

Second Edition



PEARSON

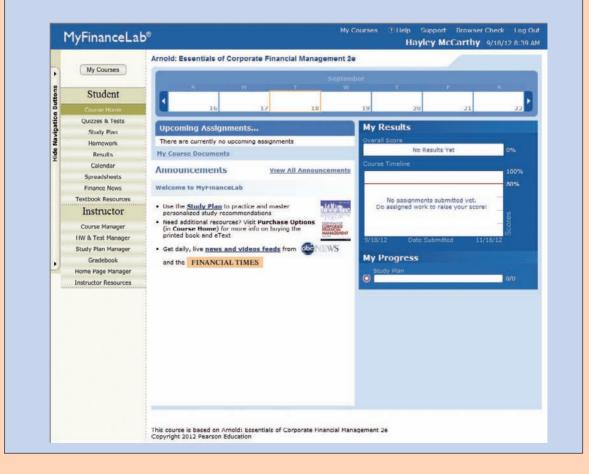
Essentials of CORPORATE FINANCIAL MANAGEMENT Essentials of Corporate Financial Management Online

A wide range of supporting resources are available at:

MyFinanceLab

Visit www.myfinancelab.com to create your own personal account and access the following learning resources:

- A dynamic eText of the book that you can search, bookmark, annotate and highlight as you please
- Self-assessment questions that identify your strengths before recommending a personalised study plan that points you to the resources which can help you achieve a better grade
- A 'finance in the news' blog with accompanying podcasts
- FT articles keeping you up to date with key business concepts discussed in the book
- Flashcards to test your understanding of key terms
- Links to relevant sites on the Web





BSc (Econ), PhD

Essentials of CORPORATE FINANCIAL MANAGEMENT

Second edition

er niet ber ber het niet der ber bei

ER NEED HARD

NAME AND ADDRESS.

#

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 Essex CM20 2JE England

and Associated Companies throughout the world

Visit us on the World Wide Web at: www.pearsoned.com/uk

First published 2007 Second edition published 2013

© Pearson Education Limited 2007, 2013

The right of Glen Arnold to be identified as author of this Work has been asserted by him in accordance with the Copyright, Designs and Patents Act 1988.

All rights reserved. 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 publisher or a licence permitting restricted copying in the United Kingdom issued by the Copyright Licensing Agency Ltd, Saffron House, 6–10 Kirby Street, London EC1N 8TS.

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

The *Financial Times*. With a worldwide network of highly respected journalists, The *Financial Times* provides global business news, insightful opinion and expert analysis of business, finance and politics. With over 500 journalists reporting from 50 countries worldwide, our in-depth coverage of international news is objectively reported and analysed from an independent, global perspective. To find out more, visit www.ft.com/pearsonoffer.

ISBN: 978-0-273-75887-7 (print) 978-0-273-75894-5 (PDF) 978-0-273-75896-9 (ePub) 978-0-273-78063-2 (eText)

British Library Cataloguing-in-Publication Data

A catalogue record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data A catalog record for this book is available from the Library of Congress

10 9 8 7 6 5 4 3 2 1 16 15 14 13 12

Typeset in 9.5/11 Sabon by 30 Printed and bound by Rotolito Lombarda, Italy

NOTE THAT ANY PAGE CROSS REFERENCES REFER TO THE PRINT EDITION

To Terry Lucey, who encouraged and inspired me to write books

This page intentionally left blank

Brief contents

	Guided tour	xv
	Guided tour of MyFinanceLab	xvii
	Preface	xix
	Acknowledgements	xxi
1	The financial world	1
2	Project appraisal: Net present value and internal rate of return	37
3	Practical project appraisal	73
4	Risk and project appraisal	122
5	Portfolio theory and the capital asset pricing model	156
6	Equity capital	201
7	Debt finance	250
8	The cost of capital	296
9	Value-based management	320
10	Valuing shares and companies	365
11	Capital structure	400
12	Dividend policy	435
	Appendices	459
I.	Future value of £1 at compound interest	460
Ш	Present value of £1 at compound interest	461
Ш	Present value of an annuity of £1 at compound interest	462
IV	Future value of an annuity of £1 at compound interest	463
V	Areas under the standardised normal distribution	464
VI	Answers to the mathematical tools exercises in Chapter 2, Appendix 2.1	465
VII	Solutions to selected questions and problems	466
	Glossary	486
	Ribliography	521

Bibliography	521
Index	531

This page intentionally left blank

Contents

	Guided tour	xv
	Guided tour of MyFinanceLab	xvii
	Preface	xix
	Acknowledgements	xxi
1	The financial world	1
	Learning outcomes	1
	Introduction	2
	What is corporate finance?	2
	A simple model of the interactions between the financial manager and the capital markets	4
	The flow of funds and financial intermediation	7
	The financial system	11
	The objective of the firm	18
	Ownership and control	29
	Concluding comments	32
	Key points and concepts	32 34
	Further reading Websites	34 34
	Case study recommendations	35
	Self-review questions	35
	Questions and problems	35
	Assignments	36
2	Project appraisal: Net present value and internal rate of return	37
-	Learning outcomes	37
	Introduction	38
	Value creation and corporate investment	39
	Net present value and internal rate of return	42
	Concluding comments	61
	Key points and concepts	61
	Appendix 2.1 Mathematical tools for finance	62
	Mathematical tools exercises	68
	Websites	69
	Case study recommendations	69
	Self-review questions	69

	Questions and problems Assignments	70 72
3	Practical project appraisal	73
	Learning outcomes	73
	Introduction	74
	Quality of information Are profit calculations useful for estimating project viability?	76 76
	Evidence on the employment of appraisal techniques	87
	Payback	88
	Accounting rate of return	91
	Internal rate of return: reasons for continued popularity	93
	The managerial art of investment appraisal	94
	The investment process Capital rationing	96 101
	Taxation and investment appraisal	101
	Inflation	106
	Concluding comments	111
	Key points and concepts	111
	Further reading	113
	Case study recommendations Self-review questions	113 114
	Quick numerical questions	114
	Questions and problems	115
	Assignments	121
4	Risk and project appraisal	122
	Learning outcomes	122
	Introduction	123
	What is risk?	123
	Adjusting for risk through the discount rate Sensitivity analysis	126 127
	Scenario analysis	127
	Probability analysis	132
	The risk of insolvency	142
	Problems in using probability analysis	144
	Evidence of risk analysis in practice	145
	Real options (managerial options) Concluding comments	145 150
	Key points and concepts	150
	Further reading	151
	Case study recommendations	151
	Self-review questions	152
	Quick numerical questions	152 153
	Questions and problems Assignments	155
5	Portfolio theory and the capital asset pricing model	156
	Learning outcomes	156
	Introduction	157
	Holding period returns	158
	Expected return and standard deviation for shares	160
	Combinations of investments Portfolio expected return and standard deviation	163 171
	Diversification	171
	Some fundamental ideas and problems	173
	Systematic risk	176
	The Security Market Line (SML)	178
	Risk premiums across the world	179
	Estimating some expected returns	181

201

Applications of the CAPM183Accepted theory and controversial theory184Technical problems with the CAPM184Does the CAPM work in practice?189Factor models192Fundamental beta192Concluding comments193Key points and concepts195
Technical problems with the CAPM184Does the CAPM work in practice?189Factor models192Fundamental beta192Concluding comments193
Does the CAPM work in practice?189Factor models192Fundamental beta192Concluding comments193
Factor models192Fundamental beta192Concluding comments193
Fundamental beta192Concluding comments193
Concluding comments 193
Key points and concepts 195
Further reading 196
Case study recommendations 196
Self-review questions 197
Quick numerical questions 197
Questions and problems 198
Assignments 200

6 Equity capital

Learning outcomes	201
Introduction	202
What is equity capital?	203
Preference shares	206
The London Stock Exchange	208
Floating on the Main Market (Official List)	208
Methods of issue	213
The Alternative Investment Market (AIM)	217
techMARK	218
PLUS-quoted shares	218
The ownership of UK quoted shares	219
Rights issues	220
Other equity issues	225
Equity finance for unquoted firms	227
Disillusionment and dissatisfaction with quotation	234
The efficient market hypothesis	234
Understanding the figures in the financial pages	240
Concluding comments	243
Key points and concepts	244
Further reading	246
Websites	246
Case study recommendations	247
Self-review questions	247
Questions and problems	248
Assignments	249

7Debt finance250Learning outcomes250

Introduction	251
Some fundamental features of debt finance	251
Bonds	251
Bank borrowing	254
Syndicated loans	260
Credit rating	260
Mezzanine debt and high-yield (junk) bonds	263
Convertible bonds	265
Valuing bonds	266
Trade credit	269
Factoring	272
Hire purchase	275
Leasing	276
International sources of debt finance	278
Medium-term notes	282
Commercial paper	283

xi

The term structure of interest rates	283
Is it better to borrow long or short?	286
Concluding comments	289
Key points and concepts	289
Further reading	291
Websites	291
Case study recommendations	291
Self-review questions	292
Quick numerical questions	292
Questions and problems	293
Assignments	295

296

320

8 The cost of capital

Introduction 2	297
A word of warning 2	297
The required rate of return 2	297
The weighted average cost of capital (WACC) 2	299
The cost of equity capital 3	304
The cost of retained earnings 3	306
The cost of debt capital 3	306
The cost of preference share capital 3	308
Hybrid securities 3	309
Calculating the weights 3	309
Applying the WACC to projects and SBUs 3	310
Empirical evidence of corporate practice 3	310
How large is the equity risk premium? 3	314
Some thoughts on the cost of capital 3	314
Concluding comments 3	315
Key points and concepts 3	315
Further reading 3	316
Websites 3	317
Case study recommendations 3	317
	317
Quick numerical questions3	317
	318
Assignments 3	319

9 Value-based management

Learning outcomes 320 Introduction 321 The pervasiveness of the value approach 321 Confusing objectives 322 Three steps of value 323 Earning-based management 324 How a business creates value 330 Using value principles in strategic business unit management 337 The impact of value principles on corporate strategy 339 Value-creation metrics 341 Using cash flow to measure value 341 Shareholder value analysis 346 Economic profit 349 Economic value added (EVA®) 353 Total shareholder return (TSR) 354 Market value added (MVA) 355 Concluding comments 356 Key points and concepts 357 Further reading 359 Website 360

Contents xiii

365

360 360 361 361 364
364

10 Valuing shares and companies

Learning outcomes	365
Introduction	366
The two skills	366
Valuation using net asset value (NAV)	367
Valuation using income-flow models	370
Dividend valuation models	370
The price–earnings ratio (PER) model	378
Valuation using cash flow	382
Valuation using owner earnings	385
EBITDA	388
Valuing unquoted shares	390
Managerial control and valuation	391
Concluding comments	392
Key points and concepts	393
Further reading	394
Websites	395
Case study recommendations	395
Self-review questions	395
Quick numerical questions	396
Questions and problems	396
Assignments	399

Capital structure 11

400

Learning outcomes	400
Introduction	401
Debt finance is cheaper and riskier (for the company)	402
What do we mean by 'gearing'?	402
The effect of gearing	407
The value of the firm and the cost of capital	411
Does the cost of capital (WACC) decrease with higher debt levels?	412
Modigliani and Miller's argument in a world with no taxes	414
The assumptions	414
The capital structure decision in a world with tax	417
Additional considerations	419
Some further thoughts on debt finance	427
Concluding comments	428
Key points and concepts	430
Further reading	431
Video presentations	432
Case study recommendations	432
Self-review questions	432
Quick numerical questions	433
Questions and problems	433
Assignments	434

125

Dividend policy	435
Learning outcomes	435
Introduction	436
Defining the problem	436
	438
Dividends as a residual	440
Clientele effects	442
Taxation	444
	Learning outcomes Introduction Defining the problem Miller and Modigliani's dividend irrelevancy proposition Dividends as a residual Clientele effects

Dividends as conveyors of information	444
Resolution of uncertainty	446
Owner control (agency theory)	447
Scrip dividends	449
Share buy-backs and special dividends	449
A round-up of the arguments	451
Concluding comments	453
Key points and concepts	454
Further reading	454
Video presentations	455
Case study recommendations	455
Self-review questions	455
Questions and problems	456
Assignment	458

	Appendices	459
Т	Future value of $\pounds 1$ at compound interest	460
Ш	Present value of £1 at compound interest	461
Ш	Present value of an annuity of £1 at compound interest	462
IV	Future value of an annuity of £1 at compound interest	463
V	Areas under the standardised normal distribution	464
VI	Answers to the mathematical tools exercises in Chapter 2, Appendix 2.1	465
VII	Solutions to selected questions and problems	466
	Glossary	486
	Bibliography	521
	Index	531

Essentials of Corporate Financial Management Online

A wide range of supporting resources are available at:

MyFinanceLab

Visit www.myfinancelab.com to create your own personal account and access the following learning resources:

Resources for students

- A dynamic eText of the book that you can search, bookmark, annotate and highlight as you please
- Self-assessment questions that identify your strengths before recommending a personalised study plan that points you to the resources which can help you achieve a better grade
- A 'finance in the news' blog with accompanying podcasts
- FT articles keeping you up to date with key business concepts discussed in the book
- Flashcards to test your understanding of key terms
- Links to relevant sites on the Web

Resources for instructors

- Complete, downloadable Instructor's Manual
- PowerPoint slides that can be downloaded and used for presentations

For more information, please contact your local Pearson Education sales representative or visit www.myfinancelab.com

Guided tour

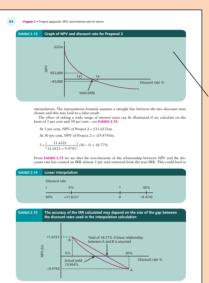


Learning

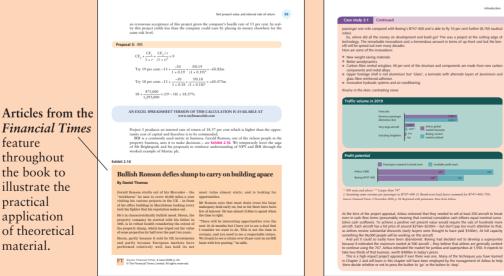
outcomes introduce topics covered and summarise what you should have learnt by the end of the chapter.



- describe and explain at least three potential problems that can arise with internal rate of return in specific circumstances.



Exhibits provide explanations and demonstrations of mathematical concepts and techniques.



Case studies from a variety of sources are used to demonstrate arguments in the chapter and provide a different dimension to an issue.

75

Financial Times feature throughout the book to illustrate the practical application of theoretical material.

