Corporate Finance

Unit 1 Perspectives on Corporate Finance

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Unit Overview

Unit 1 introduces the module by explaining the key questions in corporate finance and providing a brief description of the theoretical concepts that will be developed through the various units. Following this introduction, you will study the origin and the nature of conflicts of interest that may arise among the various stakeholders of a firm, such as shareholders, bondholders, and managers.

Learning outcomes

When you have completed your work on this unit, you will be able to:

- explain and discuss the objective of the firm
- assess how the objective of the firm relates to conflicts of interest among stakeholders
- critically assess conflict of interest between (a) shareholders and managers (b) shareholders and bondholders, and their implications for the value of the firm
- evaluate corporate governance structures and their effectiveness.

Reading for Unit 1

Jensen MC (2001) 'Value maximization, stakeholder theory, and the corporate objective function'. *Journal of Applied Corporate Finance*, 14 (3), 8–21.

Cohen N (2014) 'US companies fend off activists with poison pills', *Financial Times*, 23 April.

Shleifer A and R Vishny (1997) 'A survey of corporate governance'. *The Journal of Finance*, 52 (2), 737–61.

Hillier D, S Ross, R Westerfield, J Jaffe and B Jordan (2021) *Corporate Finance*. 4th European Edition. London UK, McGraw-Hill Education. Chapter 1 'Introduction to Corporate Finance' and Chapter 2 'Corporate Governance'.

The Economist (2009) 'Executive Pay: Maligned, or misaligned?' September 17.

Paulin G (2009) 'Changing the Economics of Executive Compensation'. *Businessweek*, 13 October.

Ward L and J Treanor (2002) 'Investors to vote on top pay'. *The Guardian*, 26 June.

Groom B (2014) 'Gap widens between UK executive pay and results'. *The Financial Times*, 23 January.

Allen F, E Carletti and R Marquez (2014) 'Stakeholder Governance, Competition, and Firm Value'. *Review of Finance*, 19 (3), 1315–46.

Chen F, K Ramaya and W Wu (2020) 'The wealth effects of merger and acquisition announcements on bondholders: New evidence from the overthe-counter market'. *Journal of Economics and Business*, 107.

1.1 Introduction

In this module you will study the main issues in modern corporate finance. First, however, as I indicated in the Module Introduction, I need to clarify what I mean by the *main* issues, because the issues that are important to one person may be viewed as less important by others. The financial manager of a large company, for example, faces a different set of financial problems from the owner of a small business.

That particular difference – between the small company and a large company's financial manager – is not relevant to this module, because the theories, examples and empirical studies in corporate finance concentrate on the finance of corporations whose shares are traded on a well-organised stock market. In some examples, their bonds or other debt instruments are also assumed to be traded on markets.

But there could still be other ways in which people differ over what the important issues are. Consider the perspectives of people in three different positions:

- The financial manager of the corporation, or any employee whose work requires financial decisions, may wish to study corporate finance in order to learn some simple rules for decision-making. We usually see their decisions as determining the corporation's demand for finance. A major question facing financial managers is whether their decisions on how to finance the company affect the firm's value. It is a question underlying much of corporate finance.
- A stock market dealer or portfolio manager (such as a pension fund manager) may seek, instead, to learn how to evaluate corporations' financial positions in order to be able to allocate their portfolio between the shares of different companies. We usually see such decisions as determining the supply of finance to corporations although they relate to both existing and newly issued shares.
- An economic or financial theorist examines corporate finance to analyse its role in the economy. The purpose is to explain the observable financial decisions of corporations and portfolio managers, and to explain the behaviour of the securities markets that results from the decisions of those and other agents. Traditionally, the securities markets considered in corporate finance are 'spot' or 'cash' stock markets dealing in company shares and bonds. But modern finance also includes large and growing markets in 'derivatives', especially options and futures, which are contracts relating to the future prices of the underlying shares or bonds. To 'explain the behaviour' of any of the financial markets involves explaining how the prices of shares, bonds and derivatives are determined.

Although those three perspectives are rather different, the subjects studied in this and other corporate finance modules do address issues that are important from any of those viewpoints. For example, a model you will study in one unit is the capital asset pricing model (CAPM). The CAPM demonstrates how the risk on a security may be divided into diversifiable (specific) risk and non diversifiable (market) risk, and it shows how in principle the equilibrium return on a security is a function of its non diversifiable risk. Do company financial managers, pension fund portfolio managers, and economic theorists all need to understand that model?

The financial manager needs to know it in order to understand the basis on which the company's shares are priced and that, in turn, is necessary for estimating the company's cost of capital, which is a key variable in the company's planning. Note that this does not really meet the objective I suggested previously – the manager's need 'to learn some simple rules for decision making'. The capital asset pricing model, and the other models and theories taught in this module, are abstract and sophisticated theories, which are open to discussion and, indeed, may be wrong. Studying them is quite different from learning some simple rules; it is the difference between studying the principles of automobile engineering and learning how to drive a car. However, the models and theories are important to the financial manager, because they enable the manager to understand the principles which lie behind the simple decision-making rules used in the corporation and, therefore, to judge the relevance of the rules and how to modify them in different circumstances.

The portfolio manager needs to know the CAPM because knowledge of the relation between risk and return on securities enables him or her to determine an optimal allocation of funds between different securities.

The interest of economic and financial theorists in the CAPM and similar models derives from their general aim of modelling the behaviour of markets and prices to understand their role in the economy; in this case it involves modelling the relation between financial markets and the returns and risks in the 'real' sectors of the economy.

