corporate finance

5th Edition

Ivo Welch

Anderson Graduate School of Management

University of California, Los Angeles

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This book is accompanied by a free online and colorized version at https://book.ivo-welch.info. URLs are live in the online version but only underlined in this print version.

This book is accompanied by videos that were made in collaboration with https://ed.movie. We also made a short (award-winning) video about how we made them—scary but fun (to me). It is posted on YouTube (P0r4dV0ep0A).

There have been numerous contributors to this book, far too many to mention individually. I appreciate the input of every one of them and apologize for not formally acknowledging their contributions here.
However, I have to single out one individual: Without my editor **Mary Clare McEwing**, this textbook would have stunk (as in Charlie Chaplin's sense in Hinckel's speech in the The Great Dictator).

About the Author

About the Author: Ivo Welch is the J. Fred Weston distinguished professor of finance and economics — quite a mouthful — at the University of California Los Angeles Anderson Graduate School of Management (they obviously like long mouthfuls). He also previously held similar positions at the Yale University School of Management and the Brown University Economics Department. He received his BA in Computer Science from Columbia University, and both his MBA and PhD in financial economic from the University of Chicago. He first started teaching corporate finance at UCLA in 1989. Nevertheless, he has not yet lost his questionable sense of humor. More information about the author can be found at book.ivo-welch.info.

This book is dedicated to my parents, Arthur and Charlotte Welch,
my wife Lily, and my three children, Arthur, Leonard and Greta.

Preface

Most corporate finance textbooks cover a similar canon of concepts, and my book is no exception. A quick glance at the table of contents will show you that most — though not all — of the topics in this book overlap with those in other finance textbooks and syllabi. That said, my book is intentionally different. It features many innovations in approach and emphasis. I firmly believe that it is the best introductory corporate finance book available anywhere *and at any price*. After an instructor has used this book once, I believe they will never want to go back — for their own and their students' sakes. As far as I know, no one who has used this book has ever switched back, unless forced to do so by a committee.

This book is also an experiment in pricing. All major economics book publishers believe that professors do not care how much their textbooks cost. This book puts this belief to the test: its competitors cost $300 plus. In contrast, this edition is available for free on the web. (The print price of $60 is low enough to allow many students to order a nicely printed book for markup and keep it even after they have completed the course.) Of course, professors should adopt this book not because of its price, but because it is simply the best corporate finance textbook today, with full instructor support materials, including a free course management and equiz website.

Basic Organization

This book covers all the topics of the usual corporate finance curriculum. However, as noted above, the organizing principle of moving from perfect to imperfect markets unifies the core chapters. This progression from financial "utopia" to the more complex and messier real world is especially apparent in the first three parts of the book but is also revisited multiple times in the remaining parts.

Part I: Value and Capital Budgeting shows how to work with rates of return and how to decide whether to take or reject projects in a perfect market under risk neutrality. Five chapters lay out the basics of the time value of money, net present value, valuation of perpetuities and annuities, capital budgeting, interest rates, uncertainty, and debt and equity in the absence of risk aversion.

Part II: Risk and Return introduces risk aversion and shows how it creates a relation between risk and expected returns in a perfect market. It first provides a historical backdrop of rates of return on various asset classes and some institutional background. It then proceeds to the key concepts of risk, reward, and diversification from an investor's perspective; moves on to benchmarked costs of capital (which probably work best from a corporate perspective in most situation); and culminates with a discussion of the Capital Asset Pricing Model (with warts included).

Part III: Value and Market Efficiency in an Imperfect Market describes what happens if the perfect market assumptions do not hold in our messier real world. Although the perfect market assumptions form the basis of most finance formulas (such as NPV and the CAPM) and have facilitated the development of finance into a modern science, they are not always realistic. Thus, in this part, two chapters examine the reality of information differences, noncompetitive markets, transaction costs, and taxes. The chapters also explain differences between efficient and inefficient markets, and between rational and behavioral finance.

Part IV: Real-World Application puts the theory to work in three chapters. It shows that although the financial concepts may be simple, their application can be complex. This part examines a wide range of issues and pitfalls to consider when putting NPV and IRR to work, looks at financial statement analysis from a finance perspective, and considers the valuation technique of comparables. Some of Part IV has an accounting flavor.

