Introduction to Corporate Finance

Invest

Corporations invest in real assets, which generate income.

Assets:

- Tangible assets → e.g. plant, machinery
- Intangible assets → e.g. brand names, patents

Finance

Corporations finance their investments by:

- borrowing
- retaining and reinvesting cash flow
- selling additional shares of stock to the corporation's shareholders

Financial questions:

The corporation's financial manager faces **two broad financial questions**:

1. What investments should the corporation make? → **investment decision:** *spending money*
2. How should it pay for those investments? → **financing decision:** *raising money*

Five themes:

1. Corporate finance is all about <u>maximizing value</u>.
2. <u>The opportunity cost of capital</u> sets the standard for investment decisions.
3. <u>A safe dollar is worth more than a risky dollar.</u>
4. <u>Smart investment decisions create more value than smart financing decisions.</u>
5. Good governance matters.

Corporate Investment and Financing Decisions

The corporation pays for the real assets by **selling claims** on them and on the cash flow that they will generate. These claims are called **financial assets** or **securities**.

Securities include <u>bonds, shares of stock, and a dizzying variety of specialized instruments</u>.

→ Remind that *an ordinary bank loan* is **not** a security because it is held by banks and cannot be sold or traded in financial markets.

Investment decision：

- purchase of real assets

- involves managing assets already in place
- deciding when to shut down and dispose of assets if profits decline

Financing decision:

- sale of financial assets
- raising cash
- meeting obligations to banks, bondholders, and stockholders that contributed financing in the past

Investment Decisions

Some investment decisions are often referred to as **capital budgeting** or **capital expenditure (CAPEX)** decisions, because most large corporations prepare an annual capital budget listing the major projects approved for investment.

Financing Decisions

A corporation can raise money from **lenders** or from **shareholders**.

- If it borrows, the lenders contribute the cash, and the corporation promises to pay back the debt plus a fixed rate of interest.

  → *debt financing*

- If the shareholders put up the cash, they do not get a fixed return, but they hold shares of stock and therefore get a fraction of future profits and cash flow.

  → *equity financing*

The shareholders are *equity investors*.

Capital structure decision: <u>the choice between debt and equity financing</u>

Capital refers to the firm's sources of <u>long-term financing</u>.

Corporations raise equity financing in two ways:

1. <u>issue new shares of stock</u>

   → The investors who buy the new shares put up cash in exchange for a fraction of the corporation's future cash flow and profits.

2. <u>take the cash flow generated by its existing assets and reinvest the cash in new assets</u>

   → The corporation is reinvesting on behalf of existing stockholders. No new shares are issued.

What happens when a corporation does not reinvest all of the cash flow generated by its existing assets?

- hold the cash in reserve for future investment
- pay the cash back to its shareholders

Payout decision: <u>the decision to pay dividends or repurchase shares</u>

<u>In some ways financing decisions are **less important** than investment decisions.</u>

→ Financing decisions **may not add much value**, compared with good investment decisions, but they can **destroy value**

a firm's overall value = *market capitalization = market cap*

What Is a Corporation?

<u>A **corporation** is a legal entity.</u>

- a legal *person* owned by its shareholders
- can make contracts, carry on a business, borrow or lend money, and sue or be sued
- can make a takeover bid for another and then merge the two businesses
- pay taxes but cannot vote
- owned by its shareholders but is legally distinct from them

  → The shareholders have *limited liability*, which means that they cannot be held personally responsible for the corporation's debts. Shareholders can lose their entire investment in a corporation, but no more.
- *Separation of ownership and control:* A large public corporation may have hundreds of thousands of shareholders, who own the business but cannot possibly manage or control it directly.

  → *Such separation gives coporations permanence.*

Disadvantages to being a corporation:

- cost of managing the corporation's legal machinery in both time and money
- the corporation is taxed separately

  → Corporations pay tax on their profits, and shareholders are taxed again when they receive dividends from the company or sell their shares at a profit.

Difference between Business and Corporation

Business is the social science of managing people to organize and maintain collective productivity toward accomplishing particular creative and productive goals, usually to generate profit.