1.2 Core Theories of Corporate Finance

One thing should stand out from the above introduction. The module is not a 'how to do it' or 'cookbook' type of module, because it does not give you simple financial rules which you have to learn and apply. It is a *principles* module rather than an *applications* module, because you will study the theoretical principles relating to corporate finance. Moreover, you will study some of the discussions around those theories – the controversies and criticisms that always surround theoretical propositions.

The core theories of corporate finance have been developed at different times over the past four or five decades. One by one, different theorists have published propositions that have enabled us to understand and analyse problems that we could not previously solve, and together those theories now comprise the central body of the science that we call corporate finance.

The main theories we include are:

Net Present Valuation and (Hirshleifer, 1985)

Separation Theorem

Equity Valuation Model (Gordon and Shapiro, 1956)

Irrelevance of Debt-Equity Ratio (Modigliani and Miller, 1958)

Irrelevance of Dividend Policy (Modigliani and Miller, 1961)

Agency Theory Models (Jensen and Meckling, 1976)

Capital Asset Pricing Model (Sharpe, 1964; Lintner, 1965)

Efficient Markets Hypothesis (Fama, 1970)

In addition, there are two further theorems that have a central role in modern corporate finance but are omitted from this module:

Portfolio Allocation Theory (Markowitz, 1952)

Option Pricing Model (Black and Scholes, 1973)

Portfolio allocation theory underlies the capital asset pricing model. The option-pricing model has become an especially important part of the analysis of markets in corporate finance since 1973. In that year, the classic theorem of Fischer Black and Myron Scholes on the prices of 'traded options' was published, and a market in standardised traded options was opened in Chicago. One reason why the theory of option pricing has become such an important part of corporate finance theory is that since 1973 a number of new markets in traded options have been established and grown so that many corporations are able to use traded options as a means to reduce risk by hedging, and their use for that purpose has become widespread. Another reason is that, even if corporations did not use traded options, the principles of the theory of option pricing can be used more widely to analyse several other investment decisions facing corporations and investors. After careful thought, we decided to leave out those two topics because they are fully treated in another of this programme's modules, *Risk Management: Principles and Applications*.

I said that those theories have, one by one, enabled us to understand and analyse problems we could not previously solve, but that does not mean that each theory is correct or generally recognised as true. Indeed, almost all of them have been criticised and have stimulated much controversy. As a result, we now know that some of the original propositions are only valid if special, unrealistic, assumptions are made. That is especially the case with the Modigliani-Miller theorem on the irrelevance of debt-equity ratios, which is widely taken to be *the* starting point for modern corporate finance. In other words, the theory's main proposition does not accurately describe reality. Nevertheless, such theories are still the foundation for modern corporate finance theory because they have given us a new way of thinking about the problems; they are fundamental because even their critics organise their arguments in terms defined by the original theories.

This module is organised around those core theories; in most units you will study one of the core theories, its strengths and its weaknesses. In that way, your studies will give you a comprehensive understanding of modern corporate finance. However, the order in which you study the theories is not the same as the order in which they were published, as the module is structured in a way that enables you to build on the concepts cumulatively.

1.3 Key Questions in Corporate Finance

Theoretical and empirical studies of corporate finance comprise an extremely large body of literature and deal with a very large number of specialised questions. The main journal for articles on research in corporate finance is the *Journal of Finance* (published in the United States by the American Finance Association); followed by the *Journal of Financial Economics*. Other specialist journals exist, and articles on corporate finance are also published in a large number of wider-ranging economics journals.

Underlying all the specialised research questions in corporate finance is one fundamental question: 'What is the relation between:

- corporations' decisions on investing in productive ('physical') assets and issuing financial liabilities; and
- markets in the financial liabilities (equities and debt) which they issue?'

Since that fundamental question underlies all the models and analyses in this module, I would like you to make a special note of it. I will refer to it explicitly at several points in the module, but I hope that even when I do not explicitly mention it you will be able to remember it and work out its connection to whichever question or model you are studying at the time.

That fundamental question enables us to divide the core theorems and issues of corporate finance into two broad types:

- those that focus primarily on the corporation's decision problems
- those that focus primarily on the way financial markets operate.

That division is simple and it is not absolutely precise, because theories have both elements, but it helps at this stage. To give you a taste of what is to come, let me summarise which core theorems relate to which of those two perspectives, and give some indication of their location in this module.

1.3.1 Theorems focusing on corporations' decision problems

The theories that you will study in this area are Hirshleifer's Net Present Value Rule (NPV) and two theorems from Modigliani and Miller, on Dividend Policy and Debt–Equity Ratios.

Net Present Value Rule (Hirshleifer, 1958)

This is the fundamental model of how corporations should decide whether to invest in a project (the 'investment decision', or 'capital budgeting decision'). It introduces a connection with the firm's choice of finance, because the price of finance (the cost of capital) is an element in calculating the present value of an investment project. When Hirshleifer demonstrated its importance for modern analysis, he also demonstrated the Fisher Separation Theorem; its important conclusion is that, because a project can be combined with a financial operation, borrowing or lending, the amount a corporation should choose to invest in physical capital is independent of the preferences of individual owners and managers. If the Fisher Separation Theorem is valid, managers can be separate from owners without harming their interests.

Net present value also provides a model that is used for valuing shares and, therefore, for understanding how the price of shares is determined. A particularly valuable simplification of that model gives us a useful tool for valuing the shares of growing companies: that version is known as the Growth Model, developed as a core theorem by MJ Gordon and E Shapiro. Such methods will be discussed in the early units of the module.

The Modigliani-Miller Theorem on Dividend Policy

The price of shares often appears to be affected by the corporation's policy on paying dividends and, in practice, corporations give a lot of attention to the difficult problem of determining their dividend payouts (the 'dividend decision'). However, in 1961, Franco Modigliani and Merton Miller demonstrated that under certain conditions the dividend payout policy would have no influence on share price. Subsequently, many writers have shown that there are several plausible conditions under which firms' dividend payments will, after all, affect their share price. This is one good example of an issue where, even when later authors are disagreeing with the original theorem, they still nevertheless frame their models in relation to the seminal arguments of Modigliani and Miller. You will study those models in Unit 5.

