PEARSON

高等院校双语教学适用教材·会计

FUNDAMENTALS OF CORPORATE FINANCE

Jonathan Berk Peter DeMarzo Jarrad Harford

公司理财基础

（美）乔纳森·伯克 彼得·德玛佐 加拉德·哈福德 著

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大连

图书在版编目（CIP）数据

公司理财基础 /（美）伯克（Berk，J.）等著；姜英兵译注 . —大连：东北财经大学出版社，2012. 9

（高等院校双语教学适用教材 · 会计）

书名原文：Fundamentals of Corporate Finance

ISBN 978-7-5654-0879-3

Ⅰ. 公… Ⅱ. ①伯…②姜… Ⅲ. 公司-财务管理 Ⅳ. F276. 6

中国版本图书馆 CIP 数据核字（2012）第 149599 号

辽宁省版权局著作权合同登记号：图字 06-2010-455 号

东北财经大学出版社出版

（大连市黑石礁尖山街 217 号 邮政编码 116025）

教学支持：（0411）84710309

营 销 部：（0411）84710711

总 编 室：（0411）84710523

网 址：http：//www. dufep. cn

读者信箱：dufep @ dufe. edu. cn

大连图腾彩色印刷有限公司印刷 东北财经大学出版社发行

幅面尺寸：185mm×260mm 字数：1 172 千字 印张：42 3/4 插页：1

2012 年 9 月第 1 版 2012 年 9 月第 1 次印刷

责任编辑：李 季 封面设计：冀贵收

ISBN 978-7-5654-0879-3

定价：82. 00 元

出版者的话

当前，在教育部的大力倡导下，财经和管理类专业的双语教学在我国各大高校已经逐步开展起来。一些双语教学开展较早的院校积累了丰富的经验，同时也发现了教学过程中存在的一些问题，尤其对教材提出了更高的要求；一些尚未进入这一领域的院校，也在不断探索适于自身的教学方式和方法以及适用的教材，以期时机成熟时加入双语教学的行列。总之，对各类院校而言，能否找到“适用”的教材都成为双语教学成功与否的关键因素之一。

然而，国外原版教材为国外教学量身定做的一些特点，如普遍篇幅较大、侧重于描述性讲解、辅助材料繁杂，尤其是许多内容针对性太强，与所在国的法律结构和经济、文化背景结合过于紧密等，却显然不适于国内教学采用，并成为制约国内双语教学开展的重要原因。因此，对国外原版教材进行本土化的精简改编，使之变成更加“适用”的双语教材，已然迫在眉睫。

东北财经大学出版社作为国内较早涉足引进版教材的一家专业出版社，秉承自己一贯服务于财经教学的宗旨，总结自身多年的出版经验，同培生教育出版集团和麦格劳希尔、圣智、威立出版集团等国外著名出版公司通力合作，在国内再次领先推出了会计、工商管理、经济学等专业的“高等院校双语教学适用教材”。这套丛书的出版经过了长时间的酝酿和筛选，编选人员本着“品质优先、首推名作”的选题原则，既考虑了目前我国财经教育的现状，也考虑了我国财经高等教育所具有的学科特点和需求指向，在教材的遴选、改编和出版上突出了以下一些特点：

- 优选权威的最新版本。入选改编的教材是在国际上多次再版的经典之作的最新版本，其中有些教材的以前版本已在国内部分高校中进行了试用，获得了一致的好评。
- 改编后的教材在保持英文原版教材特色的基础上，力求内容精要，逻辑严密，适合中国的双语教学。选择的改编人员既熟悉原版教材内容，又具有本书或本门课程双语教学的经验。
- 改编后的教材配有丰富的辅助教学支持资源，教师可在网上免费获取。
- 改编后的教材篇幅合理，符合国内教学的课时要求，价格相对较低。

本套教材是在双语教学教材出版方面的一次新的尝试。我们在选书、改编及出版的过程中得到了国内许多高校的专家、教师的支持和指导，在此深表谢意，也期待广大读者提出宝贵的意见和建议。