Ways to organize a business

- Sole Proprietorship (one person owns the business)
- Partnership (two or more own the business)

Advantages	Disadvantages
Easy to establish (less regulations)	Unlimited liability
Owner(s) keep all the profit	Difficult to transfer ownership
Less agency issues	Limited life of business

- Corporation (business owned by stockholders who have limited liability)

Advantages	Disadvantages
Easier to raise money	Double taxes
Limited liabilities	Agency issues
Easy to transfer ownership	Complicated regulations

The Role of the Financial Manager

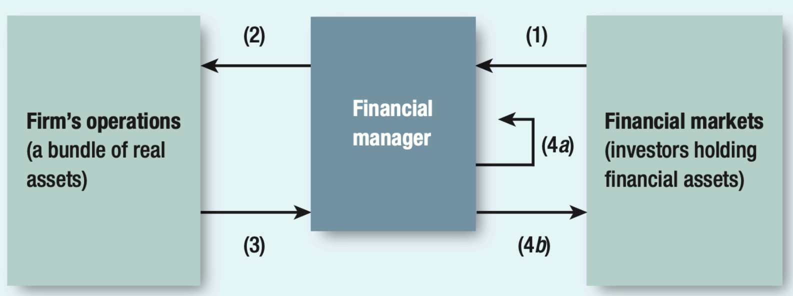

FIGURE 1.1
Flow of cash between financial markets and the firm's operations. Key: (1) Cash raised by selling financial assets to investors; (2) cash invested in the firm's operations and used to purchase real assets; (3) cash generated by the firm's operations; (4a) cash reinvested; (4b) cash returned to investors.

The Financial Goal of the Corporation

Shareholders Want Managers to Maximize Market Value

There is a natural **financial objective** on which almost all shareholders agree: Maximize the current market value of shareholders' investment in the firm.

A Fundamental Result

Assumption: the financial manager should act in the interests of the firm's owners, its stockholders

1. **Each stockholder wants three things:**
   - To be as rich as possible, that is, to maximize his or her current wealth.
   - To transform that wealth into the most desirable time pattern of consumption either by borrowing to spend now or investing to spend later.
   - To manage the risk characteristics of that consumption plan.

2. But stockholders do not need the financial manager's help to achieve the best time pattern of consumption. **They can do that on their own**, provided they have free access to competitive financial markets. They can also choose the risk characteristics of their consumption plan by investing in more- or less-risky securities.

3. How then can the financial manager help the firm's stockholders? There is only one way: **by increasing their wealth**. That means *increasing the market value of the firm and the current price of its shares*.

Profit maximization is not a well-defined financial objective for at least two reasons:

1. Maximize profits? Which year's profits? A corporation may be able to increase current profits by cutting back on outlays for maintenance or staff training, but those outlays may have added long-term value. **Shareholders will not welcome higher short-term profits if long-term profits are damaged.**
2. A company may be able to increase future profits by cutting this year's dividend and investing the freed-up cash in the firm. That is not in the shareholders' best interest if the company earns only a modest return on the money.

The Investment Trade-Off

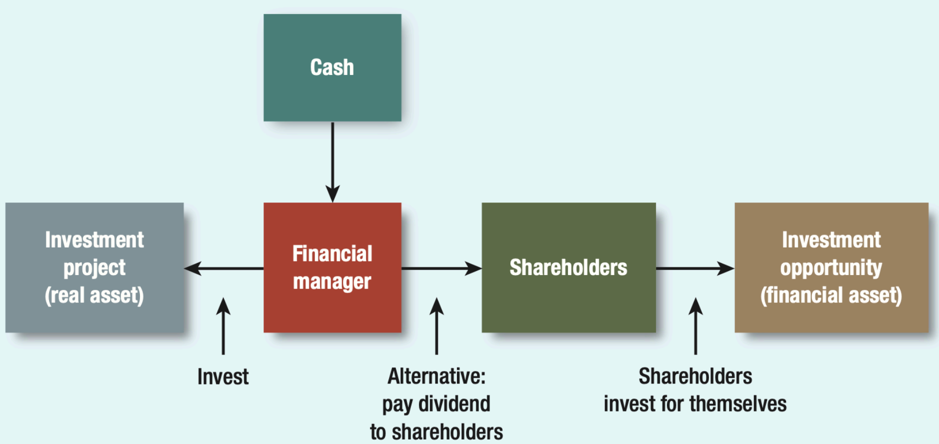

FIGURE 1.2
The firm can either keep and reinvest cash or return it to investors. (Arrows represent possible cash flows or transfers.) If cash is reinvested, the opportunity cost is the expected rate of return that shareholders could have obtained by investing in financial assets.