Modigliani-Miller Theorem on Debt-Equity Ratios (Modigliani and Miller, 1958)

This is the starting point for all analyses of corporations' choice of debt-equity ratio, which is the most basic aspect of their decision on how to finance an investment project (the 'financing decision'). The theorem gives the remarkable result that under certain conditions the choice of debt-equity ratio is irrelevant; in particular, the debt-equity ratio the firm chooses does not influence its cost of capital. By showing that under certain conditions the debt-equity decision is irrelevant, the Modigliani-Miller Theorem provided the basis for theorems and studies to identify which conditions are significant and to show how, if those conditions do not exist, firms should (or do) make relevant decisions regarding leverage. As Milton Harris and Artur Raviv say in their 1991 survey:

The modern theory of capital structure began with the celebrated paper of Modigliani and Miller (1958). They (MM) pointed the direction that such theories must take by showing under what conditions capital structure is irrelevant. Since then, many economists have followed the path they mapped.

Source: Harris and Raviv (1991) p. 297.

You will study this model in Unit 6 of the module.

Review Question 1.1

From what you have read so far, what do you think are the three basic questions of corporate finance?

You have read analytically if you identified the questions underlying the three decisions discussed above. They are the following:

- Investment decision (capital budgeting): How should corporations decide whether or not to invest in a project?
- Financing decision (capital structure): How much cash must be raised for the required real (physical) investments?
- Dividend decision: How much should the firm return to its financial investors (shareholders) in the form of dividend payments?

The area of 'Agency Theory' that looks at the relations between different sets of stakeholders within a company – particularly its shareholders who own it and the managers who run it – is also an area of dispute pertinent to corporate decision-making. However, we will introduce some elements of agency theory at greater length in this unit, and you will be reading a separate section on this shortly. Agency theory is a perspective on intra-firm decision-making that invites the possibility of *legal* arguments and solutions to the problems it highlights, which is one reason we go into it at some length here in this first unit.

1.3.2 Theorems focusing on the operation of financial markets

The connection between this type of theory and those that focus on corporations' decision problems is not immediately obvious. The latter assume that the corporation is considering the issue of new equities and bonds, but when – as in this case – we consider the operation of financial markets and their pricing of equities, our concern is mainly with transactions in stocks that were issued in the past and are now traded between one portfolio owner and another. However, trading in existing stocks is linked to the corporation's new issues. First, both should reflect assessments of the corporation's expected future performance. Second, trading in existing stocks establishes prices and yields which determine the yields the corporation will have to pay on new stock if it issues more equity to finance the investment project. In other words, the price and yields of existing stock partly determine the cost of capital the firm has to consider when it makes its investment decision.

Many of the core theories in corporate finance are concerned with this type of problem: the operation of financial markets.

The Capital Asset Pricing Model

The CAPM analyses the principles of rational choice that are involved in investing a portfolio between a number of financial securities. Portfolio Allocation Theory concentrates on the underlying principles of choice that a rational individual or fund manager may follow. The Capital Asset Pricing Model builds on those principles to develop simple rules and to demonstrate how those rules should explain what determines the prices of individual securities. In particular, these theories show how portfolio investment decisions and the security prices that result from the sum of individual portfolio decisions may take account of the risk carried by each security. Those results have a direct implication for the link between financial markets and corporations' investment decisions, because the cost of capital that affects the firm's evaluation of investment projects should depend on risk or, more precisely, on how much of that firm's risk cannot be diversified away. More risky firms should expect the yield demanded by equity holders to include a risk premium related to the size of nondiversifiable risk.

The capital asset pricing model will be presented in Unit 3.

The Efficient Markets Hypothesis

This theorem postulates a simple connection between the firm's investment decision and the market for its financial liabilities. Its main proposition is that, because the stock market is an 'efficient market' (in a carefully defined sense), the price of the firm's shares fully reflects the firm's 'fundamentals' – or, in other words, it fully reflects the value of the expected future profits on the firm's physical (and other) capital. The Efficient Markets Hypothesis is introduced, though not studied in detail, in this module, but its main implications are considered in many units of the module. As you will see, in most parts of this module we assume its basic argument to be valid, because (even though it is highly questionable in reality) it greatly simplifies the models discussed here if we can assume that share prices always equal their fundamental values.

The efficient markets hypothesis and its implications for corporate financing decisions will be discussed in Unit 4.

1.4 The Objective of the Firm

Many financial economists consider that the growth of corporate finance theory can be traced to its choice of a single objective. According to the classical viewpoint, the objective of the firm is to maximise the value or wealth of its owners (i.e. its shareholders). Consequently, the investment, financing and dividend decisions that increase the value of shareholders are considered 'good' whereas those that decrease the value of shareholders are

considered 'poor'. The choice of this objective function has provided corporate finance theory with a unifying theme and internal consistency, but this has come at a cost. In fact, a significant part of the disagreement between corporate finance theorists is centred on different views about the appropriate objective function of the firm. An alternative to the idea of shareholder supremacy, the perspective from stakeholders, has recently become popular. In Section 1.5, you will be asked to read a few sections from the article by Allen and his co-authors (2014) for a good summary.

