# 高等院校双语教材·经济系列

# INANCIAL ECONOMICS

# 会融学 (第二版)

兹维·博迪 (Zvi Bodie)

罗伯特·C·默顿 (Robert C. Merton) 著

戴维·L·克利顿(David L. Cleeton)

张杰 编审

曹辉 刘澄 译校

**四**中国人民大学出版社

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### 出版说明

中国的入世,使其真正融入到经济全球化的浪潮中。中国政府"引进来,走出去"战略,使得中国经济的发展需要大量的"国际化"人才储备。这就对我国一般本科院校多年来所采取的单一语言(母语)教学提出严峻挑战,财经院校涉外经济类专业实行双语教学改革迫在眉睫。

顺应这一潮流,中国人民大学出版社携手众多国际知名的大出版公司,如麦格劳-希尔、培生教育出版公司等,面向大学本科层次,遴选了一批国外最优秀的经济类原版教材,包括宏观经济学、微观经济学、计量经济学、金融学等经济类专业基础课。

我们在引进出版过程中,注重把好质量关,每一本书都经过该学科领域的专家审核选题和内容, 争取做到把国外真正高水平的适合国内实际的优秀教材引进来。本套教材主要有以下特点:

第一,体系设计完整。本套教材精选了一批国外著名出版公司的优秀教材,基本上涵盖了经济学 专业的核心课程。

第二,保持英文原版教材的特色。本套教材根据国内教学需要,对原书进行了一定的改编,主要 删减了一些不适合和不符合我国国情的内容,但体系结构和内容方面都保持原版教材的特色。

第三,内容紧扣学科前沿。本套教材在原著选择上紧扣国外教学的前沿,基本上都选择国外最流行教材的 最新版本,有利于老师和学生掌握国外教学研究的最新发展趋势。

第四,篇幅合理,价格适中。为适应国内双语教学内容和课时上的实际需要,本套教材在进行了 删减改编后,篇幅更为合理。同时,考虑到学生实际的购买能力,我们采取低定价策略,这样,读者 既能领略原版图书的风貌,又避免了高额的购买费用。

第五,提供强大的教学支持。依托国外大出版公司的力量,本套教材为教师提供了配套的教辅资料,如教师手册、PPT课堂演示文稿、试题库等,并配套有内容丰富的网络资源,从而使教学更为便利。

本套教材既适合高等院校经济类专业的本科教学使用,也适合从事经济类工作和研究的人员阅读和培训使用。我们在选书、改编过程中虽然全面听取了专家的意见,做到尽可能满足读者的需求,但由于各教材的作者所处的政治、经济和文化背景不同,书中内容仍可能有不妥之处,我们真诚希望广大读者提出宝贵意见和建议,以便我们在以后的版本中不断改进和完善。

中国人民大学出版社

### 审译者前言

在《金融学》出版 10 年后,博迪、默顿以及克利顿三位教授通力合作,推出了《金融学》 (第二版)。三位作者均在金融研究领域建树颇多,默顿教授更是获得了 1997 年度的诺贝尔经济学奖。

本版教材承袭了《金融学》的基本框架,致力于提供金融领域的全景式描述,同时采用统一整体的逻辑演进方式阐释金融领域涉及的问题。这种安排既便于使用者根据自己的喜好自行选择感兴趣的内容,又有助于迅速了解金融领域各个组成部分之间的逻辑联系。作为一本入门教材,这种处理方式无疑存在匠心独运之处。在此基础上,本版教材增加了大量应用性专栏,这些专栏选取不同素材从各个角度说明理论的应用性,从而有利于加深对理论的理解。从总体上看,本版教材具有语言深入浅出,例证生动鲜活,理论联系实际等主要特色,确实是一本难得的优秀入门教材。具体而言,本版教材鲜明地提出从功能视角出发划分金融体系的观点,大量专栏和图表的使用提供了丰富的背景知识并为进一步的研究预留了充足的空间。

为了使本版教材更加契合我国的教学体系,更好地满足双语教学的实际需要,我们应中国人民大学出版社的邀请,通过对教材内容的改编以及增加中文注释的方式形成了本教材的双语教学版。双语教学版在保持原有教材的框架体系和内容特色的基础上,从符合我国教学实际需要的角度出发对原书内容进行了部分删节。主要体现在以下三个方面: (1) 删除了一些说明性的例证。 (2) 删除了一些可以在其他课程中了解到或者深入学习的部分。 (3) 本版教材是一本入门教材,以本版教材为母版的双语教学版应当也是以入门启发为目的,因此删除了一些难度较大的章节。

