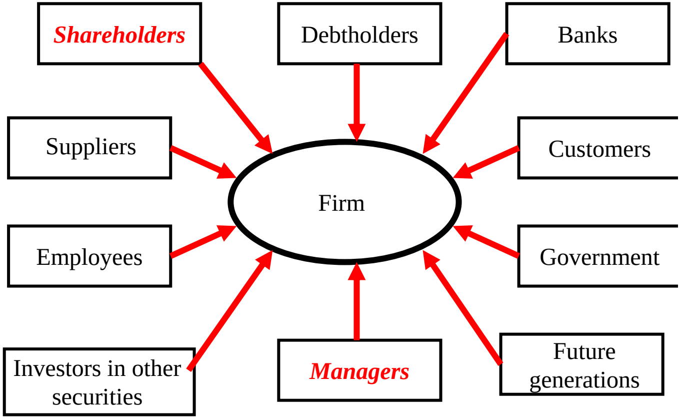
- There is a common theme in all of Finance $\Rightarrow$ No-arbitrage:
  - Essentially “you get what you pay for”.
- Fair value of anything is the present value of all CFs it generates for you over its lifespan.
  - If too cheap relative to future expected CFs $\Rightarrow$ Price $\Uparrow$
  - If too expensive relative to future expected CFs $\Rightarrow$ Price $\Downarrow$
- Market forces will make sure prices don’t deviate from their fair price.
  - This is what we mean by: “There is no free-lunch”.
- Example 1: McDonald’s Happy Meal

Value of a Relationship?

- Benefits of Getting a Boyfriend/Girlfriend/Wife/Husband?
  - Receive gifts!
  - Higher income (if partner works)
  - Can have kids to support you when you are old.
  - Decreased health costs.
  - Love (of course!)
- Costs:
  - Give gifts!
  - Cannot meet other potential partners (opportunity cost)
  - Change habits.
  - Emotional costs of potential breakup.
- Can we (should we) translate that into monetary flows?

What is a Firm?

A firm is a nexus of contracts between the stakeholders



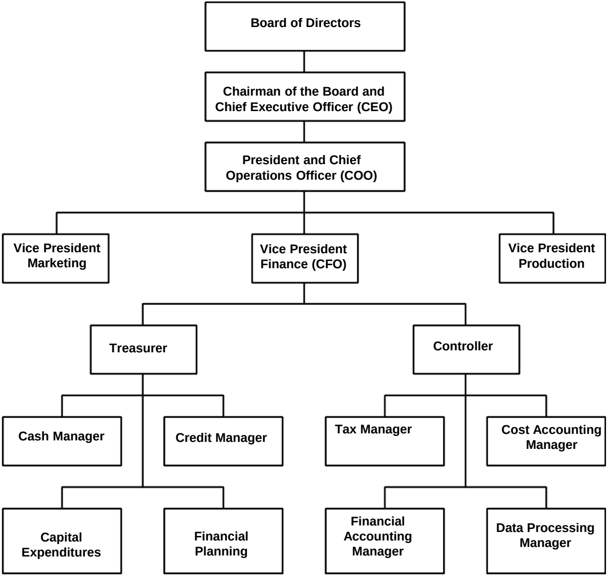
Types of Firms

- Sole Proprietorship (Ex. Coffee shop):
  - Pros: Easy to set up, subject to few regulations,
  - business pays no corporate income taxes.
  - Cons: difficult to raise large amounts of funds, unlimited personal liability,
  - business ceases when the proprietor dies.
- Partnership (General Partnership / Limited Partnership):
  - Pros: low cost and ease of formation.
  - Cons: unlimited liability, limited life at the organization,
  - difficulty of transferring ownership, tough to raise large amounts of capital.
- Corporation (Ex.: Apple, Google, Alibaba):
  - Pros: Unlimited life, easy transferability of ownership, limited liability.
  - Cons: Double taxation, legal requirements to comply.

What is the Best Form?

- Being a corporation is likely the most efficient way:
  - Limited liability reduces risk. In general, lower risk = higher firm value all else equal.
  - Easier access to capital.
  - Shares are more liquid (i.e. more easily transferred).
- Earliest corporation still in operation is in Japan.
  - Nisiyama Onsen Keiunkan hotel: Founded in 705 AD.
  - 46 generations in the same family!
- Most of the oldest companies are in Japan, Germany, Netherlands and France.

Typical Structure of a Firm



What is the goal of a corporation?

- What should a manager do?
- Non-Financial Goals:
  - Be greedy and have as many perks as possible? $\times$
  - Pollute as much as possible? $\times$
  - Work for World Peace? $\times$

Theory vs. Practice

- In theory, a firm should maximize welfare of all stakeholders.
  - In an efficient firm it is not possible improve one set without hurting others.
- In practice, firms are run by managers.
  - If managers don't have good incentives, he might not do what is best for everyone else.
  - The corporate governance system of the firm deals with creating the proper incentives and solving conflicts of interest.
- The main objective assigned to managers is to maximize shareholder's value.
  - Only system that has stood test of time.
  - Other stakeholders write contracts to protect their stakes.
- In this course, shareholder value maximization is our objective.