While the debate on the objective of firm is ongoing, this module implicitly assumes that the objective is to maximise the shareholder value over the long term. The shareholder value maximisation refers to the increase of their purchasing power via capital and income gains from shareholding. Nonetheless, it is worth noting that the objective function of 'shareholder value maximisation' is valid only under certain assumptions. The most important of these assumptions is that there are no *agency problems* between the various stakeholders in the firm. In order to understand the essence of the agency problem, let's look first at how traditional models of corporate finance viewed the firm. In elementary economic theory and in the early theory of corporate finance, the firm is presented as a mysterious 'empty box'. We can analyse what goes in: factors of production, reducible to capital and labour – and what comes out: consumer goods or capital goods – but what goes on *inside* the firm is not analysed in depth. The internal operations are summarised in a production function as a technical relationship linking inputs and outputs.

In reality, however, inside the 'box' of the firm, the operations involve the interaction of people with specialised roles and positions. The stakeholders in the firm are many. There are the shareholders, the managers, the bondholders, the customers, the workers and the society at large. The core of the agency problem is that each group has its own interests and objectives, and consequently conflicts of interest may arise between these different groups. These conflicts of interest create costs for the firms, known as *agency costs*. Many financial economists doubt the validity of the objective of shareholder value maximisation, considering it invalid in the presence of agency costs.

Given the central importance of agency problems in evaluating the objective function of the firm as well as to our understanding of the workings of corporations, we will next study the main features of agency theory in this introductory unit. Agency theory has become one of the most important recent advances in corporate finance with very wide ranging implications for different aspects of corporate finance, especially for the financing and dividend decisions of firms.

1.4.1 Shareholders and Managers

When we move away from simple models of the firm, we can see that conflicts of interest may also arise in the firm's day-to-day operations. Modern theories of corporate finance, developed especially since 1976, focus on such conflicts of interest. I have mentioned several potential conflicts of interest; now, which are the main ones on which corporate finance theory

concentrates? Two of the principal concerns of corporate finance are the conflict of interest between:

- shareholders and managers
- shareholders and bondholders.

In Section 1.5 we will deal with the first type of conflict, referred to in the literature as the 'principal–agent problem'.

Reading 1.1

I would like you now to read Jensen's 2001 article on the role of the corporate objective function.

When you have finished studying the article and taking notes, please answer the following questions.

- What problems does Stakeholder Theory face?
- What similarities are there between Stakeholder Theory and the Balanced Scorecard approach?
- From the article's discussion, can you consider whether maximising shareholder values is equivalent to maintaining social welfare?

Jensen (2001) 'Value maximization, stakeholder theory, and the corporate objective function'. *Journal of Applied Corporate Finance*.

1.5 Agency Problems

The essence of the agency problem between shareholders and managers is the separation of ownership and control. Financial investors (shareholders) hire managers/entrepreneurs because they need to use their specialised expertise in managing the company and generating returns on their investments. The entrepreneur/manager in turn needs outside funds to finance productive projects. The main question, which forms the subject matter of what is known as *corporate governance*, is this:

 Once investors (shareholders) have committed their money to the company, how can they prevent managers from expropriating their funds and/or prevent managers from wasting their money on unproductive projects?

Thus, the agency problem in this context refers to the problems that investors have in assuring that managers don't expropriate their funds (take the funds for themselves) or spend them unproductively.

In principle, investors and managers can draw up a contract in which investors provide the necessary money on the condition that they retain complete control rights over the firm's operations and the allocation of funds.

However, this raises the question as to why firms need managers in the first place. If investors want to retain complete control, then there is no need for managers. As such, the design of such contracts is both infeasible and impractical. Alternatively, the managers and financiers can sign a contract that specifies what managers should do with the funds and how the returns from

investment should be distributed among stakeholders. However, the design of such contracts is technically infeasible due to various factors such as the difficulty of foreseeing all future contingencies. This is further complicated by the fact that managers and investors are not likely to share the same information.

The infeasibility of designing 'complete contracts' that protect the rights of shareholders everywhere in the world means that significant control rights remain in the hands of managers. In practice, controlling rights are likely to be even more concentrated in managers' hands than theory suggests, because dispersed shareholders, in addition to being poorly informed, don't exercise the few control rights they have. In addition, there is the issue of contract *enforcement* by courts. Even in countries with the most developed legal systems, enforcement involving legal issues related to manager-shareholder contracts is complex and the courts don't deal with many of the conflicts that arise between shareholders and managers.

Managers, as rational individuals, seek to look after their own self-interest. Thus, if they are left alone, they will not act in the best interests of shareholders. In fact, the concentration of controlling rights in the hands of managers means that managers have both the power and the incentive to expropriate the wealth of shareholders. They can do this in various ways. Managers can simply leave with the money; or they can engage in 'transfer pricing', where they set up independent companies and sell the goods from the main company to the independent companies at low prices; or they can sell the assets of the company to relatives at cheap prices. In most countries, the law protects investors against such abuses, and expropriation is likely to take different forms. The most common one is managers' consumption of perquisites ('perks') such as jet planes, big offices, excessive pay, more leisure, etc. ... Other forms include 'empire-building' and expanding the firm beyond what is rationally feasible. Many observers consider that such expansions increase managerial benefits at the expense of shareholders.

Another channel through which managers can expropriate shareholders' wealth is by the management team remaining in their jobs even when their services are no longer needed and/or when they are performing poorly. In fact, some economists consider that the resistance of managers to takeovers aimed at their removal represents the most significant form of expropriation of wealth from shareholders.

Management resistance to takeovers

Perhaps the best evidence on agency problems comes from the literature on takeovers. In Unit 8 you will study takeovers in detail, but for now let's anticipate some of the ideas presented there. One of the effects of takeovers is usually the removal of the incumbent management. In fact, the removal of the incumbent management might well be one reason that motivated the takeover in the first place. Because of fear of losing their jobs, managers usually resist takeovers. In resisting takeovers, they may adopt anti-takeover actions that impose significant costs on shareholders.