东北财经大学出版社

序　言

当我们告诉朋友和同事，我们已决定为 MBA 学生写一部公司理财教科书时，他们大多数人的一致反应是：为什么是现在？在我们的 MBA 教科书成功出版后，这个问题又变成，“你们要多快能写出一本适合本科生学习的公司理财教科书?”我们衷心地希望在未来的岁月里《公司理财基础》能够塑造学生学习公司理财课程的新方式。

我们用了两年的时间写这本书，它既要成功保持 MBA 教科书的理念，但最重要的是，要方便非财务金融专业的本科生阅读。我们知道，不计其数的本科生感觉公司理财课程富有挑战性。教科书的作者们试图使其变得更加浅显易懂，于是不再强调公司理财的核心原理，而是更多地关注结果。我们结合 40 多年来的教学经验发现，这样做实则适得其反，反而会使这门课程变得更加难以理解。财务学的核心理念既清晰又直观。公司理财之所以如此具有挑战性，原因在于，初学者通常很难区分这些核心理念与其他具有直觉吸引力的方法，而那些方法一旦用于制定财务决策则可能会导致错误。我们写作这本书的主要动机就是，为学生掌握公司制定财务决策所需要的核心理念和理财工具打下坚实的基础，不管这是他们学习财务学的唯一课程，还是其专业基础课，学生都会受益良多。

过去 30 年来，财务学领域发生了显著的变化。这一时期金融经济学积累的大量经验证据支持了现有的理论，同时也强化了理解和运用公司理财原理的重要性。与此同时，新闻媒体对财务的关注也与日俱增，与往届很多学生相比，今天的本科生对财务学课程更感兴趣。如何利用学生自然的兴趣和动机去克服他们对这门课程的畏难心理，将这些经过时间检验的核心原理传授给他们，这是我们面临的一个挑战。再一次，我们将课堂教学的有用经验应用于教科书中：举例时所涉及的公司都是学生们熟悉的，比如，星巴克和苹果公司；坚持一贯使用真实的数据；展示财务核心理念在个人理财中的应用；我们竭力使即使是非财务专业的学生也能融入到课程之中。

我们秉持为本科公司理财教科书树立新标准的信念，这一追求超出了教科书本身。请将书翻到有关“我的理财实验室”的那些页，体会那些突破性技术有可能从根本上改变学生的学习方式。

核心理念

《公司理财基础》全面涵盖和介绍了公司理财的核心主题。内容全面，条理清晰，易于把握。

将估值作为统一的框架

根据我们的经验，将课程内容有机地整合为一体，比分散叙述更易于被学生所接受。本书将公司理财视作一套简洁有力的财务理念的应用。第一个理念是，估值驱动决策——公司应该采纳收益的价值超过成本的决策。第二个理念是，在竞争性市场中，市场价格（而不是个人的偏好）决定价值。将这两个理念结合起来，就是所谓的估值原理，公司理财的所有关键概念，包括净现值法则、证券定价、风险和回报的关系、资本结构以及股利政策中的权衡，都从估值原理演绎而来。

估值原理如同一个罗盘，引导财务决策者遵循正确的轨迹。我们在第 3 章介绍估

值原理以及它的直接应用——净现值。每一篇的开篇都强调该篇主题与估值原理的联系。

重视应用

应用估值原理可以提供进行各类比较的技能，诸如在贷款、投资和项目之间的比较，使学生变成有知识、自信的财务金融消费者和管理者。学生明白如何将财务原理应用于个人生活和未来职业生涯中时，他们就掌握了财务知识，而不是停留在抽象的、数学化的理念上。是谁比同行更强化了这一点？每章开头都有对刚毕业的大学生的访谈，看他们如何在日常工作中娴熟地运用财务工具。

