Robert Bittlestone

# Financial Management for Business

Cracking the Hidden Code



CAMBRIDGE UNIVERSITY PRESS Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore,

São Paulo, Delhi, Dubai, Tokyo, Mexico City

Cambridge University Press

The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org

Information on this title: www.cambridge.org/9780521762908

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First published 2010

Printed in the United Kingdom at the University Press, Cambridge

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

Library of Congress Cataloguing in Publication data

Bittlestone, Robert, 1952-

Financial management for business: cracking the hidden code/Robert Bittlestone.

p. cm.

ISBN 978-0-521-76290-8

1. Business enterprises - Finance. 2. Limited liability. I. Title.

HG4011.B53 2010

658.15-dc22

2010018345

ISBN 978-0-521-76290-8 Hardback

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#### Introduction

Do you know how to ride a bicycle? Do you still have the manual that taught you?

I have asked many people these questions. Most answer yes to the first, but I have never heard assent to the second. I think the reason for this is obvious. We don't learn how to ride a bicycle from a manual: we learn how to ride it intuitively. We sit on the saddle, we start to pedal, we fall off at first, but we practise some more and then almost by magic, we find that we can ride it successfully.

So we don't need an instruction manual to teach us how to ride a bicycle: instead we just use our intuition. The aim of *Financial Management for Business* is therefore to provide you with an intuitive understanding of how business works and how to succeed at it. The idea is not for me to teach you: it is for you to teach yourself, and so I also call this approach *Amplifying Intuition*.

What about the book's subtitle, Cracking the Hidden Code? Is this just over-enthusiastic marketing? In fact it is an exact description of the challenge faced by anyone who wants to succeed in business. There is a hidden code that links all aspects of an enterprise, whether it is a multinational corporation or a neighbourhood grocery store. This code is often presumed and sometimes neglected, but if you don't understand it you will be forever vulnerable, which means that you may go bankrupt and destroy your business overnight.

But you don't have to own a business in order to read this book, because it is also intended for students, managers and the public.

Students of business at the outset of their careers are nowadays presented with an impressively professional syllabus. When I started work in the 1970s, management education was almost non-existent: one simply learned on the job. However, this greater professionalism is sometimes gained at the expense of specialisation: there is a real danger that today's business students may not see the wood for the trees. So in this book I have tried to provide a perspective that may help them to survey the whole forest from above.

Managers of companies, whether modest or multinational, know that their profession is both a science and an art. The scientific side involves aspects such as the rules of accountancy, while the artistic side includes the gut-feel of marketing. These are very different skills and they are often performed by different people, some of whom rarely talk to each other. But both of them are vital if a business is to survive and thrive and so I hope that these chapters will help to build a bridge between them.

Members of the public who are not directly involved with business are nevertheless inextricably intertwined with it, whether as consumers, investors or pension-holders. Every few years a large company goes bankrupt and those who have invested in it lose their money. Their distress at this outcome is often exacerbated by

the clear recollection that it announced record profits just a few months earlier. Almost all of us therefore share an interest in understanding why these profits are not the same as real cash in the bank, and so my third aim is simply to explain to interested members of the public how the rules of financial management operate.

You can find out more about these simulation models at www.fm-fb.com and this will also enable you to determine whether you are entitled to access them. For the benefit of those readers without such access I have included many explanatory screen-shots. These will enable you to follow the argument with your analytical rather than your intuitive capabilities – with the left half of your brain as opposed to the right.

Some readers will find it easier to benefit from these online models than others. If you were born after about 1990 then you have grown up in the internet age and you are therefore what Marc Prensky has memorably described as a 'Digital Native'. You are used to playing video games and mastering software immediately and so you will find these simulations very simple to operate. However, if you were born rather earlier then you are a 'Digital Immigrant' and the experience may be somewhat more demanding. There may also exist 'Digital Refugees' who will find these models very hard going indeed, but then they have probably already decided not to read this book.