For instance, they can design contracts that compensate them in case of loss of control due to the takeover. In corporate literature jargon, these are referred to as 'golden parachutes'. Golden parachutes are widely used to restrict takeovers, and they usually benefit managers at the expense of shareholders, especially when these contracts are offered to large numbers of managers. Alternatively, managers can resist takeovers through targeted repurchases (also known as 'greenmail' because it is similar to 'blackmail', but in this case money is offered rather than demanded) in which the management makes an offer to repurchase shares from a subset of shareholders at a premium, but the offer is not extended to other shareholders. By buying out the shareholders who are likely to threaten the incumbent management, managers protect themselves from a takeover that would result in loss of control.

The management can also devise a 'poison pill', which refers to a security or a provision that changes the fundamental aspects of the corporate rules. These 'pills' are triggered by takeovers and are 'poisonous' because they significantly increase the cost to the acquirer. They are designed to make the takeover unattractive and hence serve the management in maintaining control. Interestingly, these anti-takeover actions occur without the approval of shareholders.

Reading 1.2

Various observers consider that managers do use poison pills in order to protect themselves and retain their private benefits of control rather than to promote the interests of shareholders. Your next reading, by Cohen (2014), entitled 'US companies fend off activists with poison pills', investigates such corporate self-defences. Please study it now.

After reading this article, answer the following guestions:

- According to the article, what are pros and cons of poison pills?
- Do you think that poison pills enhance or harm the interests of shareholders?
- Poison pills come in different forms. Identify three such forms.

Now let's stand back for a moment and reflect on the question of 'agency costs' as a whole. In corporate finance, agency cost models represent a turning point, largely because they recognise a phenomenon which occurs in practice but which is assumed away in the fundamental models of corporate finance. However, as you have seen above, agency costs are real and should be included in any analysis of the firm.

Reading 1.3

In order to enhance your understanding of the nature of agency problems, I would like you now to read the Introduction and Part I (pages 737 to 748) of the article by Shleifer and Vishny (1997) 'A Survey of Corporate Governance'.

Your notes should amplify and clarify the points raised in this section.

Cohen (2014) 'US companies fend off activists with poison pills' *Financial Times*.

Shleifer & Vishny, (1997) Part I of 'A survey of corporate governance'. The Journal of Finance. What are the main implications of agency problems for the objective function of shareholder wealth maximisation? To put it differently, how can the objective of shareholder wealth be justified in the presence of agency problems? Some financial economists have argued that the interests of shareholders and managers cannot diverge widely. If managers don't pursue the objective of wealth maximisation, then there are control mechanisms in place that provide shareholders with enough powers to ensure that the interests of managers are aligned with theirs. In other words, managers who don't meet this objective face discipline from shareholders and markets. This is a valid point to a large extent. In fact, there are many mechanisms that provide shareholders with power over management. However, many critics argue that these mechanisms protect shareholders only partially.

Reading 1.4

Before discussing these mechanisms in detail, I would like you to read Sections 1.2 of Chapter 1 and 2.2 of Chapter 2 of *Corporate Finance* by Hillier, Ross, Westerfield, Jaffe and Jordan (2021).

Once you have finished reading, answer the following questions.

- What are the two types of agency costs?
- How are managers bonded to shareholders?
- What are the main managerial roles?

In brief, the two types of agency cost are the monitoring costs of the share-holders and the incentive fees paid to the managers.

The bases of the management/shareholder bond are the following:

- management contracts and incentives are built into compensation arrangements
- competition in the managerial labour market makes managers perform in the best interests of stockholders
- managers could lose their jobs if a firm is taken over because the firm is considered to be poorly managed
- shareholders determine the membership of the board of directors, which selects management.

The main managerial goals are the maximisation of corporate wealth, growth and company size.

1.5.1 **Legal protection**

The first discipline mechanism comes from within the company. If managers don't meet the objective of shareholder wealth maximisation, they will face the threat of being fired by shareholders or by the board of directors. In principle, investors gain significant control rights in the company in exchange for their investment. One important control right is exercised through annual meetings where shareholders can vote on important

Hillier et al (2021)
Section 1.2 'The goal of financial management' and Section 2.2 'The agency problem and control of the corporation' in Corporate Finance.

corporate matters. More importantly, shareholders are given the right to elect the members who serve on the board of directors.

The board of directors is the apex of the internal control system of the corporation. In principle, the board of directors has responsibility for the entire functioning of the firm. As elected representatives of shareholders, they are also responsible for monitoring the performance of management and ensuring that managers are acting on behalf of shareholders' interests. In theory, the board enjoys considerable power to fulfil its tasks where it can hire, fire, and compensate managers.

Although shareholders have significant legal rights, the power to control management in practice is rather limited due to various factors. In practice, managers frequently interfere in the voting process and conceal information from their opponents. For instance, employee stockholders may be threatened with layoffs if they vote against the management, or the management team may simply fail to notify shareholders about annual meetings. The requirement that shareholders must attend annual meetings to vote can be expensive for small shareholders and has the effect of excluding these shareholders from voting. Furthermore, in many countries ownership is dispersed – that is, there is no major shareholder (core investor) who has both the power and the incentive to monitor and discipline incompetent management. These problems are particularly acute in developing and transition economies.

The problem with dispersed ownership is that no particular small investor gains any advantage over other shareholders from monitoring management, because *all* shareholders gain from more monitoring. This means that there is a 'free rider' problem: other investors can free-ride on monitoring activities. Furthermore, the existence of a large number of investors can lead to a co-ordination failure problem: investors will try to free-ride, believing that others are monitoring, when in fact no one is.