强化基础工具

掌握折现现金流技术对于学生学习财务入门课程非常关键。一如既往，熟能生巧，解决复杂的主题有利于知识的掌握。为此，第2篇集中阐述货币时间价值这一基础知识。第3章简要地介绍了单期投资的货币时间价值，这构成了估值原理的一个关键部分。第4章主要讨论持续多期的现金流的货币时间价值。第5章解释了利率的报价和决定因素。对于每个问题中的现金流，本书采取了如下框架中的系统方法：

引入第4章所述的时间线，强调建立现金流时间线的重要性。

对于涉及现金流的例题，关键的第一步就是建立时间线。

在解题过程中利用财务计算器和Excel技术。

聚焦资本预算

资本预算决策是公司理财中最重要的决策之一。本书前面的内容就强调了资本预算，第3章介绍了净现值法则，以比较决策的成本和收益。基于NPV法则，第7章评价了NPV以及其他投资决策法则。第8章“资本预算基本原理”考察了对项目的估值，清晰而系统性地区分了收益和自由现金流。先介绍资本预算，必然涉及资本成本的概念，从而逻辑性地引出对风险和回报的阐述。第12章用WACC法计算和使用公司的总体资本成本。

新的理念

《公司理财基础》在公司理财研究和实践的最新进展与全面涵盖核心财务主题之间取得谨慎细致的平衡。本书区别于其他教科书的创新之处有：

第9章关于股票估值，通过考虑公司的未来红利、自由现金流或其价值与相似的公开交易公司的比较，来评估公司的股权价值。

第16章“股利政策”考察了管理者和投资者之间的非对称信息对股利分配的影响，以及股利决策对信息不对称的信号显示。

第17章区分了可持续增长和价值提升型增长，重点探讨了增长会增加还是减少公司的价值。

学生需要掌握的工具

解决问题的方法

每个核心概念都有相应的例题讲解。财务学远不止计算那么简单：要学好财务学，学生要理解问题背后隐含的直觉，解释数学计算的含义。为养成这种思维习惯，每道例题的陈述后面都有三个步骤的解题过程——分析、计算和评价——有助于学生的理解，示范学生自己解决问题和案例时应遵循的步骤。每章的“常见错误”专栏

里给出了学生常犯的典型错误。

实践应用的方法

每章都提到的知名公司，如苹果和星巴克等，使阅读变得生动和有趣。本书还包括基于案例编写的两章（第13和14章），案例公司分别为真实网络（RealNetworks）公司和赫兹（Hertz）公司。每章的结论会提供给财务经理一些建议。对知名专业理财人士的访谈，如微软公司前CFO约翰·康纳斯（John Connors），从实践的角度加强了对财务原理的理解。

本书还用到的一种方法是介绍理财从业者依赖的工具。Excel对话框和章末附录教学生使用Excel技术，学生可利用指定的在线电子数据表自行输入变量和公式。

各章内容概述

《公司理财基础》涵盖了本科层次入门级财务课程的主题。本书集中探讨与公司的投资选择或筹集用于投资的资金有关的财务决策制定。本书的编写考虑了读者对灵活性的需求，以及整个学期学习的时间压力。

第1篇和第2篇为学习公司理财打下了基础。第1章介绍了股份有限公司和其他的企业组织形式，考察了财务经理和外部投资者在公司制定决策中起到的作用。第2章回顾了基本的公司会计准则和财务经理决策所依赖的财务报表。

第2篇提供了公司理财的基本工具，这些工具是公司理财的基石。第3章介绍了估值原理，它构成了财务学的基础，将本书的全部观念有机地联系起来。第4章主要介绍货币时间价值，分析了持续多期的一系列现金流，解释了如何对系列未来现金流估值，推导计算年金和永续年金的现值的简便公式。第5章主要解释利率的报价和利率的决定因素，重点讨论了如何使用市场利率确定系列现金流的相应的折现率。第6章使用利率展示了货币时间价值工具的一种应用：对由政府和公司发行的债券估值。

