

I. Corporate Finance: Investment Projects and Capital Allocation

The Concept of Investment Projects

In corporate finance, we view a firm as a collection of investment projects. An investment project can take many forms: it might be a business unit, a specific product line, a new factory, or even a research and development initiative. Each project represents a use of the company's capital with the expectation of generating future returns.

Capital Allocation in a Capitalist System

The fundamental principle extends beyond individual firms to the entire economic system. In a capitalist economy, scarce capital should ideally flow to uses where it generates the highest return relative to the level of risk involved. This creates an efficient allocation mechanism that maximizes overall economic productivity.

A Household Example

Consider a typical household's financial decisions. After covering essential consumption (rent, food, entertainment), any remaining income represents savings that must be invested somewhere in the economy. (Even when you simply deposit money in a bank account and receive interest, the bank doesn't store your money in a vault. Instead, the bank invests your deposits in various projects to earn returns higher than the interest they pay you, keeping the difference as profit.)

Now imagine your household wants to make investment decisions directly. As a rational investor, you would be willing to accept a certain level of risk and would want to maximize your return for that risk level. Alternatively, you might have a target return in mind and seek the investment option that offers this return with the lowest possible risk.

This decision-making process illustrates how capital allocation should work: investors compare different opportunities and direct their money toward the most attractive risk-adjusted returns.

Why Capital Allocation is Imperfect in Reality

While the theoretical framework is elegant, several factors make capital allocation imperfect in practice:

1. Irrational Decision-Making

Not all decision-makers behave rationally. When investors make poor choices based on emotions, incomplete analysis, or cognitive biases, capital flows to suboptimal uses. This means some economic activities receive funding when they shouldn't, while better opportunities may go unfunded.

2. Uncertainty About the Future

Investment decisions are inherently forward-looking. Households and other investors must form expectations about future returns and risks, but the future is fundamentally uncertain. Even rational, well-informed investors cannot perfectly predict future outcomes, leading to allocation errors.

3. Market Frictions

Several frictions complicate the capital allocation process:

1. **Information asymmetries:** Those seeking capital have incentives to make their projects appear more attractive than they actually are, overstating potential returns while understating risks.
2. **Limited investor capabilities:** Individual households may lack the expertise, time, or resources to properly evaluate complex investment opportunities.
3. **Transaction costs:** The costs of gathering information, conducting due diligence, and executing investments can be substantial.
4. **Agency problems:** Intermediaries (like fund managers) may not always act in investors' best interests.

These three factors—irrational decision-making, uncertainty, and market frictions—explain why capital allocation in capitalist systems, while generally effective, is imperfect in practice.

The Shareholder Value Perspective

However, from the argument above we can derive the fundamental principle in corporate finance: the shareholder value perspective. Since shareholders (aka investors like, e.g., households) are the owners of the firm and provide its capital, their perspective is what matters. However, in most corporations, there is a separation between ownership and management: shareholders own the company, but professional managers make the day-to-day decisions. This means that while management actually decides how to use the company's capital, they should make these decisions in the best interest of the shareholders. Company management must continuously demonstrate to shareholders (and potential shareholders) that the firm uses capital more effectively than alternative investment opportunities.

In practical terms, this means management must convince the capital markets that investors should not withdraw their money and invest it elsewhere. This creates constant pressure on companies to generate attractive risk-adjusted returns and communicate their (shareholder) value creation effectively.

A Note on Stakeholders

It's important to clarify that adopting the shareholder value perspective for analytical purposes doesn't mean ignoring other stakeholders such as employees, customers, or

environmental concerns. These considerations are increasingly important in modern business. However, in corporate finance, we use the shareholder perspective as our primary analytical framework because it provides a clear, measurable standard for evaluating financial decisions.

This approach allows us to develop rigorous methods for assessing investment projects, capital structure decisions, and other financial choices that ultimately determine whether a company creates or destroys value for its owners.

II. The Corporate Finance Framework and the Architecture of This Lecture

Course Objectives and Learning Perspectives

This course aims to provide you with the analytical perspective of corporate finance that will be valuable if you take on a financial role within a corporation. However, this perspective is inevitably interwoven with that of an investor in capital markets, which represents a second valuable learning perspective of this course. Understanding both viewpoints is essential because corporate managers must think like investors to make decisions that create shareholder value.

As this is an introductory course, our primary focus is on ensuring you grasp the fundamental principles of corporate finance and understand how these principles relate to and build upon each other. Mastering these core concepts will provide you with a solid foundation for more advanced financial analysis and decision-making.

The Central Task of Corporate Finance

Ultimately, this entire course revolves around one simple but fundamental task: determining whether an investment project (any business activity the firm is planning to undertake) generates shareholder value or not. We call projects that create value "positive NPV projects." The method is conceptually straightforward: forecast the future cash flows that the project will generate, then discount these cash flows to their present value using an appropriate discount rate. If the present value of future cash flows exceeds the initial investment, the project creates value and should be undertaken.

Course Structure and Logic

The structure of this course (excluding this first introductory section) follows a logical progression that supports this central analytical task::

1. **Section 2 (Financial Analysis)** teaches you the key terms and analytical skills needed to "read" a company's financial health through its financial statements.

This analytical skill is essential before making any investment or financing decisions. You need to understand what corporate finance is about, learn to interpret balance sheets, income statements, and cash flow statements, and distinguish between accounting values and market values.

2. **Section 3 (Investment Analysis)** dives deeper into the whole concept of NPV and addresses the core question: which investment projects should a company undertake? Here you'll learn about expected returns, risk assessment, time value of money, and the fundamental tools of NPV (Net Present Value) and IRR (Internal Rate of Return). These are the primary methods managers use to evaluate whether an investment project will create value for shareholders.
3. **Section 4 (Capital Budgeting)** focuses on how to forecast the cash flows from a project. This section builds on investment analysis by introducing more sophisticated concepts like Free Cash Flow (FCF) and opportunity costs. You'll learn how to make choices among competing investment alternatives and perform comprehensive risk analysis.
4. **Section 5 (Cost of Capital)** tackles the discount rate that should be used in NPV calculations. This requires understanding how investors price risk in financial markets, leading to concepts like CAPM (Capital Asset Pricing Model) and WACC (Weighted Average Cost of Capital). The cost of capital is also closely linked to capital structure decisions.
5. **Section 6 (Capital Structure)** examines how companies should finance their operations and investments, which directly affects the discount rate used in NPV calculations. This includes understanding the trade-offs between debt and equity financing and how these choices affect firm value and risk.

Each section builds logically on the previous ones, creating a comprehensive framework for corporate financial decision-making that serves both the manager's need to create value and the investor's need to assess that value creation.