Further reading and websites sections point you to

resources you can use to expand your knowledge.

the answers

Appendix VII.

appear in

Instem of increase, or any emangerial discipline, should get into the habit of erading the Financial Tables of the second second

nanagerial discipline, should get into the habit of reading

Websites

Further reading

nts of finance

org arers <u>www.abi.org.uk</u> t Teust Communist w tion <u>www.bba.ore.</u>uk

iompanies House www.companieshouse.gov.uk
inance and Leasing Association www.fla.org.uk
inancial Times www.FLcom
nvestment Management Association www.investment
ands.org.uk
ondon Stock Exchange www.londonstockexchange.
om
lational Association of Pension Funds www.napf.
o.uk
VYSE Liffe www.euronext.com, also https://global
erivatives.nvx.com
ecurities Industry and Financial Markets Association
rww.sifma.org
K Corporate Governance Code <u>www.frc.org.uk</u>

xhibit 3.18 Inflation adjustment methods used for investment appraisal by UK firms					
		Small %	Medium-sized %	Large %	Composite %
Specify cash f apply a real r	low in constant prices and ate of return	47	29	45	42
	expressed in inflated price counted at the market rate of return	18	42	55	39
Considered at	t risk analysis or sensitivity stage	21	13	16	17
No adjustmer	it	18	21	3	13
Other		0	0	3	1

Concluding comments

...apper is that the typ, ...deal problems presented as ...deal problems presented as ...deal problems. Manage of practical world of business. Manage practical world of business. Manage proceeding and the second second second proceeding and the second second second research or problems of the second second or provide and second second second second out provide and second The key point I would like will spend a great deal of This is necessary because However, readers should

Profit is a poor substitute for cash flow. For example, working capital adjustments modify the profit figures for NPV analysis, depreciation is not a cash flow and should

- project is implemented and the cash int opportunity costs associated with incidental effects, that is, cash fir-red along with the obvious direct eff of the decision to proceed are clea (cost and are irrelevant; interest should ow and including it as an element in the o

Self-review questions _ allow you Self-review questions Questions and problems There because a product of prod to test your understanding tion level) Cashion International are considering a project that is susceptible to risk. A and apply your knowledge. Answers to the questions can The future cost of modernising the factory. The £100,000 spent two months ago on a market survey investigation the demand for the demand The Classic queue constraints of the spectra of the s be found in crap value at the end of the three-yea rerable at the end. The discount rate i Appendix VII nt rate. the break-even point and the perat the end of ed ar f.m. compared and the expenditure controls and posts into managers will be drafted in from statism for a period of year. The transformation of a period protocol and when are they very important? The Explain why have due do not rationing occur. Why next statism text the incom-CEL SPREADSHEET VERSION OF THESE CALCULATIONS IS AVAILABLE TO LECTURERS VIA www.pearsoned.co.uk/armold.or.www.msfirmerclub.com the book. rial stock 12 Explain the alternative methods of dealing v inflation in project appraisal. Quick numerical questions Quick numerical analysis (expected return questions 2 Comment on the quality of risk assessment for major investments within your firm and recommendations sections in your report. appear at the end of some MyFinanceLab Visit www.myfinancelab.com to complete your personalised study plan for this chapter, and to access podcasts, Excel spreadsheet solutions, FT articles, and much more. chapters - again outset; no tax or inflation;

Concluding comments round up the chapter themes.

Key points and concepts are at the end of each chapter and give an outline of the essential concepts covered. New concepts, jargon and equations are summarised for easy reference.

Ouestions and problems vary in difficulty. Some answers are provided in Appendix VII, others are reserved for the Instructor's Manual, thus allowing you to be assessed.

Assignments are projects requiring you to investigate real-world practice in a firm and relate this to the concepts and techniques learnt in the chapter.

Guided tour of MyFinanceLab

MyFinanceLab is an online assessment and revision tool that puts you in control of your learning through a suite of study and practice tools tied to the online eText.

Why should I use MyFinanceLab?

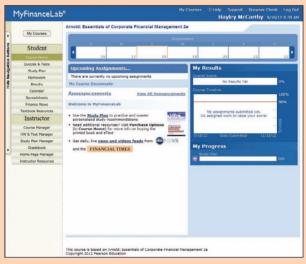
With 60,000 annual users doing 400,000 assignments, **MyFinanceLab** is the most effective and reliable online learning solution available for finance.

How do I use MyFinanceLab?

The Course Home page is where you can view announcements from your instructor and see an overview of your personal progress.

View the Calendar to see the dates for online homework, quizzes and tests that your instructor has set for you.

Your lecturer may have chosen **MyFinanceLab** to provide online homework, quizzes and tests. Check here to access the homework that has been set for you.



Course Home Page

Practice tests for each chapter of the textbook enable you to check your understanding and identify the areas in which you need to do further work. Lecturers can customise and assign the practice tests or students can complete the tests on their own.

Keep track of your results in your own gradebook.

MyFinanceLab"	Support Log Out 11W Havley McCarthy MUNITIES
est: Chapter 1-8	Oversite
Ren Genetium: 3 pt Ren 10 p	n - Balls consists <u>37</u>
Does as intermediary carry out the following functions?	
A Robicing the cost of investigations into the visibility of an investment.	
B. Acting as a middleman between investors	
C. Issaing financial securities on behalf of investors.	
D. Decreasing risk by transforming the Bolikood of default through the offering of intermediate sec	caties.
Club to select your answer(c).	
	Denne Ret Labort

Practice Test

Work through the questions in your personalised Study Plan at your own pace. Because the Study Plan is tailored to each student, you will be able to study more efficiently by only reviewing areas where you still need practice. The Study Plan also saves your results, helping you see at a glance exactly which topics you need to review.

M	yFinanceLab	n Ny Courses 17 Indy Dagweit Revenue Clock Lag Out Hayley McCarthy 101412 300 PM
	My Darters	knuk familika (Familika (Familika)) Study Plan Contents Laward die V
í.	Student	Treasured your picture and early measures payments to providing and materiang Disate Plan participat
	Course more	(b) Fig find and what you read to study, more an the following: <u>Colorest Tests</u> . <u>Remark Tests</u> .
	Quecosi & Testa	D Practice the guardiana in the sections only result is study (\$1)
	Manager	There are non-set of government of governments are presented by the set of th
	Rends	These Mill of Show What I Need II Shole
	Reveal dents	Mudy Plan Tankanta
	Progress Specia	bon family and
	Torchard Resources	FCR. 21 Project appreciation free present value and internal rate of inturn
	Instructor	+ Cb. 3. Plastical protect supressed
	Course Manager	FOL 6 Not well proved approved
	Int & Test Haraper	9 Ch. 1: Purtfuls theory and capital alsoid priving model
	Study Han Hartagel	FO. 1 Tash sets
	Grandwards	P.O. 1: Deb Nerve
	itome Page Harogen	P Ch. 8: The cost of capital
	Indructor Possaries	P.D. 1: Vela lavel management
		P CA, 12h Yalang ahara and companies
		P.O. TJ: Optical ansatza
		Oh. CD. Doubled palloy
		Sector Sector
		Data mada tha presei tha anda alea
		96
		This species is leaved or Annote Secretaria of Corporate Principal Parlagement 2a Corputed ID12 Persons Education

Study Plan

Additional instruction is provided in the form of detailed step-by-step solutions to worked exercises. The figures in many of the exercises in **MyFinanceLab** are generated algorithmically, containing different values each time they are used. This means that you can practise individual concepts as often as you like.

There is also a link to the eText from every question in the Study Plan, so you can easily review and master the content.

View supporting multimedia resources such as links to the eText and Glossary Flashcards.

MyFinanceL	ab"		Havley McCarthy scores in:
1 Holding period	emuten I		Derve
		(0b.co)	Exercise T_{a} , h (SP, G2) 0 -served: 1 that h is consistent $ S_{a}^{2} $ the real of the building period of Np.
What is your as	and a	Road your answer to our decision place.)	
	4	The mean of the solution of a given for call $(1,2)$ was held for syster and then solid for (1.3). The solution of the soluti	

Help Me Solve This

Lecturer training and support

Our dedicated team of Technology Specialists offer personalised training and support for **MyFinanceLab**, ensuring that you can maximise the benefits of **MyFinanceLab**. To make contact with your Technology Specialist, please email feedback-cw@pearson.com

For a visual walkthrough of how to make the most of **MyFinanceLab**, visit www.myfinancelab.com To find details of your local sales representatives go to www.pearsoned.co.uk/replocator



If there is one lesson that the financial crisis has taught us, it is that there is good financial practice and there is bad financial practice. So many of the basic tenets of finance were forgotten (or perhaps, were never learnt) by so many highly paid bankers in the run up to the crisis. Important financial issues were very badly handled, such as the adopting of sensible levels of debt, or simply being aware of risk levels, or checking the validity of the assumptions made when valuing a financial security.

This book has been updated to emphasise even more the basic lessons from hundreds of years of finance practice and theory, so that you might be more aware of the difference between good practice and what is plain stupid; so that you can avoid the errors made by countless business leaders.

This is an introductory book and so assumes that the reader has no prior knowledge of finance. Designed to introduce you to the core topics and key concepts of finance, it also allows you to gain an understanding of lively debates within the field, where disagreements, alternative perspectives or placement of emphasis lead to discussion, rather than dulled acceptance.

It is important not to present a set of theories as though they are *the* truth, and there is only one way of running a business. Real life is too nuanced for that – and able MBA and undergraduates know it. Often there is a need for the assimilation of arguments from two sides of a debate, thinking them through, and arriving at one's own conclusions. Room for debate occurs across the field of finance: from whether to employ beta in risk adjustment, to the advantage of using payback as well as net present value for assessing investment projects; from whether dividend policy is irrelevant to shareholder wealth, to the practical usefulness of shareholder value analysis.

Despite assuming no prior knowledge of finance, I hope the readers of the book will be empowered to enter into discussion about vital practical issues about the firm, drawing on the frameworks of finance. It is designed to achieve this by building knowledge in a series of easily surmountable steps, to lead the student as painlessly as possible to a high level of competence. There is heavy emphasis relating the concepts to real business, with plenty of up-to-date examples, mostly drawn from extracts taken from the *Financial Times*. As well as appealing to students studying a one-off course in finance within a more general business studies degree this book will, I hope, provide the foundation elements needed by those students who choose to go on to study more advanced finance.

Glen Arnold, Summer 2012

The first edition was well received in universities around the world, but there is always room for improvement. We invited a number of lecturers and professors who had adopted the book (and a few who had not) to give us their views on how it could be made even more useful for students. They were very generous with their time, and a great deal of the credit for this new improved edition must go to them for providing their insights. Some of the changes:

- While the underlying principles of finance have not altered since the publication of the first edition, a lot of the detail has, such as the workings of some financial markets. These are explained.
- Illustrations from recent corporate events of the practical use of financial knowledge, many of which draw on *Financial Times* articles.
- Recommended case studies, drawn from the Harvard Business School website, are listed in each chapter.
- Vast amounts of new statistics on the financial markets and instruments, ranging from mergers to the default rate on corporate bonds.
- Making use of the latest evidence on the extra return investors require to invest in risky shares compared with a risk-free government bond.
- EBITDA. A cautionary discussion of EBITDA is used to warn of the dangers of falling into the erroneous use of this measure, resulting in over-optimistic valuations.
- Revolving credit facilities are introduced.
- The jargon-busting glossary has been extended and updated.
- The latest literature on the theory and practical use of finance is listed.
- New recommended websites.

Acknowledgements

My thanks to the following for their help in the preparation of this book:

The international panel of reviewers for the major contribution they made to providing realism, balance and accuracy:

Heather Tarbert, Glasgow Caledonian University Arif Khurshed, Manchester Business School, Manchester University Morten Helbak, Nord-Trøndelag University College, Norway Ronald Huisman, RSM Erasmus University Rotterdam Gary Shea, St Andrews University Poul Wolffsen, Roskilde University, Denmark Javed Hussain, UCE Birmingham Kadom Shubber, University of Westminster Christopher Coles, University of Glasgow Kevin Boakes, Kingston University

The 96 finance directors who responded to a financial survey, for contributing to our understanding of modern financial practice.

My personal assistant, Susan Henton, whose knowledge, skills and intelligence are a great blessing to me. Also the publishing team at Pearson Education, particularly Philippa Fiszzon, Katie Rowland, Gemma Papageorgiou, Kate Brewin and Jenny Oates for their patience, professionalism and faith.

The *Financial Times, Investors Chronicle*, the London Stock Exchange and all those organisations and individuals acknowledged in the text, for allowing the use of their material.

Publisher's acknowledgements

We are grateful to the following for permission to reproduce copyright material:

Figures

Figure 5.33 from Global Investment Returns Yearbook 2011, Credit Suisse Research Institute (Dimson, E., Marsh, P. and Staunton, M. 2011) Copyright © Elroy Dimson, Paul Marsh and Mike Staunton, E. Dimson, P. Marsh and M. Staunton; Figure 5.34 from Fernández, P. Aguirreamaloa, J. and L.C. Avendaňo (2011) Market risk premium used in 56 countries in 2011: a survey with 6,014 answers. Working paper published on SSRN. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1822182 A report on the RPs used by academics and business people, reproduced with permission; Figures 5.39, 5.40, 5.47 from Fernández, P (2009) Betas used by professors: A survey with 2,500 answers. Working paper published on SSRN http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1407464 Evidence on what professors use around the world, but also a serious challenge to those who continue to use CAPM-beta, reproduced with permission; Figure 5.46 from Financial Analysts Journal, Benchmarks as limits to arbitrage: understanding the low-volatility anomaly, 67 (1), pp. 40-54 (Baker, M., Bradley, B. and Wurgler, J. 2011), Copyright 2011, CFA Institute. Reproduced and republished with permission from CFA Institute. All rights reserved.; Figure 6.5 from Office for National Statistics, Source: Office for National Statistics licensed under the Open Government Licence v.1.0.; Figure on p. 241 from London share service extracts, aerospace and defence, 3 October 2011 and 5 October 2011, Financial Times, 05/10/2011, © The Financial Times Limited. All Rights Reserved.; Figure on p. 243 from FTSE actuaries share indices, Financial Times, 05/10/2011, © The Financial Times Limited. All Rights Reserved.; Figures on p. 284 from http://markets.ft.com/research/Markets/Bonds, 28/10/2011, © The Financial Times Limited. All Rights Reserved.

Tables

Table 6.17 from FTSE actuaries share indices, *Financial Times*, 05/10/2011, © The Financial Times Limited. All Rights Reserved.; Table 7.6 from Fitch Ratings Global Corporate Finance 2010 Transition and Default Study, http://www.fitchratings.com/creditdesk/reports/report_frame.cfm?rpt_id=606665, reproduced with permission; Table on p. 282 from Bonds – Global investment grade, *Financial Times*, 26/10/2011, © The Financial Times Limited. All Rights Reserved.; Table on p. 367 from Pearson plc, Annual Report, 2010, reproduced with permission. Tables on pp. 311 and 312 © John Wiley & Sons Ltd (UK), Wiley-Blackwell.