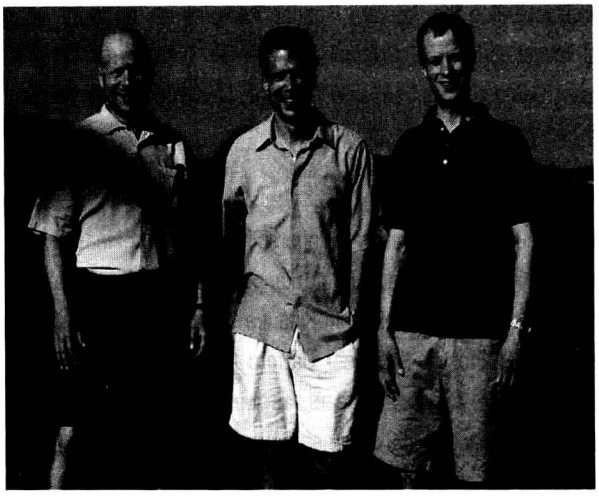
第3篇讨论财务经理面临的最重要决策：公司应该选择哪项投资，以提升公司的价值。第7章给出了引导财务经理制定决策的投资决策法则。第8章概述了对项目的增量现金流的评估，它是应用净现值决策法则的一个输入变量。资本预算决策决定了公司的价值创造，于是第9章转向评估投资者对公司的所有权——股票——的价值。利用各种方法对公司股权估值后，讨论了市场效率及其对财务经理的启示。

第4篇考察了风险和回报这些关键概念，解释了怎样测量和比较投资机会的风险，以确定每项投资机会的资本成本。第10章介绍了投资者只对不可分散风险要求风险溢价这一深刻洞见。第11章量化了这一观念，导出资本资产定价模型（CAPM）。第12章运用此前所学知识，估算公司的总体加权平均资本成本。

第5篇叙述了公司为其实施的投资筹集资金的决策。第13章解释了股权融资的机制，第14章阐述了债务市场融资机制（本章继续制度性地综述第6章开始介绍的债券市场）。在此基础上，第6篇考察了融资选择对公司价值的影响。第15章“资本结构”首先直觉性地导出莫迪格利安尼和米勒的结论，然后讨论一些重要的市场摩擦的影响。第16章主要研究股利政策问题。

第7篇转向公司的长期和日常理财事务与细节。第17章给出了预测公司现金流和长期融资需求的工具。第18章讨论了公司对其营运资本需求的管理，第19章则解释了公司如何为短期现金需求融资。

About the Authors



Jonathan Berk, Peter DeMarzo, and Jarrad Harford

Jonathan Berk is the A.P. Giannini Professor of Finance at the Stanford Graduate School of Business and is a Research Associate at the National Bureau of Economic Research. Prior to Stanford he taught at the Haas School of Business at the University of California–Berkeley, where the introductory Corporate Finance course was among his assignments. Before earning his PhD from Yale University, he worked as an associate at Goldman Sachs, where his education in finance really began. Professor Berk is an Associate Editor of the *Journal of Finance*. His research has won a number of awards including the TIAA-CREF Paul A. Samuelson Award, the Smith Breeden Prize, Best Paper of the Year in The Review of Financial Studies, and the FAME Research Prize. His paper, "A Critique of Size-Related Anomalies," was recently selected as one of the two best papers ever published in *The Review of Financial Studies*. In recognition of his influence on the practice of finance, he has received the Bernstein-Fabozzi/Jacobs Levy Award, the Graham and Dodd Award of Excellence, and the Roger F. Murray Prize. Born in Johannesburg, South Africa, Professor Berk is married, has two daughters, and is an avid skier and biker.