Few boards have done their job properly in practice, with the majority of boards being captured by management. Even in the United States, boards of directors are unlikely to be able to remove managers if they are performing poorly. Evidence shows that boards of directors tend to replace management only after disastrous results, such as when the firm is already suffering serious problems. The reasons for this poor performance are various. The most important of them are the following:

- The Chief Executive Officer (CEO) and other managers (referred to as insiders) usually serve on the board of directors. Even outsiders are not necessarily independent since the management team has a say in who serves on the board.
- Most individuals who serve on the board can't spend much time on their duties, partly because they have other commitments and partly because they serve on other boards. Even those directors who put in the effort to understand the workings of the corporation may lack the necessary expertise and rely instead on outside experts. This is

reinforced further by several information problems such that the CEO always determines the agenda and the information given to the board. Information problems limit the effectiveness of the board in monitoring, even if the directors have sufficient expertise.

- The board culture is one of passivity where directors usually agree
 with management rather than confront them. This ineffectiveness is
 reinforced by rewarding consent and discouraging conflict. The
 rewards come not only in the form of salaries, but also in the form of
 benefits and perquisites such as insurance and pension benefits.
- Problems arise from the fact that managers and non-manager board members have only small stakes in their corporation. Encouraging outside members to hold substantial equity interests would provide better incentives for directors to monitor management.

Reading 1.5 and 1.6

One of the possible ways that managers can expropriate wealth from shareholders is through excessive pay. The two articles entitled 'Executive Pay: Maligned, or misaligned?' and 'Changing the Economics of Executive Compensation' focus on the excessive salaries and bonuses paid to company executives and on how such bonuses can harm the interest of shareholders and stakeholders. These articles also describe various ways by which managers seek to look after their own interests. Please study them now.

misaligned?'
Paulin (2009) 'Changing

The Economist (2009)

'Executive pay: maligned, or

the Economics of executive compensation' from *Businessweek*.

After reading these articles, answer the following guestions:

- In assessing executive pay, is it accurate just to look at basic salaries and bonuses? What else might one look at?
- What are possible reasons behind the continuous increase of executive pay?
- Who do you think plays an active role in curbing excess pay and protecting the interests of shareholders and stakeholders?

In addition to shareholders' rights, the obligation those rights places on management is usually supplemented by an affirmative duty of loyalty of managers to shareholders. For instance, there are legal restrictions on managerial self-dealings such as outright theft, excessive compensation, or the issuance of additional shares to managers and their relatives. There are also legal restrictions on management's actions such as demanding that investors consult the board of directors. In addition, there are restrictions that ensure that minority shareholders should be treated as well as insiders. In the US, shareholders have the right to sue if the managers have violated the duty of loyalty. Despite all these legal restrictions, however, enforcement mechanisms in most countries are ineffective and strictness in rules varies considerably across countries.



In order to enhance your understanding of the links between corporate agency problems and the external financing of corporations, please now turn back and read Part III of the article by Shleifer and Vishny (1997), 'A Survey on Corporate Governance', pages 750 to 753.

Shleifer & Vishny (1997) Part III of 'A survey of corporate governance'. *The Journal of Finance*.

If legal protection does not provide shareholders with enough power to align their interests with those of managers, does this mean that the gap between shareholders and managers is so wide that the objective function of maximising shareholders' wealth is not realistic? According to many financial economists, the answer is no! First, the objective function of maximising shareholders' wealth is self-correcting. Excesses by managers lead to reactions by shareholders that reduce the likelihood of the same actions being repeated. Furthermore, the legal system usually responds to curb managers' excesses, as you will see in the exercise below. Second, there are other mechanisms that help close the gap between the interests of shareholders and managers, and increase the power of the former over the latter. These alternative mechanisms with the available legal rights help alleviate the problems associated with the separation of ownership and control.

Reading 1.8 and 1.9

For some time now, shareholders have been calling for legislation to give them an annual vote on directors' salaries. Some governments finally responded by passing new regulations aimed at curbing excessive payments. For example, the US government introduced the Dodd–Frank act in 2010. In the UK the rules on executive pay came into force in 2013. The article by Ward and Treanor (2002), entitled 'Investors to vote on top pay' highlights the main features of this new legislation, and you should read this now. (The original regulatory documents are available from the UK government website (UK Government, nd accessed July 2020)

In the earlier reading by George Paulin (2009) 'Changing the Economics of Executive Compensation' the last paragraph asks 'So, in five years, will anything be different?'. In answering this, look at the more recent article by Groom (2014) from *The Financial Times* entitled 'Gap widens between UK executive pay and results'.

When you have finished these readings and written notes on them, please answer the following question:

 Do you think the legislation will be effective in curbing directors' excessive salaries and bonuses? Comment on your reasoning.

1.5.2 Large investors

One mechanism highly emphasised in the literature is the role of large or 'core' investors. It is argued that investors can become more effective by being large. Large shareholdings provide incentives for shareholders to collect information and monitor management, facilitate the coordination of

Ward & Treanor (2002) 'Investors to vote on top pay' from *The Guardian*

Groom (2014) 'Gap widens between UK executive pay and results' from *The Financial Times*

effort to control management, and give investors enough power to put pressure on management. In the case of 51% ownership, the shareholders have enough interest in value maximisation and have enough controlling rights to put pressure on managers to align the interests of managers with theirs. In the US and UK, large or majority shareholdings are relatively uncommon. This is in contrast with Germany where large banks, through proxy voting arrangements, control a large share of the votes. Furthermore, banks have significant cash flow stakes as direct shareholders.

There is some evidence to support large shareholders' controlling power. Large shareholdings are usually associated with the higher turnover of management, because firms with large shareholders are more likely to replace managers with poor performance than firms without large shareholders. There is also some evidence from Japan that large shareholdings reduce discretionary spending, especially on advertising, research and development (R&D), and entertainment expenses. This evidence suggests that large shareholders play a role in corporate governance.