Part V: Capital Structure and Payout Policy considers the capital structure that firms should choose. It starts again with a perfect-market theme and then shows in five chapters how this should play out in an imperfect world of corporate taxes and other issues. Some market imperfections should push firms toward more equity and others toward more debt. Some of Part V has a a legal flavor.

Part VI: Projecting the Future shows how to think about the construction of pro formas. In a certain sense, it is what much of corporate finance is all about.

The Companion

This edition of the book is disciplined in keeping only enough content to fit the essential first course in finance. This keeps the book shorter. Other material — even important material as long as it is impossible to cover in a first course — is now in a "Companion" book. This companion is also available for free. Instructors can also print and distribute individual chapters. The formatting is the same as it is in this primary book, but they are updated only every few editions. The companion includes such chapters as "International Finance," which are a necessary checkbox for AACSB accreditation — but which no introductory finance course has *ever* found time to cover.

The companion includes more detailed coverage, most notably chapters on options and risk management, real options, and corporate governance.

Instructor Preface

The instructor preface, which describes differences from other textbooks and changes from earlier editions, is now laid out onto the website, book.ivo-welch.info. The website also offers more information about additional instructor aids.

Ivo Welch
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PS: Please email any errata to the author. The website will keep an errata page.

To Struggling First-Course Finance Students

I would like to warn you ahead of time about one common issue in introductory finance classes that may end up frustrating you. This is especially the case if you take your first finance course in an MBA program. Chances are that you will find the tempo of the first finance course either too slow or too fast. This problem arises because MBA students typically come from very different backgrounds.

One set of students comes from finance-related jobs. Usually, their work experience has not left them with knowledge solid enough to skip the first finance core course, but their previous exposure gives them a useful road map that makes it much easier to take in new finance-related knowledge. (Some also wrongly believe that they already know everything they need to know, fail to realize this and study, and are then shocked when they fail the course.)

☺Schadenfreude!
(And what does it say about Germans (like me) that only German has such a word??)

Another set has not seen an algebra equation for many years. These students may even be less prepared now than they were when they graduated from high school. It is a challenge for them simply to keep up.

If you are in the second group, you will initially feel overwhelmed by the class experience. (And you will likely not do as well on the early exams — the world is not fair.) My advice to help you even the playing field is to read the book itself once ahead of the course. The idea is not for you to fully understand everything. The idea is to acquire the road map, the rough idea where the course is going. It will make understanding the material much easier.

And let me advise patience, practice, and reflection: New knowledge will eventually fall into place, and you should be able to do well *in the end*. Some of my best and brightest students felt frustrated during the course, but they kept at it, studied twice as hard, and ended up at the top of their classes. (One of my best and most memorable students was a D.J. in Lebanon before she joined the MBA program!) Struggling and anxiety along the way are necessary and maybe even desirable. Whether you like it or not, some angst will be unavoidable. Tough it out.

You may become tempted to blame your instructor for your frustrations. But instructors are caught in the same circumstances as you are. How would *you* gear an introductory finance class toward the different kinds of students in your class? See, despite the different levels of student preparedness, recruiters expect every graduating MBA to have a solid grasp of the finance basics. (And they often ask questions that could go right onto the midterm or final.) If there is a magic bullet, I have not found it. There are no easy solutions.

After having lamented our common dilemma, let me not disavow our own responsibility: Instructors must make the first finance course a surmountable and interesting challenge for *all* motivated students, regardless of background. Every unprepared but willing student must be able to acquire a solid finance background. Every prepared student must find the class useful.

Yet let me also disavow one misconception. It is not an instructor's duty to be entertaining or even to be liked. In fact, a recent study at the U.S. Air Force Academy has shown that students randomly enrolled in classes did better in subsequent courses if their first instructor was less generous in grading and generally less well-liked. If you want to be entertained, skip the finance course and listen to TED lectures on pop culture, instead. Finance is not a passive or easy experience.

May the Force (of this book) be with you!

PS: If your instructor is not using a syllabus.space website for student self-testing, you can register yourself in the generic “corporate-finance introduction” component and take the on-line quizzes.

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