

Instructor's Manual

Corporate Finance

Principles and Practice

Seventh Edition

**Denzil Watson
Antony Head**

**For further instructor material
please visit:**

www.pearsoned.co.uk/watsonhead

ISBN: 978-1-292-10305-1

© Pearson Education Limited 2017

Lecturers adopting the main text are permitted to download and photocopy the manual as required.

PEARSON

Harlow, England • London • New York • Boston • San Francisco • Toronto • Sydney • Auckland • Singapore • Hong Kong
Tokyo • Seoul • Taipei • New Delhi • Cape Town • São Paulo • Mexico City • Madrid • Amsterdam • Munich • Paris • Milan

PEARSON EDUCATION LIMITED

Edinburgh Gate
Harlow CM20 2JE
United Kingdom
Tel: +44 (0)1279 623623
Web: www.pearson.com/uk

Sixth edition published 2014
This edition published 2017

© Pearson Education Limited 2017

The rights of Denzil Watson and Antony Head to be identified as authors of this work have been asserted by them in accordance with the Copyright, Designs and Patents Act 1988.

ISBN 978-1-292-10305-1

All rights reserved. Permission is hereby given for the material in this publication to be reproduced for OHP transparencies and student handouts, without express permission of the Publishers, for educational purposes only. In all other cases, no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without either the prior written permission of the Publishers or a licence permitting restricted copying in the United Kingdom issued by the Copyright Licensing Agency Ltd., Barnard's Inn, 86 Fetter Lane, London EC4A 1EN. This book may not be lent, resold, hired out or otherwise disposed of by way of trade in any form of binding or cover other than that in which it is published, without the prior consent of the Publishers.

All trademarks used herein are the property of their respective owners. The use of any trademark in this text does not vest in the author or publisher any trademark ownership rights in such trademarks, nor does the use of such trademarks imply any affiliation with or endorsement of this book by such owners.

Contains public sector information licensed under the Open Government Licence (OGL) v3.0.
<http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>.

Contains Parliamentary information licensed under the Open Parliament Licence (OPL) v3.0.
<http://www.parliament.uk/site-information/copyright/open-parliament-licence/>.

The screenshots in this book are reprinted by permission of Microsoft Corporation.

Pearson Education is not responsible for the content of third-party internet sites.

Contents

Chapters	Pages
Guideline Answers to Questions for Review and Questions for Discussion	4
Chapter 1 The finance function	5
Chapter 2 Capital markets, market efficiency and ratio analysis	11
Chapter 3 Short-term finance and the management of working capital	18
Chapter 4 Long-term finance: equity finance	26
Chapter 5 Long-term finance: debt finance, hybrid finance and leasing	31
Chapter 6 An overview of investment appraisal methods	39
Chapter 7 Investment appraisal: applications and risk	52
Chapter 8 Portfolio theory and the capital asset pricing model	64
Chapter 9 The cost of capital and capital structure	70
Chapter 10 Dividend policy	77
Chapter 11 Mergers and takeovers	82
Chapter 12 Risk management	91

**GUIDELINE ANSWERS
TO
QUESTIONS FOR REVIEW
AND
QUESTIONS FOR DISCUSSION**

THE FINANCE FUNCTION

Questions for review

Question 1

The definition of wealth is not straightforward, but one method is to consider the returns that investors expect in becoming shareholders. Such returns will be in the form of dividends and any capital gain made on selling the shares, i.e. the returns will be either revenue or capital in nature. The objective of maximising shareholder wealth then becomes the objective of maximising these returns to the shareholder, i.e. maximising the value of dividends paid to shareholders over time, before shareholders receive any gains made on disposal.

Since investors have a required return, which is the opportunity cost of investing in a given company rather than investing elsewhere, future cash flows will need to be discounted. If disposal of the security is distant, we can ignore it, recognising that discounted distant returns are less valuable than those received in the near future. Maximisation of shareholder wealth then becomes maximisation of the present value of the stream of future dividends, and as Gordon and others have shown, the present value of future dividends can be equated to the current ex-dividend share price. Maximisation of the company's share price can therefore be used as a surrogate objective.

Question 2

The maximisation of sales has a number of problems as a measure of maximisation of shareholder wealth:

- Sales are measured in revenue rather than cash terms, so maximising sales may not result in cash inflows for a company.
- Sales may be maximised by offering goods on extended credit terms or by making sales to disreputable companies who may default on payment.
- Sales is an historical measure and not necessarily a guide to expected future cash flows.
- Sales may be maximised but on mispriced goods, leading to losses.
- Sales are in theory maximised when marginal revenue is equal to marginal cost, but how do we know when this has occurred?

Sales maximisation is therefore a subjective measure. In contrast, a company's ordinary share price is an objective yardstick provided by the capital markets. It is independent of the company, forward-looking and reflects an assessment of the company's prospects in both financial and strategic terms.