Like large shareholders, significant lenders such as banks can be potentially active investors monitoring closely the performance of managers and replacing managers who produce poor performance. However, their power comes from different sources. Banks usually lend short term, which means that firms have to come back to them regularly for funding. Second, violation of restrictions on the debt contract, or default, gives creditors large control rights. Furthermore, in some countries banks vote by proxy on behalf of other equity holders, which gives them significant controlling rights.

Review Question 1.2

A study has shown that around the world a large shareholding is the exception rather than the rule. Based on the discussion of this subsection, how would you explain this observation?

1.5.3 Threat of takeovers

During a particular wave of takeovers in the US, in the 1980s, various studies suggested that many of the firms that were taken over were poorly managed, and that they under-performed when compared to their competitors and provided low rates of return to their shareholders. By taking over such badly managed firms, the acquirers could make substantial profits through removing the incumbent management and restructuring the assets of the firm. As such, badly managed firms became the target of hostile takeovers. This issue will be discussed in detail in Unit 8. However, one implication of this finding is relevant for the discussion here: the threat of takeovers can act as a disciplinary mechanism on managers, forcing them to align their interests with those of shareholders.

Reading 1.10

I would like you to turn to Parts IV and V of the article by Shleifer and Vishny (1997), 'A Survey on Corporate Governance', pages 753 to 761.

Shleifer & Vishny (1997) Parts IV and V of 'A survey on corporate governance'. *Journal of* Finance

Once you have read these sections, please answer the following questions:

- What are the main disadvantages of having large investors and creditors?
- What are the main limitations of using takeover threats to discipline management?

Large investors are not diversified and hence are excessively risky; large investors represent their own interests, which may not conform to the interests of other shareholders, especially minority shareholders, which may lead to straightforward expropriation, the accumulation of personal benefits and distortion to the incentives of other stakeholders.

Management has developed anti-takeover mechanisms to protect themselves; takeovers require highly liquid markets that are absent in many countries; takeovers usually prove to be very expensive, which also discourages them. For instance, if raiders have to pay on average a 20 per cent higher price than the pre-acquisition price while the estimated benefit from control and changing management is only 10 per cent, then the takeover will not be profitable. Thus, bad managers have a cushion before they are actually taken over.

1.5.4 A summary of the main arguments on shareholders and managers

In short, managers and shareholders have their own interests and objectives and, consequently, conflicts of interest may arise between these different groups. Given that controlling rights are concentrated in the hands of managers, the managers can put their own interests above the interests of shareholders. However, there are various mechanisms that help close the gap between the interests of shareholders and those of managers and increase the power of the former over the latter.

These include legal protection of shareholders, the role of large investors and threats of takeovers. Furthermore, there are some specific contractual mechanisms, discussed throughout this module, which can close the gap further. It is also important to note that there have been improvements in the internal control mechanisms of corporations. However, these mechanisms don't completely eliminate the agency problem. Hence, whether the objective of stockholder wealth maximisation is valid or not depends on the magnitude of the agency costs. Given that financial economists have different views regarding the severity of agency costs and the effectiveness of the various mechanisms in aligning shareholders and managers' interests, the debate on what is the proper objective function of the firm is likely to continue.

Reading 1.11

To reinforce your understanding of the various issues covered so far, I would like you to read Sections 1, 5 and 6 of the article [skip Sections 2, 3, and 4 on the model development] by Allen *et al* (2014) entitled 'Stakeholder Governance, Competition, and Firm Value'. The authors provide an abstract model which attempts to compare the shareholder-based corporate governance system in the US on the one hand and the stakeholder-based corporate governance system of Europe and Japan on the other. You do not need to understand the detail of the model presented in this article. However, you should read about the issues the authors are trying to solve, and about the empirical predictions from the model.

Allen et a/(2014)
'Stakeholder governance, competition, and firm value. Review of Finance.

After reading this article, answer the following questions:

- What are the main objectives of stakeholder-oriented firms?
- To what extent does the theory help to explain differences between German/Japanese firms and US firms with regard to:
 - i) their comparative advantages, and
 - ii) financing patterns.

1.6 Conflict between Shareholders and Bondholders

In a world with no conflicts of interest, bondholders have no need to protect themselves from shareholders. In reality, however, there are various ways through which shareholders may expropriate wealth from bondholders if bondholders are not adequately protected. Agency costs of debt exist because shareholders' actions can damage the interests of bondholders.

For example, shareholders may obtain credit from bondholders, supposedly to finance a particular set of physical assets, but they then have an incentive to invest the funds in a different way. When they have obtained the funds, they have an incentive to invest them in projects that are more risky than the bondholders would like. As you will see in Unit 5, the reason for this is that if the risky project actually yields a high return the equity owners receive a large proportion of it; but if it fails the cost to the shareholders is restricted by limited liability and the bondholders bear the cost since the loan cannot be repaid.

Another example is when bondholders lend money to a firm which was perceived to be safe when the loan was first made, but which soon after borrowing went back to financial markets to borrow more, using the same assets as collateral. This subsequent borrowing increases the riskiness of the firm, but bondholders don't have the power to alter their interest rates to reflect the new higher risk. This results in lower bond prices and loss of value to bondholders. In some extreme cases, shareholders can directly expropriate bondholders by borrowing money and then distributing it to themselves by paying high dividends. Although these actions are likely to cause the value of the firm to decline, shareholders may be willing to do this if the transfer of wealth from bondholders outweighs the loss to their wealth due to a decrease in the value of the firm.