If you can access the simulation models then I would emphasise the benefit of doing so while you are reading these chapters. There are many books about learning to ski, but you cannot expect to excel in that ambition without also visiting the slopes. In this sense we can use the internet as if it were a ski-school or a flight simulator. It is a place where you can make mistakes without suffering the consequences.

Once you have run your own simulated company and watched it go bankrupt while you are simultaneously declaring healthy profits, you will not need anyone to explain to you how this can happen: it will have become entirely obvious to you. And however galling you may find the experience, rest assured that it is less painful to go bankrupt with simulated money than with actual funds, just as it is less painful to fall on the beginners' slopes than on a black run, or to crash a virtual aircraft instead of a real one.

I hope this experience will also give you the confidence to see that the diagrams in this book and on the website are not simply theoretical depictions. They are instead direct representations of business reality. So if you can control them successfully, you will have every chance of succeeding in the real business world.

Kingston-upon-Thames, January 2010

#### Acknowledgements

This book has been the subject of a long gestation: so much so that some of my early mentors are no longer alive. For tolerating my naivety and answering endless questions at the start of my career I would like to thank in particular David Walker, John Reeve and Tony Butler of the Vickers Group. For advising Metapraxis as non-executive directors I am grateful to Bob Abbott, Sir Douglas Hague and Lord Butterworth. I am especially appreciative of the lessons I have learned from two remarkable gurus, Stafford Beer and Ken Olisa, who provided inspiration and salvation.

Many of the experiences in this book were acquired while working for our clients. Particularly influential in this respect were Mac Derwig (formerly Unilever), Jim Alles (formerly ICI), Robert Lerwill (Aegis and formerly WPP), John Warren (formerly W.H. Smith and McVities), Andrew Allner (formerly RHM, Dalgety and Guinness), Ken Hanna (Inchcape and formerly Cadbury Schweppes), David Barker (WPP) and David Davies (OMV and formerly Morgan Crucible). I would also like to highlight the contribution of Ken Lever (Numonyx and formerly Tomkins) who has given generously of his time and experience in guiding me through some of these financial minefields.

From the business school world I am indebted to Harvard Business School's Professor Robert Eccles and also to Neil Chisman, latterly a member of the ICAEW's Financial Reporting Committee. From the auditing and business advisory profession I record with admiration the work of David Phillips, Philip Wright, Peter Holgate and their fellow partners at PricewaterhouseCoopers. Kevin Cook of BDO Stoy Hayward, friend and auditor, read through the typescript with consummate care and advised me of some essential changes.

Another major influence has been the continuing discussion with my colleagues at Metapraxis on how best to tackle these issues in the real business world. This resulted in the production of a software resource called *Resolve* in the 1990s followed by *Empower* in the 2000s and as we enter this new decade, the *Business Flight Simulator*. These tools represent a business stethoscope in our clients' and consultants' kitbags and you can find out more about them at www.metapraxis.com.

Many people at Metapraxis have contributed to these developments, but I would like to cite in particular Andrew Mosely, our Chief Operating Officer, and Tony Kirke, our Chief Technology Officer. Last but undeniably not least is Anne Stephenson, my long-suffering PA for nearly twenty years, who has always combined tact with tenacity.

I would also like to pay tribute to all those at CIMA (the Chartered Institute of Management Accountants) and the BCS (now the Chartered Institute for IT) who had the confidence to involve their

organisations in this new initiative, under the leadership of Charles Tilley and Robert Jelly at CIMA and David Clarke and Ian Ryder at the BCS. This has enabled an innovative and internationally recognised new professional qualification to be launched on the basis of this book's material.

Finally, I would like to thank Paula Parish and her colleagues at Cambridge University Press, who guided the typescript into print with imagination, skill and sensitivity. Needless to say, I am wholly responsible for any infelicities that may have escaped their watchful eyes.

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## Part I

# A dream of future wealth

The aim of 'A dream of future wealth' is to provide the reader with an intuitive understanding of the rules of business financial management. 'Do you know how to play chess?' is the question that mirrors our subject, whereas the rather more demanding challenge 'Do you know how to play chess well?' is tackled in Part 2, 'The hidden art of management'.