Text

Exhibit 1.1 from Ophir set for \$1 bn London flotation, Financial Times, 08/06/2011 (Pfeifer Sylvia), © The Financial Times Limited. All Rights Reserved.; Exhibit 1.3 from Finance directors step on to centre stage, Financial Times, 15/05/2011 (Smith, Alison and Plimmer, Gill), © The Financial Times Limited. All Rights Reserved.; Exhibit 1.8 from Cap in hand, France's most respected newspaper teeters on the edge of bankruptcy The Economist, 10/06/2010, © The Economist Newspapers Limited, London, 10/06/2010; Exhibit 1.9 from EasyJet founder guits board of airline Financial Times, 14/05/2010 (Clark, Pilita), © The Financial Times Limited. All Rights Reserved.; Exhibit 1.10 from Partners hold key to John Lewis success, Financial Times, 22/01/2011 (Felsted, Andrea), © The Financial Times Limited. All Rights Reserved.; Exhibit 1.11 from European drugs groups do most for poor, Financial Times, 21/06/2010 (Jack, Andrew), © The Financial Times Limited. All Rights Reserved.; Exhibit 1.12 from Forget how the crow flies Financial Times Magazine, 17/01/2004 (Kay, John); Exhibit 1.15 from Satyam sums up Asian governance failings, Financial Times, 13/10/2010 (Brown, Kevin), © The Financial Times Limited. All Rights Reserved.; Exhibit 2.18 from How not to measure a business, Financial Times, 22/06/2011 (Kay, John), © The Financial Times Limited. All Rights Reserved.; Exhibit 6.9 from Pendragon rights issue falters on turmoil, Financial Times, 18/08/2011, p. 16 (Plimmer, Gill), © The Financial Times Limited. All Rights Reserved.; Exhibit 6.10 from CapCo poised to redo Covent Garden estate, Financial Times, 05/05/2011, p. 20 (Thomas, Daniel), © The Financial Times Limited. All Rights Reserved.; Exhibit 6.11 from Business angels that are devils in disguise, Financial Times, 17/09/2011, p. 34 (Moules, Jonathan), © The Financial Times Limited. All Rights Reserved.; Exhibit 7.1 from National Express in debt talks, Financial Times, 17/06/2009, p. 15 (Plimmer, Gill); Exhibit 7.5 from Downgrade blow knocks wind out of Portugal, Financial Times, 07/07/2011, p. 6 (Wise, Peter, Spiegel, Peter and Hall, Ben), © The Financial Times Limited. All Rights Reserved.; Exhibit 7.7 from Hunger for funds spurs mezzanine

debt revival, Financial Times, 17/08/2011, p. 30 (Schafer, Daniel and Wigglesworth, Robin), © The Financial Times Limited. All Rights Reserved.; Exhibit 7.10 from Banks' invoice financing gets cool reception, Financial Times, 04/06/2010, p. 4 (Gutherie, Jonathan), © The Financial Times Limited. All Rights Reserved.; Exhibit 7.14 from Retailers resist lease obligation plans, Financial Times, 24/02/2011, p. 25 (Jones, Adam), © The Financial Times Limited. All Rights Reserved.; Ouote on page 339 from Warren Buffet Berkshire Hathaway 1984 Annual Report © Warren Buffet. Reproduced with the permission of the author; Exhibit 9.11 from Berkeley shares leap on £1.7bn cash return plan, Financial Times, 24/06/2011, p. 16 (Gray, Alistair and Hammond, Ed), © The Financial Times Limited. All Rights Reserved.; Exhibit 11.3 from Lex Column: Goodbye gearing Financial Times, 09/10/1995, © The Financial Times Limited. All Rights Reserved.; Exhibit 11.8 from Corporate Finance: Rivers of riches, Financial Times, 22/05/2011 (Milne, Richard and Sakoui, Anousha), © The Financial Times Limited. All Rights Reserved.; Exhibit 11.15 from EMI's battle with banks over debt makes artists wary of signing up, Financial Times, 25/02/2010, p. 1 (Edgecliffe-Johnson, Andrew and Davoudi, Salamander); Quotes on page 436, 12.3 from Warren Buffet A letter to shareholders attached to the Berkshire Hathaway 1984 Annual Report © Warren Buffet. Reproduced with the permission of the author; Exhibit 12.1 from UK dividends set to rise by 12% plus Financial Times, 11/10/2011, p. 20 (Smith, Alison), © The Financial Times Limited. All Rights Reserved.; Exhibit 12.2 from Founder demands special EasyJet pay-out, Financial Times, 11/05/2011, p. 20 (Odell, Mark), © The Financial Times Limited. All Rights Reserved.; Quotes page 436, 12.3 from Warren Buffet A letter to shareholders attached to the Berkshire Hathaway 1984 Annual Report © Warren Buffet. Reproduced with the permission of the author; Exhibit 12.7 from Lex column: Dividend theory, Financial Times, 05/04/2010, p. 16; Exhibit 12.9 from Companies face difficult calls on returning cash, Financial Times, 17/03/2011, p. 21 (Smith, Alison), © The Financial Times Limited. All Rights Reserved.

The Financial Times

Case Study on page 74 from Will it fly? Airbus's superjumbo: Building the superjumbo, *Financial Times*, 02/11/2000 (Done, Kevin), Reprinted with permission. Data from Airbus; Exhibit 6.7 from Strong response to Lloyds cash call, *Financial Times*, 15/12/2009, p. 20 (Goff, Sharlene); Exhibit 10.4 from Valuations complicated by lack of functioning market, *Financial Times*, 24/02/2009 (Thomas, Daniel); Exhibit 10.5 from *Financial Times*, 11/11/2011; Exhibit 10.12 from A magical mystery tour over private valuations, *Financial Times*, 04/12/2008 (Hughes, Jennifer); Exhibit 11.4 from Gearing levels set to fall dramatically, *Financial Times*, 09/04/2009, p. 26 (van Duyn, Aline and Taylor, Andrew), Reprinted with permission; Exhibit 11.16 from Premier chews over sale of famous brands, *Financial Times*, 18/10/2008, p. 15 (Wiggins, Jenny and Killgren, Lucy); Exhibit 11.20 from Baggies supporter braced for downturn, *Financial Times*, 02/09/2008, p. 3 (Guthrie, Jonathan); Exhibit 12.4 from Companies strive to keep investors sweet, *Financial Times*, 22/04/2008, p. 23 (Burgis, Tom); Exhibit 12.5 from Confidence call by character, *Financial Times*, 30/04/2008 (Burgis, Tom); Exhibit 12.8 from Lurid acquisitions lose their edge..., *Financial Times*, 15/09/2004, p. 25 (Tricks, Henry), Reprinted with permission.

In some instances we have been unable to trace the owners of copyright material, and we would appreciate any information that would enable us to do so. *This page intentionally left blank*

The financial world

LEARNING OUTCOMES

At the end of this chapter the reader will have a balanced view of the purpose and value of the finance function, at both the corporate and the national level. More specifically, the reader should be able to:

- explain the role of the financial manager;
- detail the value of financial intermediaries;
- show an appreciation of the function of the major financial institutions and markets;
- describe alternative views on the purpose of the business and show the importance to any organisation of clarity on this point;
- describe the impact of the divorce of corporate ownership from day-to-day managerial control.

Introduction

Managers, at all levels, very quickly discover the need for a good working knowledge of finance. Those with ambitions to climb the corporate ladder find that the further they advance the more they need to understand the concepts and jargon of finance, both for internal decision making and external interaction with investors, bankers and the City. This message is not directed just at those who specialise in accounting or finance. Too many marketing directors and production directors have found themselves unable to follow boardroom (or even divisional) discussions because they are unfamiliar with financial language and the central ideas of corporate finance. It is clear that the imperatives of day-to-day management and the forming of sound long-term plans mean that all middle and senior managers must have a firm grasp of fundamental financial issues. Discussion throughout the modern organisation is mostly couched in financial terms: e.g. would we achieve a sufficient rate of return on an investment in that proposed new factory? What proportion of annual profits should we pay out as dividends? Should we take the risk of borrowing more money? How do you sell more shares in the company to allow it to expand? Finance is about hundreds of questions like this.

Because the language of modern business is largely financial, managers need to understand that language if they want to know what is going on, and to advance in their careers. Simply being able to read the *Financial Times* and other financial papers intelligently makes it worthwhile studying corporate finance, let alone the benefit of appreciating the workings of the corporate environment in which you may find yourself.

Before getting carried away with specific financial issues and technical detail, it is important to gain a broad perspective by looking at the fundamental questions and the place of finance in the overall scheme of things. Conveying this broad perspective is the main aim of this chapter.

What is corporate finance?

So, what are the key aspects of corporate finance you need to know? To illustrate the scope of the subject we can make use of a mini-case study drawn from a *Financial Times* article about Ophir, which, in the summer of 2011, floated on the London Stock Exchange (*see* **Exhibit 1.1**).

Exhibit 1.1

Ophir set for \$1bn London flotation

By Sylvia Pfeifer in London

Ophir Energy, the African explorer backed by Lakshmi Mittal, one of Britain's richest men, is set to tap into the demand for energy stocks by announcing on Thursday its intention to float on the London market.

The flotation is expected to value Ophir at more than \$1bn (£607m), making it one of the largest exploration IPOs in London.

If the flotation is successful, the company would become one of the main independent players on the London market, smaller than Premier Oil but bigger than Salamander Energy.

Ophir hopes to raise up to \$400m through the sale of new shares to fund further exploration.

It has some high-profile backers, including Mittal Group, which owns 21 per cent. Poland's wealthiest man, Jan Kulczyk, is another backer with 13 per cent while Och-Ziff, the asset manager, holds 13 per cent.

Other investors include Mvelaphanda Holdings, the South African company founded by former freedom fighter and South African politician Tokyo Sexwale, with a 3.8 per cent share.

None of the existing shareholders is selling into the initial public offering.

The company recently recruited Nick Cooper, previously chief financial officer at Salamander Energy, as chief executive.

Set up in 2004, Ophir has notched up a string of exploration successes, with five discoveries from eight wells drilled as operator since 2008.

Two were gas discoveries in Equatorial Guinea and three were gas discoveries in Tanzania.

Exhibit 1.1 (Continued)

The current portfolio comprises 17 assets in eight jurisdictions in Africa. It is the fifth largest holder of deepwater acreage in Africa. The company has approximately 90,000 sq km of net exploration acreage.

The company plans to undertake an extensive exploration programme and appraisal drilling following the listing, with plans to drill 11 wells in four countries over the next 18 months.

The company acts as operator on most of its projects and usually holds a high level of equity as a way of being able to control the timing and scale of any expenditure. The flotation comes at a time of strong demand for energy stocks. Kosmos Energy, an explorer and a producer, recently floated on the New York Stock Exchange and raised more than expected.

Ophir is being advised by Credit Suisse as sponsor, global coordinator and joint bookrunner and lead manager, with JPMorgan Cazenove as joint bookrunner and lead manager.

RBC Capital Markets is also joint bookrunner, with Oriel Securities and Standard Bank as syndicate members.

Lexicon Partners is the financial adviser to the company.

FT

Source: Financial Times, 8 June 2011, p. 22. © The Financial Times Limited. All rights reserved.

There are four vital financial issues facing management:

What type of finance should we raise?

In the past, Ophir's business has been supported by money injected by international financiers and companies who started the company in 2004. Now Ophir has turned to the London Stock Exchange (LSE), to raise \$400m by selling new shares. Also, being listed on the LSE will enhance its ability to raise more capital in the future, because of the additional credibility that flows from being on the exchange. The modern financial world provides a wide range of options for companies when it comes to raising finance to allow growth. The array of choice can be dizzying so Chapters 6 and 7 provide some sort of order, describing the characteristics of the main forms of finance and their relative advantages and drawbacks. Chapter 6 guides the reader through the various ways in which a company can raise finance by selling shares. Chapter 7 discusses the benefits and dangers of a variety of forms of debt finance, including using bank loans and overdrafts and bond markets.

In what projects are we going to invest our shareholders' money?

The directors of Ophir believe they have fantastic investment opportunities in developing oil and gas fields in Africa. It intends to invest heavily in exploring for new sources of energy, which will benefit the countries where the investments are made, as well as Ophir's shareholders, employees, suppliers, etc. The money it has raised has come from people and institutions purchasing newly created shares in Ophir. Sound financial techniques are needed to make a judgement on whether it is worth committing the large sums required to develop a particular oil or gas field. There are also many smaller investment decisions, from whether it is best to build their own storage tanks or rent them, to the size and capability of an exploration ship. Three chapters of this book are devoted to describing proven approaches adopted by all leading corporations in deciding where to concentrate the firm's financial resources (Chapters 2, 3 and 4). This class of decision is sometimes referred to as **capital expenditure**, '**capex**' for short, and the process is referred to as **capital budgeting**.

How do we create and measure shareholder value?

Value creation by a corporation, or by individual business units within a large firm, is about much more than deciding whether to invest in specific projects. Ophir will need to consider

a number of strategic implications of its actions, such as: what is the current and likely future return on capital in the industries that it may choose to enter? Will Ophir have a competitive edge over its rivals in those industries? **Value-based management** brings together a number of disciplines, such as strategy and resource management, and draws on the analytical techniques developed in the finance field to help judge the extent of **value creation** from current operations, or from new strategic and tactical moves (covered in Chapter 9). At the centre of value-based management is recognition of the need to produce a return on capital devoted to an activity commensurate with the risk. Establishing the minimum **required return** is the '**cost of capital**' issue – the logic behind this calculation is discussed in Chapter 8. Ophir might consider buying another company and so being able to value business units, companies and shares is very useful. Possessors of this skill can avoid overpaying when buying an established business. They also have insight into how stock market investors value the manager's company. Ophir, when preparing for its stock market flotation, employed individuals with knowledge of how to price its shares (e.g. Credit Suisse), which was crucial in establishing a healthy market for them. Chapter 10 covers the main valuation approaches used today.

A further key value decision is how much of the annual profit to keep in the business to support investment and how much to pay out to shareholders. Is a 50:50 split about right? Or, how about keeping just 30 per cent in the company and paying the other 70 per cent in dividends? This is not an easy decision, but someone has to make it. Chapter 12 outlines the key considerations.

How do we manage risk?

Ophir is faced with many **operational risks**. Perhaps it will fail to strike oil in the next 11 wells it drills, or the oil it finds is too expensive to extract. There are some risks that firms have to accept, including these operational risks. However, there are many others that can be reduced by taking a few simple steps. For example, the risk of a rise in interest rates increasing the cost of borrowings, thus wiping out profits, can be reduced/eliminated in various ways, for example by choosing a less risky **capital structure**. That is, the proportion of finance raised from debt is lowered while that from share owners is raised. Chapter 11 discusses this issue along-side a number of other factors to be taken into account when considering how much debt to take on.

I hope I have convinced you that the finance function is a vital one, both within an individual organisation and for society as a whole. It is also a fascinating area of study, especially given that the ever-dynamic financial markets are constantly innovating. They are also subject to sudden shocks. Almost every day the television news reports a dramatic financial story, whether it is in the stock market, loan markets or a corporate collapse due to a poor financial structure. To give some idea of the importance of finance in the UK it is worth reflecting on the fact that the financial services industry now accounts for a larger proportion of employees and national output than the whole of the manufacturing industry.

We now move on to look in more detail at the role and value of the finance function. This will be followed by a brief description of the different financial markets, from money markets to currency markets. Finally, this chapter considers the most fundamental question facing anyone trying to make decisions within an organisation – what is the objective of the business? This must be addressed before we can use the financial tools provided in the rest of the book.

A simple model of the interactions between the financial manager and the capital markets

To be able to carry on a business a company needs **real assets**. These real assets may be tangible, such as buildings, plant, machinery, vehicles and so on. Alternatively a firm may invest in intangible real assets, for example patents, expertise, licensing rights, etc. To obtain these real assets corporations sell **financial claims** to raise money; to lenders a bundle of rights are sold within a loan contract; to shareholders rights over the ownership of a company are sold as well as the right to receive a proportion of profits produced. The financial manager has the task of both raising finance by selling financial claims and advising on the use of those funds within the business. This is illustrated in **Exhibit 1.2**.

In order to raise finance, knowledge is needed of the financial markets and the way in which they operate. To raise share (equity) capital, awareness of the rigours and processes involved in 'taking a new company to market' might be useful. For instance, what is the role of an issuing house? What services do brokers, accountants, lawyers, etc. provide to a company wishing to float? Once a company is quoted on a stock market it will be useful to know about ways of raising additional equity capital.

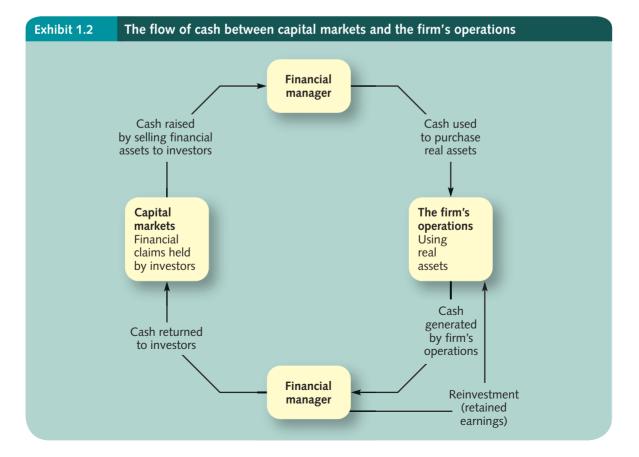
If the firm does not wish to have its shares quoted on an exchange perhaps an investigation needs to be made into the possibility of raising money through the private equity industry, where finance is available for those companies where the owner(s) is willing to sell a portion of the company's shares to outsiders who might bring managerial expertise as well as money.