Why Maximize Shareholder Value?

- Because the stock market is the most efficient and liquid (or, if you prefer, the least inefficient and illiquid) market.
- Thus, the evolution of shareholder value is easier to track than that of other stakeholders' values.
- Since shareholders' value creation can be measured and verified it can be used to incentivize managers (carrots and sticks).
- Correct Goals:
  - Maximize shareholder wealth ✓
  - Maximize share price ✓
  - Maximize Firm value ✓
- Will managers always work in the shareholders' best interests?

Agency Costs

- Agency costs:
  - Conflicts of interest arise whenever someone (i.e. the agent) is acting on behalf of someone else (principal).
  - Conflicts of interest between managers and shareholders.
  - Conflicts of interest between managers and stockholders.
  - Conflicts between different shareholders.
  - Same as politicians and voters.

Conflicts between Managers vs. Shareholders

- A potential conflict arises whenever a firm is less than 100% owned by managers.
- In large firms, managers generally own only a small percentage of the stock.
- Managers might be more interested in maximizing firm size to:
  - increase their own power, status, and salaries.
  - increase job security because a hostile takeover is less likely in a large rapidly growing firm.
  - create more opportunities for their lower and middle level managers.

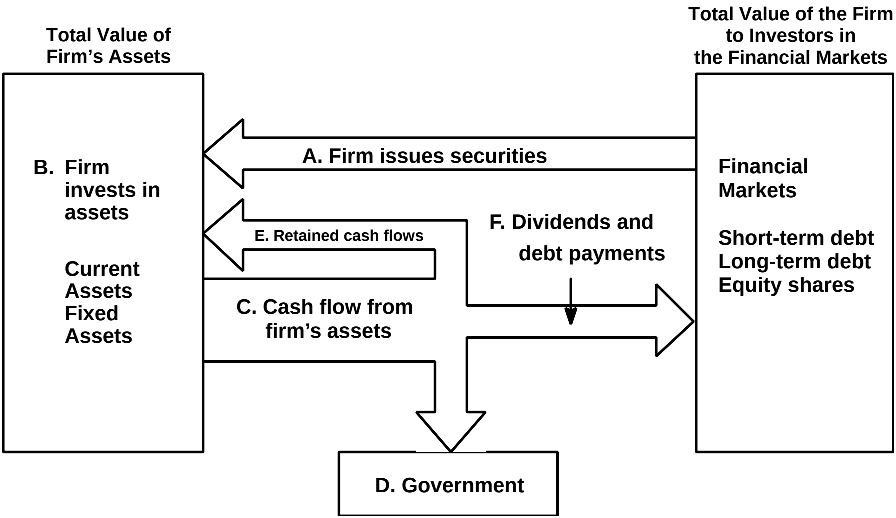
Types of Agency Costs

- Direct Costs:
  - Monitoring (i.e. auditing and compliance).
  - Structuring to limit managerial misbehavior (e.g. outside directors).
  - Direct expenditures by managers (e.g. planes, corporate perks, etc.)
- Indirect Costs:
  - Opportunity costs arise due to shareholder-imposed restrictions.
  - Preventing "bad" actions make managers sometimes unable to take "good" ones.

How do we deal with agency problems?

- It is all about giving proper incentives.
  - Performance based incentive plans.
  - Direct intervention by shareholders.
  - The threat of firing.
  - The threat of takeover by someone else.

Valuation


Total Value of
Firm's Assets
Total Value of the Firm
to Investors in
the Financial Markets
A. Firm issues securities
B. Firm
invests in
assets
Current
Assets
Fixed
Assets
E. Retained cash flows
F. Dividends and
debt payments
C. Cash flow from
firm's assets
Financial
Markets
Short-term debt
Long-term debt
Equity shares
D. Government

Calculating Value & Investment Decisions

1. Calculate the cash flows (inflows and outflows) in every period.
2. Calculate the present value of all these cash flows
   - \$100 today is not the same as \$100 in the future.
   - Need to determine a discount rate.
3. Add them all together.
4. This results in the present value of future cash-flows.
5. Subtract initial costs (I_0) to get the Net Present Value (NPV)
6. Decision Rule: Take action $\Leftrightarrow$ if the NPV is positive.

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Summary

- Main Idea: Maximize shareholder value
- How does a firm interact with the outside world?
- What should be the goal of a corporation?
- What are agency costs and the different types of costs.
- What is the benefit of financial markets in the economy?
- How can a manager maximize firm value without worrying about different types of shareholders?