Rational bondholders usually know the 'games' played by shareholders and hence they devise mechanisms to protect themselves against wealth-expropriating actions. The most direct way for bondholders to protect themselves is to impose restrictions in their bond agreements. These restrictions are usually known as 'covenants' and they are intended to prohibit firms from taking actions that can harm bondholders – such as restrictions on dividend payments, on additional leverage, and on investment policy. The bondholders can also attach a provision to their bonds that gives them the right to sell back the bond at face value if shareholders take certain actions. It is important to note that although these contracts provide bondholders with protection, the contracts are not 'complete', in the sense that they are not able to cover all possible eventualities and hence cannot fully protect bondholders from shareholders' actions.

Reading 1.12

Chen *et al* (2020) provide evidence regarding the conflict of interest between stockholders and bondholders in the context of mergers and acquisitions (M&A). Read their introduction (Section 1) and literature and hypotheses (Section 2).

After reading the article, answer the following questions:

- Explain (i) the coinsurance hypothesis and (ii) the wealth transfer hypothesis in the context of M&A.
- Read their findings from Sections 4, 5, and 6 to explain when and how bondholders benefit or lose from M&A.

Chen et al (2020) 'The wealth effects of merger and acquisition announcements on bondholders: New evidence from the overthe-counter market'. Journal of Economics and Business

1.7 Conclusion

Corporate finance is about investment and financing decisions of corporations. In this unit you have considered a set of theoretical concepts that are directly or indirectly related to those decisions. Moreover, you also studied what may be the objective that motivates such decisions, and how conflicts of interest among corporations' stakeholders might arise as to which particular investment or financing-related decision should be undertaken.

In the next seven units, as explained in this introductory unit, you will engage in the study of the most relevant theoretical principles underlying corporate finance. The logic of the module structure is to deal with investment decisions first, then financing issues, and then more complex concepts such as capital structure, dividend policy and mergers and acquisitions. Unit 2 provides the general theoretical background to making investment decisions under certainty. Unit 3 extends the theory discussed in Unit 2 to the case of uncertainty. There you will learn the role of models of capital market equilibrium such as the CAPM. The concepts developed in Units 2 and 3 are of crucial importance to the understanding of the rest of the module. Also, both these units, and specially Unit 3, are the most technical ones, from a mathematical point of view.

It is for these reasons that these two units are particularly demanding, and we strongly advise you to study these units carefully.

References

Allen F, E Carletti and R Marquez (2014) 'Stakeholder governance, competition, and firm value'. *Review of Finance*, 13 February.

Black F and M Scholes (1973) 'The pricing of options and corporate liabilities'. *Journal of Political Economy*, 81 (May/ June), 637–54.

Chen F K Ramaya and W Wu (2020) 'The wealth effects of merger and acquisition announcements on bondholders: New evidence from the over-the-counter market'. *Journal of Economics and Business*, 107.

Cohen N (2014) 'US companies fend off activists with poison pills'. *Financial Times*, 23 April.

Fama EF (1970) 'Efficient capital markets: a review of theory and empirical work'. *Journal of Finance*, 25 (May), 383–417.

Gordon MJ and E Shapiro (1956) 'Capital equipment analysis: The required rate of profit'. *Management Science*, 3 (October), 102–10.

Groom B (2014) 'Gap widens between UK executive pay and results'. *The Financial Times*, 23 January: http://www.ft.com/cms/s/0/92a3db66-835b-11e3-aa65-00144feab7de.html#axzz3ATeRwvBd

Harris M and A Raviv (1991) 'The theory of capital structure'. *Journal of Finance*, 46 (1), 297–355.

Hillier D, SA Ross, R Westerfield, J Jaffe and B Jordan (2021) *Corporate Finance*. 4th European Edition. London UK: McGraw-Hill Education.

Hirshleifer J (1958), 'On the theory of optimal investment decision'. *Journal of Political Economy*, 66 (August), 329–52.

Jensen MC (2001) 'Value maximization, stakeholder theory, and the corporate objective function'. *Journal of Applied Corporate Finance*, 14 (3), 8–21.

Jensen MC and W Meckling (1976) 'Theory of the firm: managerial behaviour, agency costs and capital structure'. *Journal of Financial Economics*, 3, 305–60.

Lintner J (1965) 'The valuation of risk assets and the selection of risky investments in stock portfolios and capital budgets'. *Review of Economics and Statistics*, 47 (February), 13–37.

Markowitz HM (1952) 'Portfolio selection'. *Journal of Finance*, 7 (March), 77–91.

Miller MH and F Modigliani (1961) 'Dividend policy, growth and the valuation of shares'. *Journal of Business*. 34 (October), 411–33.

Modigliani F and MH Miller (1958) 'The cost of capital, corporation finance, and the theory of investment'. *American Economic Review*, 48 (June), 261–97.

Paulin G (2009) 'Changing the Economics of Executive Compensation'. *Businessweek*, October 13: http://www.businessweek.com/stories/2009-10-13/changing-the-economics-of-executive-compensationbusinessweek-business-news-stock-market-and-financial-advice

Sharpe WF (1964) 'Capital asset prices: a theory of market equilibrium under conditions of risk'. *Journal of Finance*, 19 (September), 425–42.

Shleifer A and RW Vishny (1997) 'A survey of corporate governance'. *The Journal of Finance*, 52 (2), 737–61.

The Economist (2009) 'Executive Pay: Maligned, or misaligned?', September 17, London: Pearson.

UK government (nd) Website. Available from: http://www.legislation.gov.uk/uksi/2013/1981/pdfs/uksi/20131981 en.pdf [Accessed 13 July 2020]

Ward L and J Treanor (2002) 'Investors to vote on top pay'. *The Guardian* Archive, 26 June, London: The Scott Trust.