Understanding how shares are priced and what it is that shareholders are looking for when sacrificing present consumption to make an investment could help the firm to tailor its strategy, operations and financing decisions to suit its owners. These, and dozens of other equity finance questions, are part of the remit of the finance expert within the firm (all other managers need a working knowledge of these issues too).

Another major source of finance comes from banks. Understanding the operation of banks and what concerns them when lending to a firm may enable you to present your case better, to negotiate improved terms and obtain finance which fits the cash flow patterns of the firm. Then there are ways of borrowing which bypass banks. Bonds could be issued either domestically or internationally. Medium-term notes, commercial paper, leasing, hire purchase and factoring are other possibilities (all described in Chapter 7).

Once a knowledge has been gained of each of these alternative financial instruments and of the operation of their respective financial markets, then the financial manager has to consider the issue of the correct balance between the different types. What proportion of debt to equity? What proportion of short-term finance to long-term finance?, and so on.

Perhaps you can already appreciate that the finance function is far from a boring 'beancounting' role. It is a dynamic function with a constant need for up-to-date and relevant



knowledge. The success or failure of the entire business may rest on the quality of the interaction between the firm and the financial markets. The financial manager stands at the interface between the two.

Decisions also need to be made concerning how much to invest in real assets and which specific projects to undertake. Managers need knowledge of both analytical techniques to aid these sorts of decisions and the influence of a wide variety of factors that might have some impact on the wisdom of proceeding with a particular investment. These range from corporate strategy and budgeting restrictions to culture and the commitment of individuals likely to be called upon to support an activity.

Financial knowledge is essential to perform well as a chief executive officer (CEO) – *see* **Exhibit 1.3.** Even those directors who have not held a finance post will be aware of their need for a sound understanding of the discipline.

Exhibit 1.3

Finance directors step on to centre stage

By Alison Smith and Gill Plimmer

It has been a season to put a spring in the step of finance directors. Within a couple of months earlier this year, no fewer than five became chief executives at FTSE 250 companies.

David Sleath, who took the helm at office and warehouse developer Segro at the annual meeting in late April, is the most recent in a clutch of chief financial officer promotions that began with John Hunter becoming chief executive at software group SDL in February.

The fashion for finance officers is not confined to movement within a company. Ian Dyson was finance director at Marks and Spencer before becoming chief executive of Punch Taverns, while Colin Day left household goods group Reckitt Benckiser and then became chief executive of cigarette filter maker Filtrona.

They are in good company. Analysis by headhunters Spencer Stuart shows that about one-third of FTSE 100 chief executives have a financial background, 15 of them being former chief financial officers. They include Peter Voser at Royal Dutch Shell, Jeremy Darroch at BSkyB, and Tidjane Thiam at Prudential.

Tim Burrage, a consultant at Spencer Stuart, says that the proportion of CFOs who go on to become chief executive is pretty consistent over time, though their routes to the top jobs have changed.

"It is much rarer for someone to have come up through a 25-year career at a single organisation,"

he says, "and more common for someone to have had a career across three, four or five companies taking in at least one big general management role along the way."

Headhunters cite two main factors pushing finance directors to the fore when it comes to recent chief executive appointments.

The first is a rise of a generation of finance directors who have made a point of managing their careers so they gain wider skills on their way to the C-suite. "Many have acquired experience leading significant operational change to complement their technical and corporate finance expertise," says Aidan Bell of Spencer Stuart.

"A lot of CFOs will have had at least one nonexecutive position," says Peter Waine, partner at Hanson Green.

Second is the change in the finance function itself, which has become both broader and more prominent during the past decade. "Finance directors have got much more involved in strategic operations," Mr Freebairn says. "They have got heavily involved in pricing, product development and margin management."

"A CFO is now much more like a partner with the CEO than at a lower place in the hierarchy," says Marie Hollein, president and chief executive of Financial Executives International.

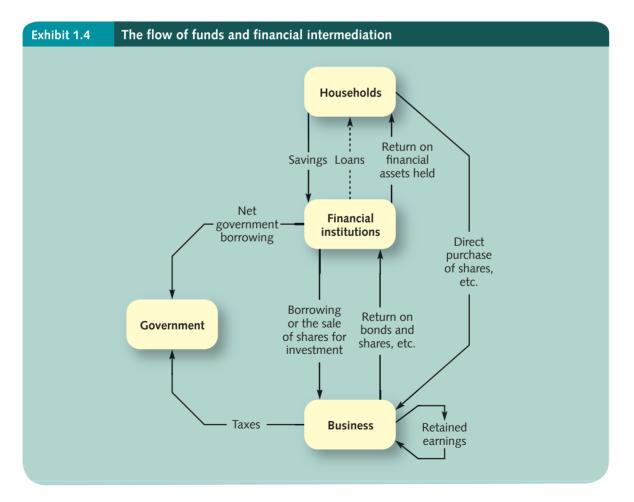


Source: Financial Times, 15 May 2011, p. 19. © The Financial Times Limited. All rights reserved.

The flow of funds and financial intermediation

Exhibit 1.2 looked at the simple relationship between a firm and investors. Unfortunately the real world is somewhat more complicated and the flow of funds within the financial system involves a number of other institutions and agencies. **Exhibit 1.4** is a more realistic representation of the financial interactions between different groups in society.

Households generally place the largest proportion of their savings with financial institutions. These organisations then put that money to work. Some of it is lent back to members of the household sector in the form of, say, a mortgage to purchase a house, or as a personal loan. Some of the money is used to buy securities issued by the business sector. The institutions will expect a return on these loans and shares, which flows back in the form of interest and dividends. However, they are often prepared for businesses to retain profit within the firm for further investment in the hope of greater returns in the future. The government sector enters into the financial system in a number of ways, two of which are shown in Exhibit 1.4. First, taxes are taken from businesses and this adds a further dimension to the choices concerning the finance of the firm – for example, taking taxation into account when selecting sources of finance and when approving investment proposals. Second, governments usually fail to match their revenues with their expenditure and therefore borrow significant sums from the financial institutions. The diagram in Exhibit 1.4 remains a gross simplification; it has not allowed for overseas financial transactions, for example, but it does demonstrate a crucial role for financial institutions in an advanced market economy.



Primary investors

Typically the household sector is in financial surplus. This sector contains the savers of society. It is these individuals who become the main providers of funds used for investment in the business sector. **Primary investors** tend to prefer to exchange their cash for financial assets which (a) allow them to get their money back quickly should they need to (with low transaction cost of doing so) and (b) have a high degree of certainty over the amount they will receive back. That is, primary investors like high liquidity and low risk. Lending directly to a firm with a project proposal to build a North Sea oil platform which will not be sold until five years have passed is not a high-liquidity and low-risk (if we exclude the possibility of the risk of sock theft).

Ultimate borrowers

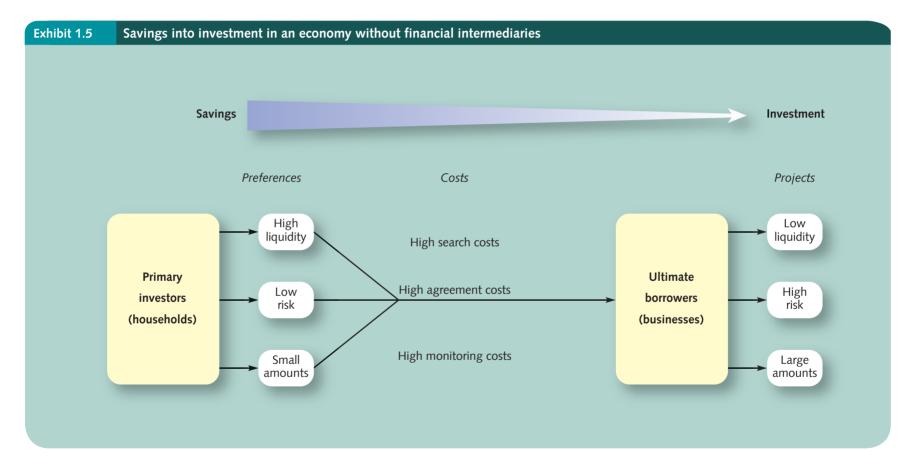
In our simplified model the **ultimate borrowers** are in the business sector. These firms are trying to maximise the wealth generated by their activities. To do this companies need to invest in real buildings, equipment and other assets, often for long periods of time. The firms, in order to serve their social function, need to attract funds for use over many years. Also, these funds are to be put at risk, sometimes very high risk. (Here we are using the term 'borrower' broadly to include all forms of finance, even 'borrowing' by selling shares.)

Conflict of preferences

We have a **conflict of preferences** between the primary investors wanting low-cost liquidity and certainty, and the ultimate borrowers wanting long-term risk-bearing capital. A further complicating factor is that savers usually save on a small scale, £100 here or £200 there, whereas businesses are likely to need large sums of money. Imagine some of the problems that would occur in a society that did not have any financial intermediaries. Here, lending and share buying would occur only as a result of direct contact and negotiation between two parties. If there were no organised market where financial securities could be sold on to other investors, the fund provider, once committed, would be trapped in an illiquid investment. Also, the costs that the two parties might incur in searching to find each other in the first place could be considerable. Following contact a thorough agreement would need to be drawn up to safeguard the investor, and additional expense would be incurred obtaining information to monitor the firm and its progress. In sum, the obstacles to putting saved funds to productive use would lead many to give up and to retain their cash. Those that do persevere will demand exceptionally high rates of return from the borrowers to compensate them for poor liquidity, risk, search costs, agreement costs and monitoring costs. This will mean that few firms will be able to justify investments because they cannot obtain those high levels of return when the funds are invested in real assets. As a result few investments take place and the wealth of society fails to grow. Exhibit 1.5 shows (by the top arrow) little money flowing from saving into investment.

The introduction of financial intermediaries

The problem of under-investment can be alleviated greatly by the introduction of financial institutions (e.g. banks) and financial markets (e.g. a stock exchange). Their role is to facilitate the flow of funds from primary investors to ultimate borrowers at a low cost. They do this by solving the conflict of preferences. There are two types of financial intermediation: the first is an agency or brokerage-type operation which brings together lenders and firms; the second is an asset-transforming-type of intermediation, in which the conflict is resolved by creating intermediate securities which have the risk, liquidity and volume characteristics that the investors prefer. The financial institution raises money by offering these securities, and then uses the acquired funds to purchase primary securities issued by firms.



The flow of funds and financial intermediation

Brokers

At its simplest an intermediary is a 'go-between', someone who matches up a provider of finance with a user of funds. This type of intermediary is particularly useful for reducing the **search costs** for both parties. Stockbrokers, for example, make it easy for investors wanting to buy shares in a newly floated company. **Brokers** may also have some skill at collecting information on a firm and monitoring its activities, saving the investor time. They also act as middlemen when an investor wishes to sell to another, thus enhancing the liquidity of the fund providers. Another example is the Post Office, which enables individuals to lend to the UK government in a convenient and cheap manner by buying National Savings Income Bonds or Premium Bonds.

Asset transformers

Intermediaries, by creating a completely new security, the **intermediate security**, increase the opportunities available to savers, encouraging them to invest and thus reducing the cost of finance for the productive sector. The transformation function can act in a number of different ways.

Risk transformation

For example, instead of an individual lending directly to a business with a great idea, such as installing wind turbines in the English Channel, a bank creates a deposit account or current account with relatively low risk for the investor's savings. Lending directly to the firm, the saver would demand compensation for the probability of default on the loan and therefore the business would have to pay a very high rate of interest, which would inhibit investment. The bank acting as an intermediary creates a special kind of security called a bank account agreement. The intermediary then uses the funds attracted by the new financial asset to buy a security issued by the wind farm (the primary security) when it obtains long-term debt capital. Because of the extra security that a lender has by holding a bank account as a financial asset rather than by making a loan direct to a firm, the lender is prepared to accept a lower rate of interest and the ultimate borrower obtains funds at a relatively low cost. The bank is able to reduce its risk exposure to any one project by diversifying its loan portfolio among a number of firms. It can also reduce risk by building up expertise in assessing and monitoring firms and their associated risk. Another example of risk transformation is when unit or investment trusts (see later in this chapter) take savers' funds and spread these over a wide range of company shares.

Maturity (liquidity) transformation

The fact that a bank lends long term for a risky venture does not mean that the primary lender is subjected to illiquidity. Liquidity is not a problem because banks maintain sufficient cash funds to meet their liabilities when they arise. You can walk into a bank and take the money from your account at short notice because the bank, given its size, exploits economies of scale and anticipates that only a small fraction of its customers will withdraw their money on any one day. Banks and building societies play an important role in borrowing 'short' and lending 'long'.

Volume transformation

Many institutions gather small amounts of money from numerous savers and repackage these sums into larger bundles for investment in the business sector. Apart from the banks and building societies, unit trusts are important here. It is uneconomic for an investor with, say, \pounds 50 per month, who wants to invest in shares, to buy small quantities periodically. Unit trusts gather together hundreds of individuals' monthly savings and invest them in a broad range of shares, thereby exploiting economies in transaction costs.

Intermediaries' economies of scale

An intermediary, such as a bank, is able to accept lending to (and investing in shares of) companies at a relatively low rate of return because of the **economies of scale** enjoyed compared with the primary investor. These economies of scale include:

- (a) *Efficiencies in gathering information* on the risk of lending to a particular firm. Individuals do not have access to the same data sources or expert analysis.
- (b) *Risk spreading* Intermediaries are able to spread funds across a large number of borrowers and thereby reduce overall risk. Individual investors may be unable to do this.
- (c) Transaction costs They are able to reduce the search, agreement and monitoring costs that would be incurred by savers and borrowers in a direct transaction. Banks, for example, are convenient, safe locations with standardised types of securities. Savers do not have to spend time examining the contract they are entering upon when, say, they open a bank account. How many of us read the small print when we opened a bank account?

The reduced **information costs**, convenience and passed-on benefits from the economies of operating on a large scale mean that primary investors are motivated to place their savings with intermediaries.

Financial markets

A financial market, such as a stock exchange, has two aspects; there is the *primary market* where funds are raised from investors by the firm, and there is the *secondary market* in which investors buy and sell shares, bonds, etc. between each other. The understanding when securities are sold into the primary market is generally that repayment will not be made for many years, if ever. This would mean that the holder is trapped in that investment if it were not for the existence of the secondary market; it is highly beneficial for the original buyer to be able to sell on to other investors. In this way the firm achieves its objective of raising finance that will stay in the firm for a lengthy period and the investor. In addition a well-regulated exchange encourages investment by reducing search, agreement and monitoring costs – see Exhibit 1.6.

