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# 现代

# 投资理论

第 5 版

Robert A. Haugen/著

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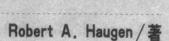
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## Modern Investment Theory

第 5 版



Professor Emeritus of Finance
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Prentice Hall

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### ·院长寄语。

北京大学光华管理学院秉承北大悠久的人文传统、深邃的学术思想和深厚的文化底蕴,经过多年努力,目前已经站在中国经济发展与企业管理研究的前列,以向社会提供具有国际水准的管理教育为已任,并致力于帮助国有企业、混合所有制企业和民营企业实现经营管理的现代化,以适应经济全球化趋势。

光华 MBA 项目旨在为那些有才华的学员提供国际水准的管理教育,为工商界培养熟悉现代管理理念、原理和技巧的高级经营管理人才,使我们的 MBA 项目成为企业发展致富之源,为学员创造迅速成长和充分发挥优势的条件和机会。

为了适应现代人才需求模式和建立中国的一流商学院,北京大学 光华管理学院正在推出国际 MBA"双语双学位"培养方案;同时,为了 配合北大 MBA 教育工作的展开,光华管理学院与北大出版社联合推出 本套《当代全美 MBA 经典教材书系(英文原版)》,并向国内各兄弟院校 及工商界人士推荐本套丛书。相信我们这些尝试将会得到社会的支 持。而社会对我们的支持,一定会使光华 MBA 项目越办越好,越办越 有特色。

北京大学光华管理学院院长 / 参 以

#### 出版者序言

2001年12月10日中国加入了世界贸易组织,从此,中国将进一步加大与世界各国的政治、经济、文化各方面的交流和合作,这一切都注定中国将在未来世界经济发展中书写重要的一笔。

然而,中国经济的发展正面临着前所未有的人才考验,在许多领域都面临着人才匮乏的现象,特别是了解国际贸易规则、能够适应国际竞争需要的国际管理人才,更是中国在未来国际竞争中所必需的人才。因此,制定和实施人才战略,培养并造就大批优秀人才,是我们在新一轮国际竞争中赢得主动的关键。

工商管理硕士(MBA),1910 年首创于美国哈佛大学,随后 MBA 历经百年风雨不断完善,取得了令世人瞩目的成绩。如今,美国 MBA 教育已经为世界企业界所熟知,受到社会的广泛承认和高度评价。中国的 MBA 教育虽起步较晚,但在过去 10 年里,中国的 MBA 教育事业发展非常迅速,也取得了相当显著的成绩。现在国内已经有 50 多所高等院校可以授予 MBA 学位,为社会培养了 3000 多名 MBA 毕业生,并有在读学员 2 万多人。

目前,国内的 MBA 教育市场呈现一片繁荣景象,但繁荣的背后却隐藏着种种亟待解决的问题。其中很大一部分问题的成因是因为目前我国高校使用的教材内容陈旧,与国外名校的名牌教材差距较大,在教学内容、体系上也缺乏与一流大学的沟通。为适应经济全球化,国家教育管理部门曾要求各高校大力推广使用外语讲授公共课和专业课,特别是在我国加入 WTO 后急需的上百万人才中,对 MBA 人员的需求更是占 1/3 之多,所以,大力开展双语教学,适当引进和借鉴国外名牌大学的原版教材,是加快中国 MBA 教育步伐,使之走向国际化的一条捷径。

目前,国内市场上国外引进版教材也是新旧好坏参差不齐,这就需要读者进行仔细的甄别。对于国外原版教材的使用,在这里我们要提几点看法。国外每年出版的教材多达几万种,如果不了解国外的教材市场,不了解国外原版教材的品质就可能找不到真正适合教学和学习的好的教材。对于不太了解外版教材的国内读者来说,选择教材要把握以下几点,即:选择国外最新出版的书;选择名校、名作者的书;选择再版多次并且非常流行的书。综合以上几点来看,目前国内市场上真正出新、出好、出精的 MBA 教材还是不多的。

北京大学出版社推出的《当代全美 MBA 经典教材书系(英文原版)》弥补了国内 MBA 教材市场的缺憾、给国内 MBA 教材市场注入了一股新鲜的血液。全套丛书共由 22 本书组成,覆盖了北京大学 MBA 的全部主修课程,包括;经济学、管理学、营销学、战略管理、管理信息系统、运作管理、人力资源管理、商务沟通、国际金融、金融管理、决策分析、货币银行学、会计学等。另外在十几门主课的基础上又增加了几门高级选修课程,包括:国际会计学、组织行为学、投资学、商务学、财务报表解析、管理会计、管理沟通、商业伦理学、企业家精神等。