Question 3

You should discuss the following points:

- Divergence of ownership and control.
- Divergence of goals between principal and agent.
- Asymmetry of information.
- Managers' personal goals may not lead to maximisation of shareholder wealth.
- Conflict between investors and managers in terms of investment decisions and risk.
- Ways in which principals can monitor the activities of agents.
- Agency costs, including monitoring costs, the free-rider problem and contract costs.
- Optimal contracts and other ways of encouraging goal convergence.

Question 4

(a) Agency implies that managers (as agents) maximise their own wealth rather than that of their shareholders (the principals) due to asymmetry of information, differing objectives and divorce of ownership and control. Hence, we need to look for clear signs that agency problems are present.

The first thing to note is that the company has diversified its activities across a range of different industries. This is often justified in the name of reducing risk for shareholders, but shareholders should have already diversified themselves through the portfolios they hold. Companies tend to diversify their activities for managerial motives, such as to increase job security by diversifying unsystematic risk.

Second, the company is maintaining a gearing ratio significantly below the industrial average. This is another example of the agency problem as shareholders prefer higher levels of debt because of the cheaper cost of debt finance and are prepared to accept higher levels of financial risk because they have a diversified portfolio. Managers, however, prefer equity finance as too high a level of financial risk could jeopardise their job security.

A more obvious example of agency problem is that the directors' average salaries are above the industry norm and they have five-year contracts, contravening corporate governance directives such as the Greenbury Report. Managers are likely to become complacent with contracts of such length. There is also a problem with the use and terms of the share options. Given the historical growth rate in share price of 5 per cent, the company's share price five years ago when the directors were given the share options would have been approximately £1.83. For the share price to climb above £2 in less than five years represents a very unchallenging target.

If managers were to exercise the options in a year's time, their gain would be:

$$(2.34 \times (1.05) - 2.00) \times 100,000 = \text{£}45,700$$

This is a big reward for underperforming the sector share price growth rate of 9 per cent.

(b) Given the company appears to have major agency and corporate governance problems, these could be reduced by some of the following actions:

- Get managers to refocus the business in one area of specialisation and realise economies of scale and operation.
- Instruct managers to increase the level of debt finance as the current level of gearing is unlikely to minimise the company's cost of capital.
- Restructure share options so that gains are achievable if managers stretch themselves.
- Monitor managers to ensure they are not maximising their own wealth. The degree of success depends on the monitoring method used and the structure of the company's shareholders as someone must pay for monitoring to take place.
- Reduce salaries back in line with industry averages and tie part of the salary to a performance-related variable (e.g. company share price relative to the sector). Introduce one-year rolling contracts to keep managers on their toes.
- Examine the constitution of the remuneration committee and the backgrounds of non-executive directors, and make appropriate changes where necessary.

Ultimately, the shareholders might want to exercise their right to vote out directors at the AGM if they think that their performance has been poor.

Questions for discussion

Question 1

There are a number of ways of seeking to optimise managerial behaviour in order to encourage goal congruence between shareholders and managers. One way is for shareholders to monitor the actions of managers. There are several potential monitoring devices that could be used, but they will all incur costs in terms of both time and money. These devices include:

- independently audited accounting statements;
- government regulation;
- legal system;
- cash dividends;
- reputation;
- information disseminated as a result of new external financing.

The costs of monitoring must be weighed against the benefits accruing from a decrease in sub-optimal managerial behaviour. One difficulty here is the existence of free riders; investors who allow larger shareholders to incur monitoring costs while reaping the benefits of the corrected management behaviour.

Alternatively, shareholders can try and incorporate clauses into managerial contracts which are intended to reduce the agency problem and encourage goal congruence. Such clauses may formalise constraints, incentives and punishments. In this way, agency costs are reduced. An optimal contract is one which minimises agency costs, while reflecting the needs of individual companies. For example, if monitoring is difficult or costly, the contract could include bonuses for good performance.

It is also possible to discuss here the following points:

- The right of shareholders to appoint and remove directors.
- Incentives (performance-related pay, share options, etc.).
- The right of shareholders to sell their shares in the capital markets.
- Competition in the market for managerial control.

Question 2

There is a difference between short- and long-term objectives. In the short-term, profits and cash flow must be enough to ensure the survival of the company, but owners will want to receive dividends. The need to strike a balance between short-term and long-term objectives could lead to conflicts between objectives even within the objective of maximising shareholder wealth.