The financial system

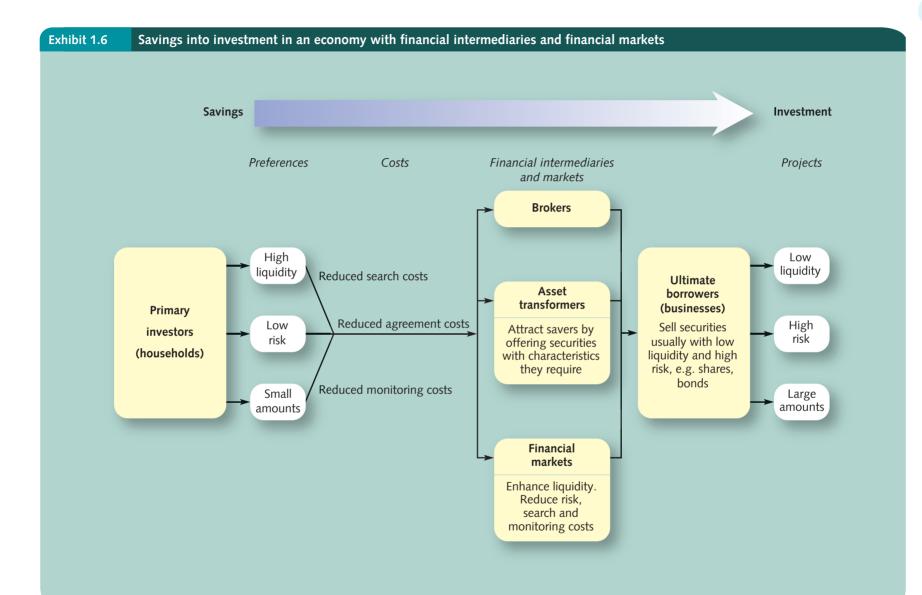
To assist with orientating the reader within the financial system and to carry out more jargon busting, a brief outline of the main financial services sectors and markets is given here.

The institutions

The banking sector

Retail banks

Put at its simplest, the **retail banks** take (small) deposits from the public which are repackaged and lent to businesses and households. This is generally high-volume and low-value business that contrasts with wholesale banking which is low volume but each transaction is for high value. The distinction between retail and wholesale banks has become blurred over recent years as the large institutions have diversified their operations. The retail banks operate nationwide branch networks and a subset of banks provide a cheque clearance system (transferring money from one account to another) – these are the *clearing* banks. The five largest UK clearing banks are Barclays, Lloyds, Royal Bank of Scotland (including NatWest), HSBC and Santander. Loans, overdrafts and mortgages are the main forms of retail bank lending. Up until 2009, the trend has been for retail banks to reduce their reliance on retail deposits and raise more wholesale funds from the money markets. But this has partially reversed as banks found wholesale funding less reliable than obtaining funds to lend from deposit in bank accounts. They also get together with other banks if a large loan is required by a borrower (say £150m) rather than provide the full amount themselves as this would create an excessive exposure to one customer – this is called a syndicated loan, discussed in Chapter 7.



12

Wholesale banks/Investment banks¹

The terms wholesale bank, merchant bank and investment bank are often used interchangeably. There are subtle differences but for most practical purposes they can be regarded as the same. These institutions tend to deal in large sums of money – at least £250,000 – although some have set up retail arms. They concentrate on dealing with other large organisations, corporations, institutional investors and governments. While they undertake some lending their main focus is on generating commission or trading income by providing advice and facilitating deals. There are five main areas of activity:

- *Raising external finance for companies* These banks provide advice and arrange finance for corporate clients. Sometimes they provide loans themselves, but often they assist the setting up of a bank syndicate or make arrangements with other institutions. They will advise and assist a firm issuing a bond, they have expertise in helping firms float on a stock exchange and make rights issues. They may 'underwrite' a bond or share issue. (This means that they will buy any part of the issue not taken up by other investors *see* Chapter 6.) This assures the corporation that it will receive the funds it needs for its investment programme.
- **Broking and dealing** They act as agents for the buying and selling of securities on the financial markets, including shares, bonds and Eurobonds. Some also have market-making arms, which quote prices at which they are willing to buy from or sell to, say, a shareholder, thus assisting the operation of secondary markets. Many also trade in the markets on their own account and assist companies with export finance.
- *Fund management (asset management)* The investment banks offer services to rich individuals who lack the time or expertise to deal with their own investment strategies. They also manage unit and investment trusts as well as the portfolios of some pension funds and insurance companies. In addition corporations often have short-term cash flows which need managing efficiently (treasury management).
- Assistance in corporate restructuring Investment banks earn large fees from advising acquirers on mergers and assisting with the merger process. They also gain by helping target firms avoid being taken over too cheaply. Corporate disposal programmes (selling off a division, for example) may also need the services of an investment bank.
- Assisting risk management using derivatives Risk can be reduced through hedging strategies using futures, options, swaps and the like. However, this is a complex area with large room for error and terrible penalties if a mistake is made. The banks may have specialist knowledge to offer in this area.

International banks

There are two main types of international banking:

- *Foreign banking* transactions (lending/borrowing, etc.) in the host country currency with overseas residents and companies, e.g. transactions in sterling with non-UK residents by UK banks.
- *Eurocurrency banking* for transactions in a currency outside the jurisdiction of the country of that currency, e.g. yen transactions in Canada. Thus for UK banks this involves transactions in currencies other than sterling with both residents and non-residents (Chapter 7 considers this further).

The major part of international banking these days is borrowing and lending in foreign currencies. There are about 250 non-UK banks operating in London, the most prominent of which are American, German, Swiss and Japanese. Their initial function was mainly to provide services for their own nationals, for example for export and import transactions, but nowadays their main emphasis is in the Eurocurrency market and international securities (shares, bonds, etc.) trading. Often funds are held in the UK for the purpose of trading and speculation on the foreign exchange market.

¹ There is much more on investment banks as well as many other financial organisations in G. Arnold (2012) Modern Financial Markets and Institutions (Harlow: FT Prentice Hall).

Building societies

Building societies collect funds from millions of savers by enticing them to put their money in interest-bearing accounts. The vast majority of that deposited money is then lent to people wishing to buy a home – in the form of a mortgage. Thus, they take in short-term deposits and they lend money for long periods, usually for 25 years. More recently building societies have diversified their sources of finance (e.g. using the wholesale financial markets) and increased the range of services they offer.

Finance houses²

Finance houses are responsible for the financing of hire purchase agreements and other instalment credit, for example leasing. If you buy a large durable good such as a car or a washing machine you often find that the sales assistant also tries to get you interested in taking the item on credit, so you pay for it over a period of, say, three years. It is normally not the retailer that provides the finance for the credit. The retailer usually works in conjunction with a finance house, which pays the retailer the full purchase price of the good and therefore becomes the owner. You, the customer, get to use the good, but in return you have to make regular payments to the finance house, including interest. Under a hire purchase agreement, when you have made enough payments you will become the owner. Under leasing, the finance house retains ownership (for more detail see Chapter 7). Finance houses also provide factoring services – providing cash to firms in return for receiving income from the firms' debtors when they pay up. Most of the large finance houses are subsidiaries of the major conglomerate banks.

Long-term savings institutions

Pension funds

Pension funds are set up to provide pensions for members. For example, the University Superannuation Scheme (USS), to which university lecturers belong, takes about 7.5 per cent of working members' salaries each month and puts it into the fund. In addition, the employing organisation pays money into the scheme. When a member retires the USS will pay a pension. Between the time of making a contribution and retirement, which may be decades, the pension trustees oversee the management of the fund. They may place some or all of the fund with specialist investment managers. This is a particularly attractive form of saving because of the generous tax relief provided. The long time horizon of the pension business means that large sums are built up and available for investment – currently around £1,100bn in the UK funds. A typical allocation of a fund is:

- 30–35 per cent in UK shares;
- 20–30 per cent in overseas company shares;
- 20–30 per cent lending to the UK government by buying bonds and bills and lending via corporate bonds issued by UK firms;
- 3–6 per cent in bonds issued by foreign organisations;
- 5–15 per cent other (e.g. property, cash and overseas bonds).

Insurance funds

Insurance companies engage in two types of activity:

• **General insurance** This is insurance against specific contingencies such as fire, theft, accident, generally for a one-year period. The money collected in premiums is mostly held in financial assets which are relatively short term and liquid so that short-term commitments can be met (totalling around £100bn in the UK).

² The term finance house is also used for broadly based financial-service companies carring out a wide variety of financial activities from share brokerage to corporate lending. However, we will confine the term to instalment credit and related services.

• Life assurance With term assurance, your life is assured for a specified period. If you die, your beneficiaries get a payout. If you live, you get nothing at the end of the period. With whole-of-life policies, the insurance company pays a capital sum upon death whenever this occurs. Endowment policies are more interesting from a financial systems perspective because they act as a savings vehicle as well as cover against death. The premium will be larger but after a number of years have passed the insurance company pays a substantial sum of money even if you are still alive. The life company has to take the premiums paid over, say, 10 or 25 years, and invest them wisely to satisfy its commitment to the policy holder. Millions of UK house buyers purchase with an endowment mortgage. They simply pay interest to the lender (e.g. a building society) while also placing premiums into an endowment fund. The hope is that after 25 years or so the value of the accumulated fund will equal or be greater than the capital value of the loan.

Life assurance companies also provide *annuities*. Here a policy holder pays an initial lump sum and in return receives regular payments in subsequent years. They have also moved into pensions. Indeed, the majority of their business is now pension related.

UK life assurance companies have over $\pounds 1.5$ trillion under management. A typical fund allocation is:

- 30–50 per cent UK shares;
- 10–15 per cent lending to the UK government;
- 5–10 per cent property;
- 15–25 per cent overseas securities;
- 5–10 per cent other.

The risk spreaders

These institutions allow small savers a stake in a large diversified portfolio.

Unit trusts

Unit trusts are 'open-ended' funds, so the size of the fund and the number of units depend on the amount of money investors wish to put into the fund. If a fund of one million units suddenly doubled in size because of an inflow of investor funds it would become a fund of two million units through the creation and selling of more units. The buying and selling prices of the units are determined by the value of the fund. So if a two-million unit fund is invested in £2m worth of shares in the UK stock market, the value of each unit will be £1. If, over a period, the value of the shares rises to £3m, the units will be worth £1.50 each. Unit holders sell units back to the managers of the unit trust if they want to liquidate their holding. The manager would then either sell the unit holder. The units are usually quoted at two prices depending on whether you are buying (higher) or selling. There is also usually an initial charge and an ongoing management charge for running the fund. Trustees supervise the funds to safe-guard the interests of unit holders but employ managers to make the investment decisions.

There is a wide choice of unit trusts specialising in different types of investments ranging from Japanese shares to privatised European companies. Of the \pounds 500bn or so invested in unit trusts and their cousins, OEICs, 50–60 per cent is devoted to shares (one-half of which are non-UK), with 20 per cent devoted to bonds. Instruments similar to unit trusts are called mutual funds in other countries.

Investment trusts

Investment trusts differ from unit trusts by virtue of the fact that they are companies (rather than trusts!) able to issue shares and other securities. Investors can purchase these securities when the investment trust is first launched or purchase shares in the secondary market from other investors. These are known as closed-end funds because the company itself is closed to new investors – if you wished to invest your money you would go to an existing investor (via a broker) and not buy from the company. Investment trusts usually spread the investors' funds across a range of other companies' shares. They are also more inclined to invest in a

broader range of assets than unit trusts – even property and shares not listed on a stock market. Approximately one-half of the money devoted to the 400 or so UK investment trusts (£80bn) is put into UK securities, with the remainder placed in overseas securities. The managers of these funds are able to borrow in order to invest. This has the effect of increasing returns to share-holders when things go well. Correspondingly, if the value of the underlying investments falls, the return to shareholders falls even more, because of the obligation to meet interest charges.

Open-ended investment companies (OEICs)

Open-ended investment companies are hybrid risk-spreading instruments which allow an investment in an open-ended fund. Designed to be more flexible and transparent than either investment or unit trusts, OEICs have just one price. However, as with unit trusts, OEICs can issue more shares, in line with demand from investors, and they can borrow.³

Exchange-traded funds (ETFs)

ETFs are set up as companies issuing shares, and the money raised is used to buy a range of securities such as a collection of shares in a particular stock market index or sector, say the FTSE 100 or pharmaceutical shares. Thus if BP comprises 8 per cent of the total value of the FTSE 100 and the ETF has £100m to invest it will buy £8m of BP shares; if Whitbread is 0.15 per cent of the FTSE the ETF buys £150,000 of Whitbread shares. (Alternatively, many ETFs do not buy the actual shares, but gain exposure to the share returns by the purchase of derivatives of the shares). They are open-ended funds – the ETF shares are created and cancelled as demand rises or falls. However, they differ from unit trusts and OEICs in that the pricing of ETF shares is left up to the marketplace. ETFs are quoted companies and you can buy and sell their shares at prices subject to change throughout the day (unlike unit trusts and OEICs, where prices are set by a formula once a day). Globally, there are over 2,000 different ETFs listed on over 40 exchanges with a total value over \$1,000bn. In the US alone over 800 ETFs are traded on the stock markets. They have become so significant there that around 30 per cent of New York Stock Exchange trading is in ETFs.

The risk takers

Private equity funds

These are funds that invest in companies that do not have a stock market trading quote for their shares. The firms are often young and on a rapid growth trajectory, but private equity funds also supply finance to well-established companies. The funds usually buy shares in these companies and occasionally supply debt finance. Frequently, the private equity funds are themselves funded by other financial institutions, such as a group of pension funds. Private equity has grown tremendously over the last 20 years to the point where now over one-fifth of nongovernment UK workers are employed by a firm financed by private equity.

Hedge funds

Hedge funds gather together investors' money and invest it in a wide variety of financial strategies largely outside the control of the regulators, being created either outside the major financial centres or as private investment partnerships. The investors include wealthy individuals as well as institutions, such as pension funds, insurance funds and banks. Being outside normal regulatory control, hedge funds are not confined to investing in particular types of security, or to using particular investment methods. For example, they have far more freedom than unit trusts in 'going short', i.e. selling a security first and then buying it later, hopefully at a lower price. They can also borrow many times the size of the fund to punt on a small movement of currency rates, or share movements, orange juice futures, or whatever they judge will go up (or go down). If the punt goes well (or rather, a series of punts over the year) the fund managers earn million-pound bonuses (often on the basis of 2 per cent of funds under management fee plus 20 per cent of the profit made for client investors).

³ There is much more on unit trusts, investment trusts, OEICs and ETFs in G.C. Arnold (2010), *The Financial Times Guide to Investing*, 2nd edition (Harlow: FT Prentice Hall).

Originally, the term 'hedge' made some sense when applied to these funds. They would, through a combination of investments, including derivatives, try to **hedge** (lower or eliminate) risk while seeking a high absolute return (rather than a return relative to an index). Today the word 'hedge' is misapplied to most of these funds because they generally take aggressive bets on the movements of currencies, equities, interest rates, bonds, etc. around the world. For example one fund, Amaranth, bet on the movement of the price of natural gas, and lost US\$6bn in a matter of days in 2006. Their activities would not be a concern had they remained a relatively small part of the investment scene. However, today they command enormous power and billions more are being placed in these funds every week. Already over £1,300 billion is invested in these funds. Add to that the borrowed money – sometimes ten times the fund's base capital – and you can see why they are to be taken very seriously. For example, up to 50 per cent of the share trades on a typical day in London or New York is said to be due to hedge funds.

The markets

The money markets

The **money markets** are wholesale markets (usually involving transactions of £500,000, \in 1,000,000 or more) which enable borrowing on a short-term basis (less than one year). The banks are particularly active in this market – both as lenders and as borrowers. Large corporations, local government bodies and non-banking financial institutions also lend when they have surplus cash and borrow when short of money.

The bond markets

A **bond** is merely a document that sets out the borrower's promise to pay sums of money in the future – usually regular interest plus a capital amount upon the maturity of the bond. These are long-dated securities (in excess of one year) issued by a variety of organisations including governments and corporations. The UK bond markets are over three centuries old and during that time they have developed very large and sophisticated primary and secondary sub-markets encompassing gilts (UK government bonds), corporate bonds, local authority bonds and Eurobonds, among others. Bonds as a source of finance for firms will be examined in Chapter 7.