本套丛书的筛选大体上本着以上所提到的几点原则,即,(1)出"新"。克服以往教材知识陈旧、落后的弊端,大部分教材的出版年限都选择在 2002 年,与国外原版书同步出版。(2)出"好"。本套丛书收入了美国哈佛大学、斯坦福大学、麻省理工学院等著名院校所采用的教材,如:《管理学》、《营销管理》、《管理信息系统》、《管理人力资源》、《财务会计》、《管理会计》、《面向管理的数量分析》等;本套丛书收入著名学术界宗师包括斯蒂芬・罗宾斯(《管理学基础》)、菲利

普·科特勒(《营销管理架构》)、查尔斯·亨格瑞(《财务会计》)、威廉·鲍莫尔(《经济学:理论、方针和政策》)等人的学术巨著。(3)出"精"。大多数教材都是再版多次,经过不断的修改和完善而成的,如:再版 5 次的《卓越的商务沟通》、《现代投资理论》、《商业伦理:概念和案例》等;再版 6 次的《货币、银行和金融市场经济学》、《商务学》、《财务报表解析》等;再版 7 次的《面向管理的数量分析》等;再版 8 次的《经济学:理论、方针和政策》、《财务会计》、《管理信息系统》等;甚至还有再版 12 次的《金融管理与政策》、《管理会计》。本丛书中每一本书的选择都依据该书旧的版本,或作者过去同类书籍的销售情况,选择居于该领域销售排行榜首位的教材。

本套《当代全美 MBA 经典教材书系(英文原版)》集合了美国经济学界和管理学界各个学科领域专家的权威巨著,该丛书经过北京大学光华管理学院及其他著名高校的知名学者的精心选编,包括了大量精深的理论指导和丰富的教学案例,真正称得上是一套优中选精的丛书。

### 致谢

本套教材是我社与国外一流专业出版公司合作出版的,是从大量外版教材中选出的最优秀的一部分。在选书的过程中我们得到了很多专家学者的支持和帮助,可以说每一本书都经过处于教学一线的专家、学者们的精心审定,北京大学出版社英文影印版教材的顺利出版离不开他们的无私帮助,在此,我们将对审读并对本套图书提出过宝贵意见的老师们表示衷心的感谢,他们是:

北京大学光华管理学院:符国群、李东、梁钧平、陆正飞、王建国、王其文、杨岳全、于鸿君、张 国有、张圣平、张志学、朱善利(按拼音排序)

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本套丛书的顺利出版还得到了培生教育集团(Pearson Education)北京代表处、汤姆森学习集团(Thomson Learning)北京代表处的大力支持,对他们的付出我们也非常感谢。

#### 教辅材料说明

教材,顾名思义教学之材料,它和普通的书籍有一个很大的区别,就是必须以"方便教授教学"为主。所以,好的教材更需有完备的教学辅助材料相匹配,且每一本教材都要有教辅材料,只有配备了齐全的辅助材料才能称其为完整的教材。北京大学出版社的《当代全美 MBA 经典教材书系(英文原版)》系我社获全球最大的教育出版集团,美国培生教育集团(Pearson Education Group)独家授权之英文影印版本。Pearson Education 旗下的国际知名教育图书出版公司Prentice Hall/Addison Wesley/Longman,以其高品质的经济类出版物,已成为全美乃至全球高校采用率最高的教材,享誉全球教育界、工商界。我社在选择此套教材的过程中,尽量选择教辅材料齐全的教材,这些教辅材料包括:教学指导用书、教学提纲、测试题、解答题、课堂演示文稿等、以书、幻灯片(Powerpoint Mesentation)、Disk、CD、CD—ROM等形式出现。我社特获权独家复制以上材料,并向采用该书的教师免费赠送。同时,这些材料还可通过访问培生教育集团相关站点:http://www.prenhall.com、http://www.pearsoned.com、http://www.aw.com或国内站点:http://www.digishop.com.cn免费下载。

欲获得相关教辅材料的教师烦请填写后面的《教辅资料支持表》,以确保此教辅材料仅为教师获得。

#### 出版声明

本套丛书是对国外原版教材的直接影印,由于各个国家政治、经济、文化背景的不同,原作者所持观点还请广大读者在阅读过程中加以分析和鉴别。我们希望本套丛书的出版能够促进中外文化交流,加快国内经济管理专业教学的发展,为中国经济走向世界做出一份贡献。

我们欢迎所有关心中国 MBA 教育的专家学者对我们的工作进行指导,欢迎每一位读者给我们提出宝贵的意见和建议。

北京大学出版社 数字经实公司 2002年1月

## 内器简介

全书共分6部分25章,在强调有价证券理论的前提下提出了正确和指导性的投资概念,包括对资本资产价格、套利交易价格、证券交易价格、汇率以及证券的管理等进行了广泛的讨论。还分析了对股票的估价、对期货收益和红利的评估、固定收益市场等问题。另外还涉及了微积分学,但这只是作为主要讨论议题的附属问题被用到。