But before you skip directly to Part 2, let us remember that we cannot play chess well until we know how to play chess.

#### Income and outcome

Few have heard of Father Luca Pacioli, the inventor of double-entry book-keeping; but he has probably had much more influence on human life than has Dante, or Michelangelo.

Herbert Muller

13 March 1500. Two men are walking across the great square of San Marco in Venice. The monk is from Borgo San Sepulcro: he is a mathematician, 53 years old, and he has been travelling for the last few weeks with a 47-year-old artist from Anchiano.<sup>2</sup> They have recently left Milan where they were the guests of Ludovico il Moro at his colossal Castello Sforzesco, but on 6 October 1499 the French army invaded Milan and Ludovico was forced to flee.

Almost a century will pass before Shakespeare writes *The Merchant of Venice*, but the monk's mathematical skills turn out to be of great practical assistance to merchants: initially in Italy, but later worldwide. The artist is also destined for immortality: a few years later he will create the most famous painting in the world.

So what did Leonardo da Vinci, artist and designer of flying machines, find so compelling about the mind of Luca Pacioli, mathematician and ambassador of accountancy?<sup>3</sup> And what made the

<sup>&</sup>lt;sup>1</sup> Muller 1952, p. 257.

Luca Pacioli met Leonardo da Vinci in Milan after arriving there in 1497. They collaborated on various projects and Pacioli also taught da Vinci mathematics. They lived in the city until 1499 and moved to Venice in March 1500. A letter from a Venetian friend of Pacioli's dated 13 March 1500 refers to da Vinci's visit to his musical instrument works some days earlier and to seeing his charcoal portrait of Isabelle d'Este. These and further details of Pacioli's work and his relationship with da Vinci can be found in Michael White's Leonardo: The First Scientist (2000), in Peter Bernstein's Against the Gods: The Remarkable Story of Risk (1996) and in Alfred Crosby's The Measure of Reality: Quantification and Western Society, 1250–1600 (1997).

<sup>&</sup>lt;sup>3</sup> Pacioli (sometimes written Paccioli) was the ambassador rather than the inventor of accountancy in the *Summa* (Pacioli 1494). As Bernstein points out: 'this was not Paccioli's invention, though his treatment of it was the most extensive to date. The notion of double-entry book-keeping was apparent in Fibonacci's *Liber Abaci* and had shown up in a book published about 1305 by the London branch of an Italian firm' (Bernstein 1996, p. 42). There is also clear evidence that the Dubrovnik writer Benedikt Kotruljević (Benedetto Cotrugli) described double-entry accounting

Figure 1.1 Leonardo da Vinci and







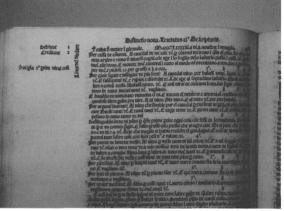


Figure 1.2 Pacioli's Summa in the Castello Sforzesco
Photographed by the author with the kind permission of the Biblioteca Trivulziana. Copyright Comune di Milano. All rights reserved.

author of the critically acclaimed 1494 opus Summa de Arithmetica, Geometria, Proportioni et Proportionalita so interested in the relationship between mathematics and art? Was this the first and last time that the words 'creative' and 'accountancy' were combined in a context untarnished by suspicion? Can we put ourselves in their shoes and pinpoint the problem they were trying to solve and the nature of the solution that emerged?

Luca Pacioli clearly understood the hidden code of accountancy. He taught Leonardo da Vinci mathematics and da Vinci illustrated Pacioli's *Summa*, so the great artist had many opportunities to decipher the code himself. But what is the Pacioli financial code about, and why is it hidden?

Few of the tourists who visit the Castello Sforzesco enter its Trivulziana Library, but if you do so, you will find on its shelves one of the original printed copies of Pacioli's book. Turn to page 201 and you will see something quite remarkable (Figure 1.2).

in his 1458 Libro de l'Arte de la Mercatura. See Yamey 1994, pp. 43–50; and also Stipetić 2000, p. 32.