The foreign exchange markets (forex or FX)

The **foreign exchange markets** are the markets in which one currency is exchanged for another. They include the **spot market**, where currencies are bought and sold for 'immediate' delivery (in reality, one or two days later) and the **forward** markets, where the deal is agreed now to exchange currencies at some fixed point in the future. Also currency *futures* and *options* and other forex derivatives are employed to hedge risk and to speculate.

The share markets

All major economies now have **share markets**. For UK companies and for hundreds of overseas companies the London Stock Exchange is an important potential source of long-term equity (ownership) capital. Firms can raise finance in the primary market by a new issue, a rights issue, open offer, etc., either in the main London market (the Official List), or on the Alternative Investment Market. Subsequently investors are able to buy and sell to each other on the very active secondary market. Chapter 6 examines stock markets and the raising of equity capital.

The derivative markets

A **derivative** is a financial instrument, the value of which is derived from other financial securities or some other underlying asset. For example, **a future** is the right to buy something (e.g. currency, shares, bonds) at some date in the future at an agreed price. This *right* becomes a saleable derived financial instrument. The performance of the derivative depends on the behaviour of the underlying asset. Companies can use these markets for the management and transfer of risk (hedging) or to speculate. NYSE Liffe trades options and futures in shares, bonds and interest rates. This used to have a trading floor where face-to-face dealing took place in an **open outcry** system (traders shouting and signalling to each other, face to face in a trading pit, the price at which they are willing to buy and sell). Now all the financial markets (money, bond, forex, derivative and share markets) are conducted using computers (and telephones) from isolated trading rooms located in the major financial institutions. In the derivative markets a high proportion of trades take place on what is called the **over-the-counter (OTC)** market rather than on a regulated exchange. The OTC market flexibility allows the creation of tailor-made derivatives to suit a client's risk situation.

The objective of the firm

Xstrata, widely regarded as one of the best-managed companies in the world, has a clear statement of its objective ('aim') in the 2010 Annual Report – *see* **Case study 1.1**. Notice that there is not a confusion of objectives (as there is in many companies) with no one knowing which of a long list of desirable outcomes is the dominant purpose of the firm. Xstrata does not confuse the objective with the strategy to be employed to achieve the objective. Many managerial teams believe that it is their objective to operate within a particular market or take particular actions. They seem unable to distinguish market positions or actions from the ultimate purpose for the existence of the organisation. This will lead not only to poor strategic decisions but frequently makes intelligent financial decisions impossible.

This book is all about practical decision making in the real world. When people have to make choices in the harsh environment in which modern businesses have to operate, it is necessary to be clear about the purpose of the organisation; to be clear about what objective is set for management to achieve. A multitude of small decisions are made every day; more importantly, every now and then major strategic commitments of resources are made. It is imperative that the management teams are aware of, respect and contribute to the fundamental objective of the firm in all these large and small decisions. Imagine the chaos and confusion that could result from the opposite situation where there is no clear, accepted objective. The outcome of each decision, and the direction of the firm, will become random and rudderless. One manager on one occasion will decide to grant long holidays and a shorter working week, believing that the purpose of the institution's existence is to benefit employees, while on another occasion a different manager sacks 'surplus' staff and imposes lower wages, seeing the need to look after the owner's interests as a first priority. So, before we can make decisions in the field of finance we need to establish what it is we are trying to achieve.

You have probably encountered elsewhere the question, 'In whose interests is the firm run?' This is a political and philosophical as well as an economic question and many books have been written on the subject. Here we will provide a brief overview of the debate because of

Case study 1.1 Xstrata plc

'We will grow and manage a diversified portfolio of metals and mining businesses with the single aim of delivering industry leading returns for our shareholders.

We can achieve this only through genuine partnerships with employees, customers, shareholders, local communities and other stakeholders, which are based on integrity, co-operation, transparency and mutual value-creation.

Our businesses maintain a meaningful position in seven major international commodity markets: copper, coking coal, thermal coal, ferrochrome, nickel, vanadium and zinc . . . The Group also comprises a growing platinum group metals business, iron ore projects, recycling facilities and a suite of global technology products, many of which are industry leaders.

We believe that operating to leading standards of health, safety and environmental management, contributing to the development of sustainable communities and engaging with our stakeholders in two-way dialogue, regardless of our location, enhances our corporate reputation and is a source of competitive advantage. We balance social, environmental, ethical and economic considerations in how we manage our businesses.'

Source: Xstrata plc Annual Report 2010. Reprinted with permission.

its central importance to making choices in finance. The list of interested parties in **Exhibit 1.7** could be extended, but no doubt you can accept the point from this shortened version that there are a number of claimants on a firm.

Sound financial management is necessary for the survival of the firm and for its growth. Therefore, all of these stakeholders, to some extent, have an interest in seeing sensible financial decisions being taken. Many business decisions do not involve a conflict between the objectives of each of the stakeholders. However, there are occasions when someone has to decide which claimants are to have their **objectives maximised**, and which are merely to be **satisficed** – that is, given just enough of a return to induce them to make their contributions.

There are some strong views held on this subject. The pro-capitalist economists, such as Friedrich Hayek and Milton Friedman, believe that making shareholders' interests the paramount objective will benefit both the firm and society at large. This approach is not quite as extreme as it sounds because these thinkers generally accept that unbridled pursuit of shareholder returns, to the point of widespread pollution, murder and extortion, will not be in society's best interest and so add the proviso that maximising shareholder wealth is the desired objective provided that firms remain within 'the rules of the game'. This includes obeying the laws and conventions of society, behaving ethically and honestly.

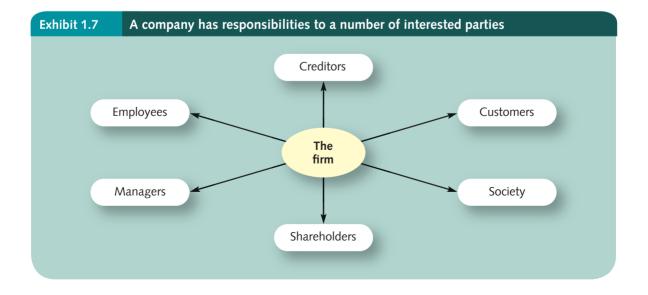
At the opposite end of the political or philosophical spectrum are the left-wing advocates of the primacy of workers' rights and rewards. The belief here is that labour should have its rewards maximised. The employees should have all that is left over, after the other parties have been satisfied. Shareholders are given just enough of a return to provide capital; suppliers are given just enough to supply raw materials and so on.

Standing somewhere in the middle are those keen on a balanced stakeholder approach. Here the (often conflicting) interests of each of the claimants is somehow maximised but within the constraints set by the necessity to compromise in order to provide a fair return to the other stakeholders.

Some possible objectives

A firm can choose from an infinitely long list of possible objectives. Some of these will appear noble and easily justified; others remain hidden, implicit, embarrassing, even subconscious. The following represent some of the most frequently encountered.

• Achieving a target market share In some industrial sectors, to achieve a high share of the market gives high rewards. These may be in the form of improved profitability, survival chances or status. Quite often the winning of a particular market share is set as an objective because it acts as a proxy for other, more profound objectives, such as generating the maximum returns to shareholders. On other occasions matters can get out of hand and there is an obsessive pursuit of market share with only a thin veneer of shareholder wealth espousement.



• *Keeping employee agitation to a minimum* Here, return to the organisation's owners is kept to a minimum necessary level. All surplus resources are directed to mollifying employees. Managers would be very reluctant to admit publicly that they place a high priority on reducing workplace tension, encouraging peace by appeasement and thereby, it is hoped, reducing their own stress levels, but actions tend to speak louder than words. Some companies have tried to reduce workplace tension by giving workers a large proportion of the shares, i.e. making them part-owners. But, as the example of *Le Monde* shows, allowing workers to organise the firm in their own interests *can* result in financial disaster – *see* Exhibit 1.8.

Exhibit 1.8

Cap in hand

France's most respected newspaper teeters on the edge of bankruptcy

Ever since Charles de Gaulle called for the launch of *Le Monde*, first published in 1944, to replace *Le Temps*, a once prestigious daily tainted by collaboration with German invaders, the paper has prided itself on its independence.

Uniquely among leading newspapers, its journalists control it, and have the right to veto the choice not only of editor but also of the company's chief executive. But the lossmaking firm has just a few months to avert bankruptcy by finding fresh capital – and the price may be the abolition of the writers' powers.

.... potential bidders may be having second thoughts after looking at the accounts, according to people close to the firm. It has nearly $\notin 100m$ (\$120m) of debt, $\notin 25m$ of which comes due in 2011. Management says that $\notin 60m-70m$ is required to reduce this burden and put the firm on a footing for growth. But others, pointing to ongoing losses, including more than $\notin 10m$ in 2009, reckon the firm needs as much as $\notin 100m-150m$.

Blame for *Le Monde's* situation rests chiefly with its journalists, business-people argue. The firm racked up debts in the late 1990s and early 2000s

with a series of acquisitions designed to create a broader media group around the flagship paper. But it was not profitable enough to sustain the expansion, mainly because the editorial staff resisted moves to improve efficiency. "Unlike the *New York Times* or the *Wall Street Journal*" says Philippe Micouleau, the ex-boss of *La Tribune*, a business daily, "neither the current nor the former management of Le Monde SA have been able to implement radical restructuring plans because of strong internal resistance."

Raising ϵ 60m or more of new capital will mean that the internal shareholders which control Le Monde SA – notably the journalists' association – will have their control diluted. It is still just possible, some people reckon, that the journalists will refuse to cede power, forcing the group to seek bankruptcy protection. Otherwise they will try to hang on to some trappings of independence, such as their veto over the editor.

If other bidders pull out by June 14th, however, the rescuer will have more power to dictate terms. A new backer would certainly insist on full commercial freedom to break with the lossmaking past.

Source: The Economist, 10 June 2010, p. 28. Reprinted with permission. © The Economist Newspapers Limited, London, 10/06/2010.

• Survival There are circumstances where the overriding objective becomes the survival of the firm. Severe economic or market shock may force managers to focus purely on short-term issues to ensure the continuance of the business. In firefighting they end up paying little attention to long-term growth and return to owners. However, this focus is clearly inadequate in the long run – there must be other goals. If survival were the only objective then putting all the firm's cash reserves into a bank savings account might be the best option. When managers say that their objective is survival what they generally mean is the avoidance of large risks which endanger the firm's future. This may lead to a greater aversion to risk, and a rejection of activities that shareholders might wish the firm to undertake. Shareholders are in a position to diversify their investments: if one firm goes bankrupt they may be disappointed but they have other companies' shares to fall back on. However, the managers of that one firm

may have the majority of their income, prestige and security linked to the continuing existence of that firm. These managers may deliberately avoid high-risk/high-return investments and therefore deprive the owners of the possibility of large gains.

• Creating an ever-expanding empire This is an objective that is rarely openly discussed, but it seems reasonable to propose that some managers drive a firm forward, via organic growth or mergers, because of a desire to run an ever-larger enterprise. Often these motives become clearer with hindsight; when, for instance, a firm meets a calamitous end the post-mortem often reveals that profit and efficiency were given second place to growth. The volume of sales, number of employees or overall stock market value of the firm have a much closer correlation with senior executive salaries, perks and status than do returns to shareholder funds. This may motivate some individuals to promote growth. EasyJet's growth strategy may be rational from a shareholder perspective. Unfortunately, its largest shareholder does not think so – see Exhibit 1.9.

Exhibit 1.9

EasyJet founder quits board of airline

Fight with airline over expansion plan

By Pilita Clark, Aerospace Correspondent

Sir Stelios Haji-Ioannou has declared open warfare on EasyJet, the airline he founded 15 years ago, by resigning from its board to become a "shareholder activist" against its expansion plans.

Sir Stelios, EasyJet's largest shareholder, announced on Friday that he would consider calling for a general meeting to ask other shareholders to "reject the management's strategy of relentless growth in aircraft numbers and focus on profit margin increase".

... Sir Stelios said he had been "constantly outvoted for the last two years" on his opposition to a strategy he says was cast when oil prices were well below what they are now. He said the "funny etiquette" of UK boardrooms prevented him from speaking out about a strategy to keep buying more aircraft "despite the fact that this huge expenditure is demonstrably failing to produce higher profits and therefore has created zero value for shareholders".

"The only weapon you have is to resign," he said.

"The inescapable fact is that this airline used to make a bigger absolute profit using far fewer aircraft."

EasyJet's fleet of aircraft has nearly doubled under Andy Harrison, departing chief executive, and had reached 189 by the end of March, with orders for more aircraft set to take the total fleet to 208 by the end of September 2012.



Source: Financial Times, 14 May 2010, p. 12. © The Financial Times Limited. All rights reserved.

- *Maximisation of profit* This is a much more acceptable objective, although not everyone would agree that maximisation of profit should be the firm's purpose.
- Maximisation of long-term shareholder wealth While many commentators concentrate on
 profit maximisation, finance experts are aware of a number of drawbacks of profit. The
 maximisation of the returns to shareholders in the long term is considered to be a superior
 goal. We look at the differences between profit maximisation and wealth maximisation later.

This list of possible objectives can easily be extended but it is not possible within the scope of this book to examine each of them. Suffice it to say, there can be an enormous variety of objectives and a large potential for conflict and confusion. We have to introduce some sort of order.

The assumed objective for finance

The company should make investment and financing decisions with the aim of maximising long-term shareholder wealth. Throughout the remainder of this book we will assume that the

firm gives primacy of purpose to the wealth of shareholders. This assumption is made mainly on practical grounds, but there are respectable theoretical justifications too.

The practical reason

If one may assume that the decision-making agents of the firm (managers) are acting in the best interests of shareholders then decisions on such matters as which investment projects to undertake, or which method of financing to use, can be made much more simply. If the firm has a multiplicity of objectives, imagine the difficulty in deciding whether to introduce a new, more efficient machine to produce the firm's widgets, where the new machine will be both more labour efficient (thereby creating redundancies) and will eliminate the need to buy from one half of the firm's suppliers. If one focuses solely on the benefits to shareholders, a clear decision can be made. This entire book is about decision-making tools to aid those choices. These range from whether to produce a component in-house, to whether to buy another company. If for each decision scenario we have to contemplate a number of different objectives or some vague balance of stakeholder interests, the task is going to be much more complex. Once the basic decision-making frameworks are understood within the tight confines of shareholder wealth maximisation, we can allow for complications caused by the modification of this assumption. For instance, shareholder wealth maximisation is clearly not the only consideration motivating actions of organisations such as the Co-operative Bank, with publicly stated ethical principles and a goal of benefiting its members. The John Lewis Partnership has been very successful as an employee-owned company, but recognises the need for a rational financial decision-making framework – see Exhibit 1.10.

Partners hold key to John Lewis success

Loyalty is vital despite injection of pragmatism into the business

By Andrea Felsted, Senior Retail Correspondent

For Gill Armstrong, manager of a Waitrose supermarket in the Oxfordshire town of Witney, having a share in the ownership of the upmarket grocery chain makes a big difference to the way she that runs the store, and oversees another in nearby Wantage.

"When you are thinking about the decisions you make, you are thinking, 'this is my business, this is my shop, what should I be doing?'," says Ms Armstrong who has been with the John Lewis Partnership, the employee-owned organisation that includes Waitrose and the John Lewis department stores, for 31 years.