Although shareholder wealth maximisation is the primary financial objective, most companies will usually have other objectives as well. In addition to responsibilities to shareholders, companies will have responsibilities to employees, trade payables, suppliers, the government and the general public. The diverse interests of these stakeholders will influence corporate objectives and act as a restraint on the objective of shareholder wealth maximisation. Other corporate objectives could include:

Providing for the welfare of managers

Managers may seek to improve their own personal wealth, status or working conditions. For example, managers may pay themselves high salaries under generous employment contracts, or they may resist a takeover bid because they wish to protect their jobs rather than recommending an attractive bid to shareholders.

Providing for employee welfare

Employees must be paid attractive wages and work under good conditions of employment. In the short-term, providing for employee welfare appears to conflict with the objective of shareholder wealth maximisation, because paying higher wages means that profits will be lower. In the long-term, however, employees who are well-paid and who are satisfied with their working conditions may work more efficiently and effectively, contributing to increased profits. In this case, there is no conflict between the objective of providing for employee welfare and the objective of shareholder wealth maximisation.

Providing for the welfare of society as a whole

Companies have obligations to society as a whole. Many companies spend heavily on measures promoting social welfare, even though this may reduce profitability. Such measures include environmental protection measures, supporting community programmes, and giving to charities. However, failure to take environmental protection measures may lead to their imposition through legislation, and customer buying patterns may be negatively influenced if a company acquires a reputation as uncaring and environmentally irresponsible. Undertaking measures promoting social welfare may, therefore, not be inconsistent with shareholder wealth maximisation.

Question 3

There have been many reports into corporate governance since the seminal Cadbury Committee Report in 1992, including those by Greenbury (1995), Hampel (1997), Turnbull (1999), Higgs (2003), Smith (2003) and Tyson (2003) and, more recently, several reviews by the Financial Reporting Council. The recommendations of these reports and subsequent reviews have been incorporated into the Combined Code on Corporate Governance, or the Corporate Governance Code as it is now known.

The Cadbury Report put forward a number of proposals for increasing board accountability to shareholders. It recommended a greater role for non-executive directors on remuneration committees, a voluntary Code of Best Practice, an improved information flow to shareholders and a strengthening of independence of auditors. The Code of Best Practice required that the board have at least three non-executive directors: that directors' service contracts be not more than three years in duration; and that the chief executive officer and the chairman be different post-holders.

Many commentators, in being critical of effectiveness of the Cadbury Report, focused on the market-based nature of the proposed self-regulation system and the failure of this system to involve shareholders in the governance process. Others argued that, while the Cadbury Report concentrated on monitoring, checking and controlling board activities, it failed to address the question of future company strategy.

Further measures to tackle corporate governance problems were introduced following the subsequent reports by Greenbury, Hampel, Turnbull, Higgs, Smith and Tyson. The integration of these recommendations into the Corporate Governance Code (overseen by the London Stock Exchange and the UK Listing Authority) has certainly had a favourable effect on the effectiveness of corporate governance in the UK. There is still some way to go before corporate governance problems are a thing of the past, however, as shown by the failure of Enron in 2002. The bankruptcy of Lehman Brothers in 2008, the resulting financial crisis and subsequent issues surrounding the governance of some of the UK's major banking institutions ensure that corporate governance and the problem of agency remain an important and topical issue.

Question 4

The failures of Enron and WorldCom had a dramatic effect on both UK and US corporate governance, with both governments and investors taking corporate governance more seriously. However, historically there have been and continue to be significant differences between the approaches of the two countries to the governance problem. Traditionally, the UK system has been based on a series of best practice guidelines that have been progressively developed over time and integrated into the UK Corporate Governance Code. These guidelines are non-statutory and are not enshrined in law, but require compliance (or an explanation, if otherwise) from self-regulatory organisations such as the London Stock Exchange. The current version of Corporate Governance Code, introduced in 2010, is now overseen by the Financial Reporting Council (FRC). It stands alongside the Stewardship Code, also introduced in 2010 and specifically directed towards institutional investors.

In contrast to this, the US system is far more legalistic in nature, with the Securities and Exchange Commission (SEC) playing a principal role in the regulation process. The regulatory framework was significantly bolstered after Enron (2002) with the introduction of the Sarbanes-Oxley Act. This takes a regulatory and legislative approach to corporate governance and disclosure of financial and other information, and contrasts with the UK best practice approach,

regarded by many as more flexible and effective. The Sarbanes-Oxley Act introduced sweeping corporate governance reforms, requiring personal certifications of disclosure from both chief executive and financial officers. Their written statements must certify that the report fully complies with SEC requirements aim to ensure that a company fairly presents the results of both the operational and financial condition of the company. Significant criminal penalties exist for false certification.

The Act also effectively requires all companies listed in the US to have fully independent audit committees. It prohibits auditors from providing an audit client with any non-audit services, apart from a small number of exceptions. The compliance burden is far more onerous than faced by UK companies and only time will tell if this more legalistic approach to corporate governance is successful.