从双语教学的需要出发,我们对书中所涉及的重要概念和定义、相关理论和模型以及不易理解的部分进行了中文加注工作,希望能为学习本书提供一些帮助。在加注的过程中,我们试图从便于理解、逻辑连贯的角度出发对章节内容进行阐释说明。但是由于水平所限,疏漏之处在所难免,敬请读者批评指正。

本教材双语教学版既可以作为金融学课程的双语教学教材使用,也可以用于金融相关专业的专业英语教学过程。作为一本优秀的入门教材,本书同样是金融相关专业的本科生、MBA、MPA 学生必备的教材,而且也是广大读者了解金融知识的优秀参考读物。

#### Foreword

Every year dozens of new textbooks are published. No wonder. As Willie Sutton told the judge about why he robbed banks: "That's where the money is." But only every other decade does there arrive an innovative new work that sets a new pattern of excellence and pedagogy. This edition of *Financial Economics* has long been expected. And it proves to be well worth the wait. Good teachability, like good wine, requires much deliberate time.

In the meanwhile, Robert Merton shared the 1997 Nobel Prize in Economics. His was never a case of "if" but only a case of "when," for it has been well said that Merton is the Isaac Newton of modern finance theory. And ever since their graduate student days at MIT, Bodie and Merton have made a productive team. Speaking as one of their teachers, I hail their demonstrating that water can indeed rise above its source. The kind of finance that matters for modern experts goes beyond the tools that have been revolutionizing Wall Street: the pricing of options and other contingent derivatives. Yes, all that is important practically and theoretically. But as this book's coverage shows, it is the Main Street economy of production, capital budgeting, personal finance, and rational accounting that is best illuminated by this overdue breakthrough in teaching.

I moan to myself, "Where were these authors back when I was a student?" Well, the future is longer than the past, and future students will reap the harvest that these innovative teachers have sown.

Enjoy!

Paul A. Samuelson

Massachusetts Institute of Technology

#### Preface

Ten years have gone by since the publication of the first edition of this text book. That is three times the normal revision cycle time for a college text book in finance. To get the job done, it took the addition of a third coauthor, David Cleeton. But here it is.

We wrote the first edition because we strongly believed that there was a need for an introductory text book in finance built on general principles that apply across all the subfields—corporate finance, investments, and financial markets and institutions. We also believed that there would be a demand for such a book. And we were right.

We and our publisher recognized that our across-the-field general principles approach faced a big challenge: The introductory course in most business schools in the United States had an exclusive focus on corporate financial management. Indeed, some faculty who agreed completely with our approach nevertheless were not able to adopt the book because of institutional constraints surrounding the overall finance curriculum. We expected to encounter fewer such rigidities in other countries, where there was a less-uniform tradition of teaching introductory finance the corporate way. Furthermore, we believed that with its focus on the financial functions as the anchors for understanding the financial system instead of the specific financial institutions, our approach would travel well across geopolitical borders.

Our prognosis turned out to be right. The first edition had moderate success in the United States, but it was extremely successful in other countries. It has been translated into nine other languages: Chinese (old and new), French, Japanese, Korean, Polish, Portuguese, Russian, and Spanish. It has had its greatest success in China, where it is currently used at the top universities.

One of the most enthusiastic adopters of the first edition of *Finance* was David Cleeton, professor of economics at Oberlin College. Our approach dovetailed with the way he was teaching finance to students of economics at Oberlin. Indeed, David subsequently wrote the interactive study guide for the first edition and thus started a ten-year relationship, which now culminates in his coauthoring the second edition with us. With the extraordinary changes in the practice of finance accompanying the globalization of the financial system during the preceding decade, the market in the United States is now primed for the second edition of *Finance*. We have changed the title to "Financial Economics" to reflect the fact that modern finance is a branch of economics.

#### Scope of the Text

Financial Economics is an introductory text intended for use in the first course. It has a broader scope and a greater emphasis on general principles than most other introductory-level texts in finance, which typically focus exclusively on corporate finance. The first edition of this text, which was published in August 1999, has also proven to be well suited for students of economics, law, and mathematics and for business executives seeking a solid understanding and overview of the entire field of finance.

In most well-developed fields of study, such as chemistry, the educational norm is for the introductory course to cover general principles and to give the student an appreciation of the scope of the whole discipline's subject matter. It thereby lays the foundation for more specialized courses that have a narrower focus, such as organic or inorganic chemistry. In line with this approach, our text encompasses all the subfields of finance, within a single unifying conceptual framework.