When it came to whether to open until 10pm over the Christmas period, Ms Armstrong says: "Most people would think 'no way, I want to get my bus home at 5pm'. Partners think about it differently. Given that this is my shop, do I want to close my doors and turn customers away, or do I want to kick them open and welcome them in?"

Such an attitude has helped John Lewis and Waitrose trounce the competition in the crucial Christmas and new year trading period. According to Charlie Mayfield, chairman, the unusual structure that sees the 75,000 partners, as they are known, own the business, is key to this success.

"Unlike other companies who have shareholders who are outside the business, and only own [the shares] for a short time, our shareholders work in the business. They spend, in some cases, their whole careers with us. They care deeply about it. Their livelihoods and happiness are all tied up within it," he says.

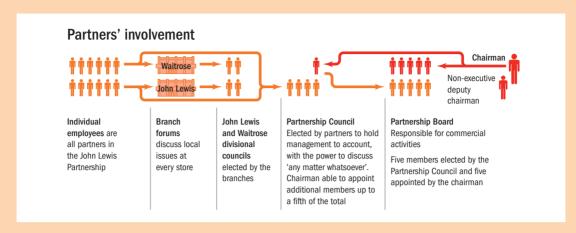
The groups' senior managers say this structure – put in place by founder John Spedan Lewis in 1929 – fosters better customer service, lower staff turnover and trust among customers.

"We don't tell people to do things, we ask them to do things, because they are owners of the business," says Mark Price, managing director of Waitrose.

Ownership also means that once a year, partners receive a bonus, paid as a percentage of salary.

This is decided by the board, based on the surplus after investment is subtracted from the final profit

Exhibit 1.10 (Continued)



for the year. Last year, the bonus was 15 per cent of salary....

. . . "It reinforces that sense of common purpose. Everyone is in this together," says Mr Mayfield.

But according to one seasoned retail analyst, the John Lewis Partnership has injected a "pragmatism" into its business.

He says the "triumvirate" of Mr Mayfield, Andy Street running John Lewis, and Mr Price, are "as true to the founders' principles as commercial realities will allow".

The new dynamism includes investing in online for the past 10 years – a move now paying off with more than £500m of sales for the first time in the year from February 1 2010.

On Friday, John Lewis said it would open beauty spas in stores.

But it also includes initiatives that the analyst says would have been considered "taboo" in the past, such as John Lewis stores cutting jobs and outsourcing parts of after sales service. "Cutting costs and cutting staff is alien to the John Lewis culture," says Neil Saunders, consulting director of Verdict.

Mr Mayfield argues that both paternalism and commercialism are inherent in the model. "We are not a charity. We were not created just as a nice place. The belief that sits behind it is a very commercial one. That is a point that is often overlooked," he says.

"The partnership model was founded expressly because it was a better way to run a business. It was intended as a competitive idea, one that would beat the competition, not just be nice."

But could this pragmatism go too far?

"A business can't be set in aspic," says Mr Street, managing director of John Lewis. "If we take the right business decisions [partners] will all share in that process."

He adds that some 90 per cent of people affected by job cuts are redeployed elsewhere in the business.

Source: Financial Times, 22 January 2011, p. 13. © The Financial Times Limited. All rights reserved.

Drugs companies are coming under pressure from shareholders to be more generous to the poor of the world – *see* Exhibit 1.11. Just how generous should they be and still be shareholder wealth maximisers? Real-world decision making can be agonisingly hard.

The theoretical reasons

The 'contractual theory' views the firm as a network of contracts, actual and implicit, which specify the roles to be played by various participants in the organisation. For instance, the workers make both an explicit (employment contract) and an implicit (show initiative, reliability, etc.) deal with the firm to provide their services in return for salary and other benefits, and suppliers deliver necessary inputs in return for a known payment. Each party has welldefined rights and pay-offs. Most of the participants bargain for a limited risk and a fixed pay-off. Banks, for example, when they lend to a firm, often strenuously try to reduce risk by Exhibit 1.11

European drugs groups do most for poor

By Andrew Jack, Pharmaceuticals Correspondent

Europe-based pharmaceuticals groups led by GlaxoSmithKline are outperforming US and Japanese rivals in efforts to ensure medicines reach the poor, according to an independent evaluation to be published on Monday.

UK-based GSK retained its prime position in the second Access to Medicines Index, while Merck of the US, known for its efforts on HIV and donations to treat river blindness, came next, ahead of Novartis, Gilead and Sanofi-Aventis...

... The assessment – which analyses research on treatments for diseases of the poor, marketing, pricing and drug donations – reflects a desire by drug groups to improve their image after suing the South African government to retain their control of HIV drugs a decade ago.

It comes at a time of interest by investors in the potential of emerging markets and strategies to boost volumes by cutting prices and extending sales to those on lower incomes...

...Andrew Witty, GSK chief executive, said: "Longterm value creation will come from keeping in step with society. I don't want to look back ... and say I was in a pretty unusual position to improve healthcare around the world and didn't take advantage of it."

FT

Source: Financial Times, 21 June 2010, p. 17. © The Financial Times Limited. All rights reserved.

making sure that the firm is generating sufficient cash flow to repay, and that there are assets that can be seized if the loan is not repaid and so on. The bankers' bargain, like that of many of the parties, is a low-risk one and so, the argument goes, they should be rewarded with just the bare minimum for them to provide their service to the firm. Shareholders, on the other hand, are asked to put money into the business at high risk. The deal here is, 'You give us your £10,000 nest egg that you need for your retirement and we, the directors of the firm, do not promise that you will receive a dividend or even see your capital again. We will try our hardest to produce a return on your money but we cannot give any guarantees. Sorry.' Thus the firm's owners are exposed to the possibilities that the firm may go bankrupt and all will be lost. Because of this unfair balance of risk between the different potential claimants on a firm's resources it seems reasonable that the owners should be entitled to any surplus returns which result after all the other parties have been satisfied.

Another theoretical reason hinges on the practicalities of operating in a free market system. In such a capitalist system, it is argued, if a firm chooses to reduce returns to shareholders because, say, it wishes to direct more of the firm's surplus to the workers, then this firm will find it difficult to survive. Some shareholders will sell their shares and invest in other firms more orientated towards their benefit. In the long run those individuals who do retain their shares may be amenable to a takeover bid from a firm that does concentrate on shareholder wealth creation. The acquirer will anticipate being able to cut costs, not least by lowering the returns to labour. In the absence of a takeover the company would be unable to raise more finance from shareholders and this might result in slow growth and liquidity problems and possibly corporate death, throwing all employees out of work.

For over 200 years it has been argued that society is best served by businesses focusing on returns to the owner. Adam Smith (1776) expressed the argument very effectively:

The businessman by directing . . . industry in such a manner as its produce may be of the greatest value, intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for society that it was no part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it. I have never known much good done by those who affected to trade for the public good. It is an affectation, indeed, not very common among merchants.

Source: Adam Smith, The Wealth of Nations, 1776, p. 400.

Adam Smith's objection to businessmen affecting to trade for the public good is echoed in Michael Jensen's writings in which he attacks the stakeholder approach (and its derivative, the Balanced Scorecard of Kaplan and Norton (1996)). His main worry is the confusion that results from having a multiplicity of targets to aim for, but he also takes a sideswipe at managers who are able to use the smokescreen of the stakeholder approach to cloak their actions in pursuit of benefits for themselves, or their pet 'socially beneficial' goals:

Stakeholder theory effectively leaves managers and directors unaccountable for their stewardship of the firm's resources . . . [it] plays into the hands of managers by allowing them to pursue their own interests at the expense of the firm's financial claimants and society at large. It allows managers and directors to devote the firm's resources to their own favorite causes – the environment, arts, cities, medical research – without being held accountable . . . it is not surprising that stake-holder theory receives substantial support from them. (Jensen 2001).

However, Jensen goes on to say that companies cannot create shareholder value if they ignore important constituencies. They must have good relationships with customers, employees, suppliers, government and so on. This is a form of corporate social responsibility (CSR), within an overall framework of shareholder wealth maximisation. (Some of the CSR officers, consultants and departments go too far in balancing all the stakeholder interests in Jensen's view.) Also, to simply tell people to maximise shareholder value is not enough to motivate them to deliver value. They must be turned on by a vision or a strategy, e.g. to put a PC on every desk, to produce a drug to cure AIDs, or to build a state-of-the-art aeroplane. Shareholder value can measure how successful you are, but it does not create superior vision or strategy – you need additional (but subsidiary) goals and measures, which may be identified and supported through a Balanced Scorecard approach, because it allows a greater understanding of what creates value.

John Kay also points out that firms going directly for 'shareholder value' may actually do less well for shareholders than those that focus on vision and excellence first and find themselves shareholder wealth maximisers in an oblique way. He argues that Boeing, in the 1990s, sacrificed its vision of being a company always on the cutting edge of commercial plane design, breaking through technological and marketplace barriers. This reduced the vibrancy of the pioneering spirit of the organisation, as it refocused on short-term financial performance measures - see Exhibit 1.12. However, it is possible to argue that Boeing's managers in the 1990s were not, in fact, shareholder wealth maximisers because they forgot the crucial 'long-term' focus. Being daring and at the cutting edge may be risky, but it often leads to the highest long-term shareholder wealth. Concentrating on short-term financial goals and presenting these as shareholder wealth-maximising actions can lead to slow pace and market irrelevance. So, being too fastidious in requiring immediately visible and quantifiable returns in an uncertain world can result in the rejection of extremely valuable projects that require a leap into the unknown by a team of enthusiasts. Where would Microsoft be today if in the 1970s it required a positive number popping out of a rigorous financial analysis of the prospects for its operating systems, when sales of PCs numbered in hundreds?

Paul Polman, chief executive of Unilever, is an obliquity man – see Exhibit 1.13.

In an interview in 2003 Milton Friedman focused on the main benefit of encouraging businesses to pursue high returns for owners. He said that this results in the best allocation of investment capital among competing industries and product lines. This is good for society because consumers end up with more of what they want because scarce investment money is directed to the best uses, producing the optimum mix of goods and services. 'The self-interest of employees in retaining their jobs will often conflict with this overriding objective.' He went on:

the best system of corporate governance is one that provides the best incentives to use capital efficiently . . . You want control . . . in the hands of those who are residual recipients [i.e. share-holders bear the residual risk when a company fails] because they are the ones with the direct interest in using the capital of the firm efficiently.

Source: Simon London, Financial Times Magazine, 'Milton Friedman - The Long View' 7 June 2003, p. 13.

One final and powerful reason for advancing shareholders' interests above all others (subject to the rules of the game) is very simple: they own the firm and therefore deserve any surplus it produces.

Exhibit 1.12

Forget how the crow flies

If you want to go in one direction, the best route may involve going in the other. Paradoxical as it sounds, goals are more likely to be achieved when pursued indirectly. So the most profitable companies are not the most profit-oriented, and the happiest people are not those who make happiness their main aim. The name of this idea? Obliquity

... I once said that Boeing's grip on the world civil aviation market made it the most powerful market leader in world business. Bill Allen was chief executive from 1945 to 1968, as the company created its dominant position. He said that his spirit and that of his colleagues was to eat, breathe, and sleep the world of aeronautics. 'The greatest pleasure life has to offer is the satisfaction that flows from participating in a difficult and constructive undertaking', he explained...

The company's largest and riskiest project was the development of the 747 jumbo jet. When a nonexecutive director asked about the expected return on investment, he was brushed off: there had been some studies, he was told, but the manager concerned couldn't remember the results.

It took only 10 years for Boeing to prove me wrong in asserting that its market position in civil aviation was impregnable. The decisive shift in corporate culture followed the acquisition of its principal US rival, McDonnell Douglas, in 1997. The transformation was exemplified by the CEO, Phil Condit. The company's previous preoccupation with meeting 'technological challenges of supreme magnitude' would, he told Business Week, now have to change. 'We are going into a value-based environment where unit cost, return on investment and shareholder return are the measures by which you'll be judged. That's a big shift.'

The company's senior executives agreed to move from Seattle, where the main production facilities were located, to Chicago. More importantly, the more focused business reviewed risky investments in new civil projects with much greater scepticism. The strategic decision was to redirect resources towards projects for the US military that involved low financial risk. Chicago had the advantage of being nearer to Washington, where government funds were dispensed.

So Boeing's civil orderbook today lags behind that of Airbus, the European consortium whose

aims were not initially commercial but which has, almost by chance, become a profitable business. . . .And what was the market's verdict on the company's performance in terms of unit cost, return on investment and shareholder return? Boeing stock, \$48 when Condit took over, rose to \$70 as he affirmed the commitment to shareholder value; by the time of his enforced resignation in December 2003 it had fallen to \$38...

At Boeing, the attempt to focus on simple, well defined objectives proved less successful than management with a broader, more comprehensive conception of objectives...

Obliquity gives rise to the profit-seeking paradox: the most profitable companies are not the most profit-oriented. Boeing illustrate how a greater focus on shareholder returns was self-defeating in its own narrow terms...

Collins and Porras compared the philosophy of George Merck ('We try never to forget that medicine is for the people. It is not for the profits. The profits follow, and if we have remembered that, they have never failed to appear. The better we have remembered it, the larger they have been') with that of John McKeen of Pfizer ('So far as humanly possible, we aim to get profit out of everything we do').

The individuals who are most successful at making money are not those who are most interested in making money. This is not surprising. The principal route to great wealth is the creation of a successful business, and building a successful business demands exceptional talents and hard work. There is no reason to think these characteristics are associated with greed and materialism: rather the opposite. People who are obsessively interested in money are drawn to get-rich-quick schemes rather than to business opportunities, and when these schemes come off, as occasionally they do, they retire to their villas in the sun...

27

Exhibit 1.12 (Continued)

Although we crave time for passive leisure, people engaged in watching television reported low levels of contentment. Csikszentmihalyi's systematic finding is that the activities that yield the highest for satisfaction with life require the successful performance of challenging tasks.

Source: John Kay, Financial Times Magazine, 17 January 2004, pp. 17–21. Reproduced with kind permission of the Financial Times. Also see Kay, J. (2010) *Obliquity* (London: Profile Books).

Exhibit 1.13

The outsider in a hurry to shake up his company

By Stefan Stern

Mr Polman makes it clear that shareholders are not exactly the first thing on his mind. "I do not work for the shareholder, to be honest; I work for the consumer, the customer," he says. "I discovered a long time ago that if I focus on doing the right thing for the long term to improve the lives of consumers and customers all over the world, the business results will come... I'm not driven and I don't drive this business model by driving shareholder value. I drive this business model by focusing on the consumer and customer in a responsible way, and I know that shareholder value can come."

Source: Financial Times, 5 April 2010, p. 14. © The Financial Times Limited. All rights reserved.

The Companies Act 2006 reinforces this by stating that directors' primary duty is to promote the success of the company for the benefit of its members; that is, the shareholders. Yet in the fulfilment of that duty, directors should have regard to the interests of employees, suppliers, customers, the environment and corporate reputation. Thus, in closing a factory, say, the interests of shareholders trump those of employees, but the latter's concerns should not be completely ignored.

This is not the place to advocate one philosophical approach or another which is applicable to all organisations at all times. Many organisations are clearly not shareholder wealth maximisers and are quite comfortable with that. Charities, government departments and other non-profit organisations are fully justified in emphasising a different set of values from those espoused by the commercial firm. The reader is asked to be prepared for two levels of thought when using this book. While it focuses on corporate shareholder wealth decision making, it may be necessary to make small or large modifications to be able to apply the same frameworks and theories to organisations with different goals. However, beware of organisations that try to balance a number of objectives. Take, for example, football clubs that have floated on the stock market. They have at least two parties to satisfy: (i) shareholders looking for good return on their savings, and (ii) fans looking for more spending on players and lower ticket prices. It is very difficult to satisfy both – hence the dramatic tensions and suspicions at so many clubs.