- If the return offered by the investment project is **higher** than the rate of return that shareholders can get by investing on their own, then the shareholders would vote for the investment project.

- If the investment project offers a **lower** return than shareholders can achieve on their own, the shareholders would vote to cancel the project and take the cash instead.

The minimum acceptable rate of return is called a **hurdle rate** or **cost of capital**. It is really an **opportunity cost of capital** because it depends on the investment *opportunities* available to investors in financial markets.

Corporations increase value by accepting all investment projects that earn more than the opportunity cost of capital.

Notice:

1. The opportunity cost of capital depends on the **risk** of the proposed investment project.

   → *Reasons:*

   - Shareholders are risk-averse.
   - Shareholders have to trade off risk against return when they invest on their own.

2. The opportunity cost of capital is generally *not* the interest rate that the company pays on a loan from a bank.

   → *If the company is making a risky investment, the opportunity cost is the expected return that investors can achieve in financial markets at the same level of risk.*

Agency Problems and Corporate Governance

Conflicts between shareholders' and managers' objectives create **agency problems**.

Agency problems arise when *agents* work for *principals.* The shareholders are the principals; the managers are their agents.

- Shareholders desire wealth maximization
- Managers may be tempted to do something satisfying their own interests

Some agency problems:

1. Difference in Information
   - Stock prices and returns
   - Issues of shares and other securities
   - Dividends
   - Financing
2. Different Objectives
   - Managers vs. stockholders
   - Top mgmt vs. operating mgmt
   - Stockholders vs. banks and lenders

Agency costs are incurred when:

1. Managers do not attempt to maximize firm value
2. Shareholders incur costs to monitor the managers and constrain their actions

Summary

Chapter1 Introduction to Corporate Finance

Corporations face **two principal financial decisions**. First, what investments should the corporation make? Second, how should it pay for the investments? The first decision is the investment decision; the second is the financing decision.

The stockholders who own the corporation want its managers to **maximize its overall value and the current price of its shares**. The stockholders can all agree on the goal of value maximization, so long as financial markets give them the flexibility to manage their own savings and investment plans. Of course, the objective of wealth maximization does not justify unethical behavior. Shareholders do not want the maximum possible stock price. They want the maximum honest share price.

How can financial managers increase the value of the firm? **Mostly by making good investment decisions.** Financing decisions can also add value, and they can surely destroy value if you screw them up. But it’s usually the profitability of corporate investments that separates value winners from the rest of the pack.

Investment decisions involve a trade-off. **The firm can either invest cash or return it to shareholders**, for example, as an extra dividend. When the firm invests cash rather than paying it out, shareholders forgo the opportunity to invest it for themselves in financial markets. **The return that they are giving up is therefore called the opportunity cost of capital.** If the firm’s investments can earn a return higher than the opportunity cost of capital, stock price increases. If the firm invests at a return lower than the opportunity cost of capital, stock price falls.

Managers are not endowed with a special value-maximizing gene. They will consider their own personal interests, which creates a potential conflict of interest with outside shareholders. This conflict is called a **principal–agent problem**. Any loss of value that results is called an agency cost.

Investors will not entrust the firm with their savings unless they are confident that management will act ethically on their behalf. Successful firms have governance systems that help to align managers’ and shareholders’ interests.

Remember the following five themes, for you will see them again and again throughout this book:

1. Corporate finance is all about maximizing value.
2. The opportunity cost of capital sets the standard for investments.
3. A safe dollar is worth more than a risky dollar.
4. Smart investment decisions create more value than smart financing decisions.
5. Good governance matters.