#### **Content and Organization**

Finance as a scientific discipline is the study of how to allocate scarce resources over time under conditions of uncertainty. There are three analytical "pillars" to finance: optimization over time (the analysis of intertemporal trade-offs), asset valuation, and risk management (including portfolio theory). At the core of each of these pillars are a few basic laws and principles that apply across all of the topical subfields. The book is divided into six major parts. Part I explains what finance is, gives an overview of the financial system, and reviews the structure and uses of corporate financial statements. Parts II, III, and IV correspond to each of the three conceptual pillars of finance and emphasize the application of finance principles to decision problems faced by households (life-cycle financial planning and investments) and firms (capital budgeting). Part V covers the theory and practice of asset pricing. It explains the Capital Asset Pricing Model and the pricing of futures, options, and other contingent claims, such as risky corporate debt, loan guarantees, and levered equity. Part VI deals with issues in corporate finance: financial structure of the firm and real options analysis of investment opportunities.

#### **Pedagogical Features**

- There are many examples to illustrate theory at work in making financial decisions.
- There are "Quick Check" *concept questions* at critical points in the text to help students check their understanding of the material just presented. Answers to these questions are provided at the end of the chapter.
- There are special-interest boxes inserted throughout the text containing newspaper
  articles and applications that encourage students to make active use of the theory in
  dealing with their own affairs and in interpreting the financial news.
- There are a large number of end-of-chapter *problems*, sorted by topic and level of difficulty. Complete step-by-step solutions for all problems are provided in the *Instructor's Manual* in a format that allows adopters of the text to distribute them to their students.

#### **New to This Edition**

Summary of significant changes to the second edition of Financial Economics is as follows:

- Addition of a wide variety of and number of new boxed applications. These boxes
  illustrate the application of chapter topics by featuring wide-ranging policy issues
  from around the world.
- Completely updated tables and charts throughout the textbook.
- Updated Internet Reference Materials sections with revised and expanded Internet links.
- New end-of-chapter problems. The vast majority of the end-of-chapter problems have been revised or changed with an emphasis on challenging students to apply the chapter concepts in new and inventive ways. These exercises will motivate students to appreciate and increase the depth of understanding they associate with key financial principles.

#### **Flexibility**

The text is organized in a way that readily permits an instructor teaching a traditional introductory course in corporate or managerial finance to adopt the book. For schools that are currently updating their finance curriculum to reflect advances in the theory and practice of finance, however, *Financial Economics* provides a flexible alternative to the traditional introductory text. Instead of focusing exclusively on corporate finance, it teaches the conceptual building blocks and applied techniques that are required in *all* areas of finance—investments and financial institutions, as well as corporate finance. Consequently, instructors in subsequent elective courses do not have to develop these fundamentals from scratch, as is often the case now. This book's broad-based approach thereby eliminates considerable duplication of effort in the elective offerings.

The text is organized to allow instructors considerable latitude in choosing the content and level of detail they wish to deliver to their classes.

One outcome of this flexible structure is that an instructor who wishes to emphasize corporate finance in the introductory course can focus on Chapters 5, 12, 15, and 16 and still provide effective coverage of general valuation and risk management by using selected chapters from Parts III and IV. Instructors who instead wish to emphasize investment subjects such as portfolio selection and option pricing in the introductory course can readily do so by covering more chapters from Parts IV and V.

#### **Supplements for the Instructor**

#### Instructor's Manual with Solutions

The Instructor's Manual includes worked-out answers to all end-of-chapter questions and problems.

#### **Test Bank**

The test bank contains multiple-choice questions, short-answer problems, and a separate section with more analytical challenging problems.

#### **TestGen-EQ Software**

This computerized package allows instructors to customize, save, and generate classroom tests. The test program permits instructors to edit, add, or delete questions from the test bank; edit existing graphics and create new graphics; analyze test results; and organize a database of test and student results. This software allows for extensive flexibility and ease of use. It provides many options for organizing and displaying tests, along with search and sort features.

#### Instructor's Resource CD

The Instructor's Resource CD contains all instructor and student resources that support this text. Instructors have the ability to access and edit the Instructor's Manual, test bank, and PowerPoint® presentation. Instructors can pick and choose from the various supplements and export them to their hard drive.

#### **Blackboard and WebCT Course Content**

Prentice Hall offers fully customizable course content for the Bb and WebCT Course Management Systems.

#### **For The Students**

#### **Companion Web Site**

The companion Web site (www.prenhall.com/bodie) includes an *Online Study Guide* that provides various self-assessment exercises and immediate feedback for the student.

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14.7 The Black-Scholes Model

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