本书的主要特色为:免费的网上资源;完整、细致的有价证券理论(第四、五、十章);修正并扩增了术语表;每章后增加了更多的基于计算机的问题。作为本书独一无二的特色,作者阐释了有价证券理论,更细致地阐述了资本资产定价问题,并用4章的篇幅阐述了利率和债券管理理论。

适用性:适合研究生和中级本科生、MBA 的投资和金融理论人门性课程,还可作为各企业、公司管理人员的培训教材和参考书。

畅销性:本书被美国加利福尼亚大学等多所著名院校采用为教材,流行于世界各地。

#### PREFACE

This book is intended for the introductory graduate or intermediate undergraduate course in investment management. It requires a minimal level of training in mathematics and statistics. A knowledge of basic calculus is useful but not required, since it is used only in the appendixes to the main discussions in the chapters. All the statistical concepts required for an understanding of the text are provided in a review of Chapter 3.

The book differentiates itself in the following respects. First, the coverage of portfolio theory is complete and detailed, covering four chapters including a unique graphical explanation of the Markowitz procedure, as well as a new chapter on asset allocation using comprehensive simulations with real data. The material on portfolio selection is backed up by computer problems and powerful, easy-to-use computerized portfolio analysis sessions fully integrated into the text. The extensive coverage given to the predictive power of factor models reflects the increasing use of these models in the industry and, at the same time, paves the way for an easy grasp of the assumptions underlying the arbitrage pricing theory.

Second, extensive coverage is given to the issues related to capital asset pricing. The capital asset pricing model is covered in great detail. Emphasis is given to discriminating between the properties of the model that derive from economics and the properties that derive from definitional identities. The coverage of the arbitrage pricing theory is both complete and up-to-date. The issues involved in testing both CAPM and APT are also explored in detail. Emphasis is given to inherent problems associated with both the CAPM and the APT, including a discussion and analysis of the controversial article on the cross section of stock expected returns by Fama and French. It is my feeling that we no longer need to convince students that a study of modern finance will increase their human capital. Most of the theories and models in this book are widely employed in the real world. Rather than trying to convince them of their merits, they should thoroughly understand their weaknesses as well as their strengths, so they will know which models to lean on in making their investment decisions and how hard. Currently most of the analysis of investment performance in the industry is done without asset pricing models. Thus, we add a new chapter covering performance measurement without these models.

Third, the book presents four chapters on interest rates and bond management. It is no secret that interest rates can be volatile. This has increased both the complexity and excitement of bond portfolio management. Two full chapters are devoted to the economic forces that push both the general level and term structure of interest rates around. Then two more chapters are devoted to aggressive and defensive bond portfolio management. In the first of these chapters the students learn how to integrate bonds into the Markowitz approach. In the second chapter they learn how to immunize their portfolio against the threat of changing interest rates. There is great interest in immunization among pension funds and other financial institutions. A knowledge of interest immunization is now an essential weapon in the modern portfolio manager's arsenal.

Finally, as befitting the increasing popularity of these contracts, the coverage of options and forward and futures contracts is extensive. Three full chapters are devoted to option pricing. In the first chapter, on the pricing of European options, the students are taken through simplified valuation frameworks. They learn the behavioral characteristics of option prices, the concept of pricing an option to provide those who hedge with the risk-free rate of return, and finally the framework of the Black-Scholes option-pricing model. In the second chapter, on American options, they learn why American options may be exercised early and how the value of American puts and calls may exceed the values of their European counterparts. The third options chapter addresses sources of bias in option pricing and option strategies, including portfolio insurance. In the greatly simplified chapter on forward and futures contracts, emphasis is given to the pricing and use of these contracts in hedging.

In addition to these distinctions in coverage, the book presents many mini case studies, which show students how the techniques explored in the book are actually used in the real world. The individuals and firms discussed in these case studies are real. In addition to motivating the student to learn the material, they are likely to provoke in-class discussion of the material.

Completion of a book of this size is a considerable task involving the participation of many people. I would like to thank my former secretary, Valeska Wolf, and Marla Hickey. Thanks to Yanbo Jin for preparing many new questions and problems. Thanks also to David Olson for programing PManager. I also wish to thank Eli Talmor for his contribution to the appendix on utility theory. In addition, thanks to Tiffany Haugen, Jim Berens, Bill Lepley, and Darius Miller for participation in writing the instructor's manual and the end-of-chapter questions and problems. I am also grateful to the reviewers of this edition: Atul Saxena, Mercer University; Manuel Tarrazo, University of San Francisco; and Joe Walker, University of Alabama at Birmingham. Finally, a special thanks goes to all the professionals who participated in the *Out on the Street* segments of the book. These people devoted their time freely to the project, and their stories should be of inspiration to the students who will follow in their footsteps.

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