What is shareholder wealth?

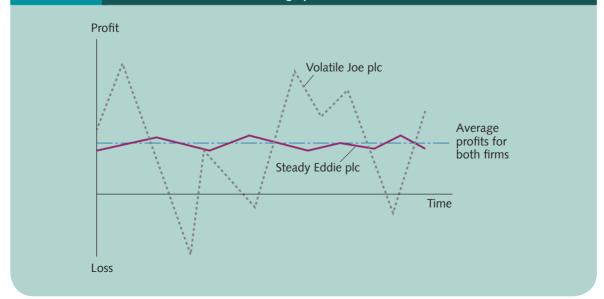
Maximising wealth can be defined as maximising purchasing power. The way in which an enterprise enables its owners to indulge in the pleasures of purchasing and consumption is by paying them a dividend. The promise of a flow of cash in the form of dividends is what prompts investors to sacrifice immediate consumption and hand over their savings to a management team through the purchase of shares. Shareholders are interested in a flow of dividends over a long time horizon and not necessarily in a quick payback. Take the electronics giant Philips: it could raise vast sums for short-term dividend payouts by ceasing all research and development (R&D) and selling off the R&D laboratories. But this would not maximise shareholder wealth because, by retaining funds within the business, it is believed that new products and ideas, springing from the R&D programme, will produce much higher dividends in the future. Maximising shareholder wealth means maximising the flow of dividends to shareholders *through time* – there is a long-term perspective.

Profit maximisation is not the same as shareholder wealth maximisation

Profit is a concept developed by accountants to aid decision making, one decision being to judge the quality of stewardship shown over the owner's funds. The accountant has to take what is a continuous process, a business activity stretching over many years, and split this into accounting periods of, say, a year, or six months. To some extent this exercise is bound to be artificial and fraught with problems. There are many reasons why accounting profit may not be a good proxy for shareholder wealth. Here are five of them:

- *Prospects* Imagine that there are two firms that have reported identical profits but one firm is, with good reason, more highly valued by its shareholders than the other. One possible explanation for this is that recent profit figures fail to reflect the relative potential of the two firms. The stock market will give a higher share value to the company that shows the greater future growth outlook. Perhaps one set of managers chose a short-term approach and raised their profits in the near term but have sacrificed long-term prospects. One way of achieving this is to raise prices and slash marketing spend over the subsequent year profits might be boosted as customers are unable to switch suppliers immediately. Over the long term, however, competitors will respond and profits will fall.
- *Risk* Two firms could report identical historical profit figures, and have future prospects indicating the same average annual returns. However, one firm's returns are subject to much greater variability and so there will be years of losses and, in a particularly bad year, the possibility of bankruptcy. **Exhibit 1.14** shows two firms which have identical average profit but Volatile Joe's profit is subject to much greater risk than that of Steady Eddie. Shareholders are likely to value the firm with stable income flows more highly than one with high risk.
- Accounting problems Drawing up a set of accounts is not as scientific and objective as some people try to make out. There is plenty of scope for judgement, guesswork or even cynical manipulation. Imagine the difficulty facing the company accountant and auditors of a

Exhibit 1.14 Two firms with identical average profits but different risk levels



clothes retailer when trying to value a dress that has been on sale for six months. Let us suppose the dress cost the firm £50. Perhaps this should go into the balance sheet and then the profit and loss account will not be affected. But what if the store manager says that he can only sell that dress if it is reduced to £30, and contradicting him the managing director says that if a little more effort was made £40 could be achieved? Which figure is the person who drafts the financial accounts going to take? Profits can vary significantly depending on a multitude of small judgements like this.

- Communication Investors realise and accept that buying a share is risky. However, they like to reduce their uncertainty and nervousness by finding out as much as they can about the firm. If the firm is reluctant to tell shareholders about such matters as the origin of reported profits, then investors generally will tend to avoid those shares. Fears are likely to arise in the minds of poorly informed investors: did the profits come from the most risky activities and might they therefore disappear next year? Is the company being used to run guns to unsavoury regimes abroad? The senior executives of large quoted firms spend a great deal of time explaining their strategies, sources of income and future investment plans to the large institutional shareholders to make sure that these investors are aware of the quality of the firm and its prospects. Firms that ignore the importance of communication and image in the investment community may be doing their shareholders a disservice as the share price might fall.
- Additional capital Profits can be increased simply by making use of more shareholders' money. If shareholders inject more money into the company or the firm merely retains profits (which belong to shareholders), their future profits can rise, but the *return* on shareholders' money may fall to less than what is available elsewhere for the same level of risk. This is shareholder wealth destructive. For more on this, see Chapter 9.

Ownership and control

The problem

In theory, the shareholders, being the owners of the firm, control its activities. In practice, the large modern corporation has a very diffuse and fragmented set of shareholders and control often lies in the hands of directors. It is extremely difficult to marshall thousands of shareholders, each with a small stake in the business, to push for change. Thus in many firms we have what is called a separation, or a **divorce**, of ownership and control. In times past the directors would usually be the same individuals as the owners. Today, however, less than 1 per cent of the shares of most of the UK's 100 largest firms are owned by the directors.

The separation of ownership and control raises worries that the management team may pursue objectives attractive to them, but which are not necessarily beneficial to the shareholders – this is termed 'managerialism' or 'managementism'. This conflict is an example of the principal-agent problem. The principals (the shareholders) have to find ways of ensuring that their agents (the managers) act in their interests. This means incurring costs, 'agency costs', to (a) monitor managers' behaviour, and (b) create incentive schemes and controls for managers to encourage the pursuit of shareholders' wealth maximisation. These costs arise in addition to the agency cost of the loss of wealth caused by the extent to which prevention measures do not work and managers continue to pursue non-shareholder wealth goals.

Some solutions?

Various methods have been used to try to align the actions of senior management with the interests of shareholders, that is, to achieve 'goal congruence'.

• Linking rewards to shareholder wealth improvements A technique widely employed in industry is to grant directors and other senior managers share options. These permit managers to purchase shares at some date in the future at a price which is fixed now. If the share price rises significantly between the date when the option was granted and the date when the shares can be bought the manager can make a fortune by buying at the pre-arranged price and then selling in the marketplace. For example in 2013 managers might be granted the right to buy shares in 2018 at a price of £1.50. If the market price moves to say £2.30 in 2018 the

managers can buy and then sell the shares, making a gain of 80p. The managers under such a scheme have a clear interest in achieving a rise in share price and thus congruence comes about to some extent. An alternative method is to allot shares to managers if they achieve certain performance targets, for example growth in earnings per share or return on assets.

- *Sackings* The threat of being sacked with the accompanying humiliation and financial loss may encourage directors/managers not to diverge too far from the shareholders' wealth path. However, this method is employed in extreme circumstances only. It is sometimes difficult to implement because of difficulties of making a coordinated shareholder effort. However, if the majority of the directors on the board are independent of the executive directors (not full-time employees, but on the board to look after shareholders' interests) then the threat of removal becomes more credible.
- Selling shares and the takeover threat Over 70 per cent of the shares of the typical company quoted on the London stock market are owned by financial institutions such as pension and insurance funds. These organisations generally are not prepared to put large resources into monitoring and controlling all the hundreds of firms of which they own a part. Quite often their first response, if they observe that management is not acting in what they regard as their best interest, is to sell the share rather than intervene. This will result in a lower share price, making the raising of funds more difficult. If this process continues the firm may become vulnerable to a merger bid by another group of managers, resulting in a loss of top management posts. Fear of being taken over can establish some sort of backstop position to prevent shareholder wealth considerations being totally ignored.
- Corporate governance regulations There is a considerable range of legislation and other regulatory pressures designed to encourage directors to act in shareholders' interests. The Companies Acts require certain minimum standards of behaviour, as does the Stock Exchange. There is the back-up of the Serious Fraud Office (SFO) and the financial industry regulators. Following a number of financial scandals, guidelines of best practice in corporate governance are now consolidated in the UK Corporate Governance Code, which is backed by the London Stock Exchange. It is also backed by the financial industry regulator, the Financial Services Authority (FSA) (the Financial Conduct Authority from 2013) and the Financial Reporting Council (FRC). Directors have to state in the accounts how the principles of the code have been applied. If a principle has not been followed they have to state why. The principles include: transparency on directors' remuneration requiring a remuneration committee consisting mainly of non-executive directors; directors retiring by rotation annually; the chairman should not also be the chief executive officer to avoid domination by one person (in exceptional circumstances this may be ignored, if a written justification is presented to shareholders); the audit committee (responsible for validating financial figures, e.g. by appointing effective external auditors) should consist mainly of independent⁴ nonexecutive directors and not by executive directors, otherwise the committee would not be able to act as a check and balance to the executive directors; at least half the members of the board, excluding the chairman, should be independent non-executive directors; the accounts must contain a statement by the directors that the company is a going concern, i.e. it will continue for at least one year (see <u>www.frc.org.uk</u> for an up-to-date version of the Code).
- Information flow The accounting profession, the Stock Exchange and the investing institutions have conducted a continuous battle to encourage or force firms to release more accurate, timely and detailed information concerning their operations. The quality of corporate accounts and annual reports has generally improved, as has the availability of other forms of information flowing to investors and analysts, such as company briefings and press announcements. All this helps to monitor firms, and identify any wealth-destroying actions by wayward managers early, but, as a number of recent scandals have shown, matters are still far from perfect.

Asian companies are notorious for placing the interests of shareholders behind those of the powerful – *see* Exhibit 1.15.

⁴ To be independent the non-executive director should not, for example, be a customer, ex-employee, supplier or a friend of the founding family or the chief executive.

Exhibit 1.15

Satyam sums up Asian governance failings

By Kevin Brown in Singapore

In January last year, India's corporate establishment was rocked by one of the biggest scandals yet to emerge in Asia – the admission by B. Ramalinga Raju, chairman of Satyam, that he had invented \$1bn of cash on the company's books, not to mention 13,000 employees.

Mr Raju is now on trial. But the scandal at Satyam, once one of India's top five IT companies, is still unfolding. The company, later acquired by the Mahindra group, disclosed a few days ago that the total financial irregularities involved amount to \$1.7bn.

It also faces a \$68m shareholders' lawsuit in New York, and a possible civil suit from the US Securities and Exchange Commission.

The Satyam case is extraordinary in its scale and its direct effect on the company's workforce, now halved from a peak of 50,000. But in the contempt it displays for the rights of minority shareholders and other stakeholders it reflects the dire state of corporate governance in much of Asia.

Sometimes this contempt is political. In China, a group of top executives at China Eastern Airlines, Air China and China Southern Airlines, suddenly swapped jobs in late 2008 without warning nor explanation, on orders from the Communist party. It made no difference that the three airlines are listed in Hong Kong. Sometimes it is nationalistic. Lee Kun-hee, convicted on corruption charges two years ago, was reinstated as chairman of Samsung in March after being granted a pardon by President Lee Myung-bak. The aggressively pro-big business president said Mr Lee was needed to help win the 2018 Winter Olympic Games for Pyeongchang.

Sometimes it is crudely financial. Hong Kong regulatory proposals that would have prevented directors benefiting from inside knowledge when trading their own companies' shares were scrapped when the territory's powerful tycoons revolted against an extension of the existing short closed period for such trades.

In much of the region, corporate governance is a low priority for both companies and governments, largely because both have bought the argument that the people most likely to run a company well over the long term are its majority owners, especially when they rely on dividends for income. The result, in many countries, is weak legislation, underpowered regulators and, often, poor access to the courts for minorities seeking redress. Truly independent directors are a rarity, related party transactions are common, and regulators often have few sanctions.

There are bright spots. Two years ago, Hong Kong became the first and only Asian jurisdiction to introduce mandatory voting by poll for all resolutions at all shareholder meetings. In Thailand, most votes at general meetings are now by poll.

Hong Kong's Securities and Futures Commission is taking an increasingly tough line against insider trading, with several successful prosecutions. For the first time, it has won a court order disqualifying directors for non-disclosure of material information.

In Singapore, the central bank last month won its first civil suit judgment against a fund manager for manipulating the share price of a listed company to raise its own net asset value.

Elsewhere, Japan has toughened up disclosure rules and introduced a requirement for at least one independent director to sit on boards of listed companies. On the other hand, audit committees remain almost unknown and most shareholder votes include only proxies, mainly representing institutions.

Corporate governance matters because it protects small investors from big ones, restricts opportunities for criminal or questionable behaviour and attracts capital by reassuring investors they will not lose their holding because the finance director has decamped with the treasury.

But there is also evidence that it improves share performance. CLSA, a Hong Kong brokerage, said in a report published last month that a survey of 875 companies over six years from 2004 showed a clear correlation between good governance standards and stock market performance, after isolating other factors.

Nevertheless, Asia is failing to catch up with global standards. Jamie Allen, secretary-general of the Asia Corporate Governance Association, an institutional lobbying and research group, says that even the leading jurisdictions – Singapore, Hong Kong and Tokyo – remain well behind London and New York.

Exhibit 1.15 (Continued)

That needs to change. Governments must set clear standards, and companies need to grasp that good governance is in their own interests, in the long term if not the short. But ticking the right boxes is not enough. For all its faults, Satyam had an independent audit committee. It just was not looking in the right places.

Kevin Brown is the FT's Asia Regional Correspondent

FT

Source: Financial Times, 13 October 2010, p. 22. © The Financial Times Limited. All rights reserved.

Concluding comments

We now have a clear guiding principle set as our objective for the myriad financial decisions discussed later in this book: maximise shareholder wealth. Whether we are considering a major investment programme, or trying to decide on the best kind of finance to use, the criterion of creating value for shareholders over the long run will be paramount. A single objective is set primarily for practical reasons to aid exposition in this text; however, many of the techniques described in later chapters will be applicable to organisations with other purposes as they stand, while others will need slight modification.

There is an old joke about financial service firms: they just shovel money from one place to another making sure that some of it sticks to the shovel. The implication is that they contribute little to the well-being of society. Extremists even go so far as to regard these firms as parasites on the 'really productive' parts of the economies. And yet very few people avoid extensive use of financial services. Most have bank and building society accounts, pay insurance premiums and contribute to pension schemes. People do not put their money into a bank account unless they get something in return. Likewise building societies, insurance companies, pension funds, unit trusts, investment banks and so on can only survive if they offer a service people find beneficial and are willing to pay for. Describing the mobilisation and employment of money in the service of productive investment as pointless or merely 'shovelling it around the system' is as logical as saying that the transport firms which bring goods to the high street do not provide a valuable service because there is an absence of a tangible 'thing' created by their activities.

Key points and concepts

- Financial institutions and markets encourage growth and progress by mobilising savings and encouraging investment.
- Financial managers contribute to firms' success primarily through **investment and finance decisions**. Their knowledge of financial markets, investment appraisal methods, cash management, value management and risk management techniques are vital for company growth and stability.
- Financial institutions encourage the flow of saving into investment by acting as **brokers** and **asset transformers**, thus alleviating the **conflict of preferences** between the **primary investors** (households) and the **ultimate borrowers** (firms).
- Asset transformation is the creation of an intermediate security with characteristics appealing to the primary investor to attract funds, which are then made available to the ultimate borrower in a form appropriate to them. Types of asset transformation: risk transformation; maturity transformation; volume transformation.
- Intermediaries are able to transform assets and encourage the flow of funds because of their economies
 of scale vis-à-vis the individual investor: (i) efficiencies in gathering information; (ii) risk spreading; (iii)
 transaction costs.