Peter DeMarzo is the Mizuho Financial Group Professor of Finance at the Stanford Graduate School of Business and is a Research Associate at the National Bureau of Economic Research. He received his PhD in economics from Stanford University. Currently, Professor DeMarzo teaches the "turbo" core finance course for first-year MBA students. Prior to Stanford, he taught at the Haas School of Business and the Kellogg Graduate School of Management, and he was a National Fellow at the Hoover Institution. Professor DeMarzo received the Sloan Teaching Excellence Award at

Stanford and the Earl F. Cheit Outstanding Teaching Award at University of California–Berkeley. Professor DeMarzo has served as an Associate Editor for *The Review of Financial Studies*, *Financial Management*, and the *B.E. Journals in Economic Analysis and Policy*, as well as the Vice President of the Western Finance Association. Professor DeMarzo has received numerous awards for his research including the Western Finance Association Corporate Finance Award and the Barclays Global Investors/Michael Brennan Best Paper Award from *The Review of Financial Studies*. Professor DeMarzo was born in Whitestone, New York, is married and has three sons. He and his family enjoy hiking, biking, and skiing.

Jarrad Harford is the Marion B. Ingersoll Professor of Finance at the University of Washington. Prior to Washington, Professor Harford taught at the Lundquist College of Business at the University of Oregon. He received his PhD in Finance with a minor in Organizations and Markets from the University of Rochester. Professor Harford has taught the core undergraduate finance course, Business Finance, for eleven years, as well as an elective in Mergers and Acquisitions, and "Finance for Non-financial Executives" in the executive education program. He has won numerous awards for his teaching, including the Interfraternity Council Excellence in Teaching Award (2007 and 2008), ISMBA Excellence in Teaching Award (2006), and the Wells Fargo Faculty Award for Undergraduate Teaching (2005). He is also the Faculty Director of the UW Business School Undergraduate Honors Program. Professor Harford serves as an Associate Editor for *The Journal of Financial Economics*, *Journal of Financial and Quantitative Analysis*, and *Journal of Corporate Finance*. Professor Harford was born in State College, Pennsylvania, is married, and has two sons. He and his family enjoy traveling, hiking, and skiing.

Bridging Theory and Practice

Study Aids with a Practical Focus

To be successful, students need to master the core concepts and learn to identify and solve problems that today's practitioners face.

- The **Valuation Principle** is presented as the foundation of all financial decision making: The central idea is that a firm should take projects or make investments that increase the *value* of the *firm*. The tools of finance determine the impact of a project or investment on the firm's value by comparing the costs and benefits in equivalent terms. The Valuation Principle is first introduced in Chapter 3, revisited in the part openers, and integrated throughout the text.

EXAMPLE 12.1 Calculating the Weights in the WACC

Problem

Suppose Sony Corporation has debt with a market value of $12 billion outstanding, and common stock with a market value of $49 billion and a book value of $30 billion. Which weights should Sony use in calculating its WACC?

Solution

Plan

Equation 12.2 tells us that the weights are the fractions of Sony financed with debt and financed with equity. Furthermore, these weights should be based on market values because the cost of capital is based on investors' current assessment of the value of the firm, not their assessment of accounting-based book values. As a consequence, we can ignore the book value of equity.

Execute

Given its $12 billion in debt and $49 billion in equity, the total value of the firm is $61 billion. The weights are

$$\frac{\$12\text{ billion}}{\$61\text{ billion}} = 19.7\%\text{ for debt} \quad \text{and} \quad \frac{\$49\text{ billion}}{\$61\text{ billion}} = 80.3\%\text{ for equity}$$

Evaluate

When calculating its overall cost of capital, Sony will use a weighted average of the cost of its debt capital and the cost of its equity capital, giving a weight of 19.7% to its cost of debt and a weight of 80.3% to its cost of equity.

- **Guided Problem Solutions (GPS)** are Examples that accompany every important concept using a consistent problem-solving methodology that breaks the solution process into three steps: Plan, Execute, and Evaluate. This approach aids student comprehension, enhances their ability to model the solution process when tackling problems on their own, and demonstrates the importance of interpreting the mathematical solution.

EXAMPLE 4.12 **Personal Finance** Solving for the Number of Periods in a Savings Plan

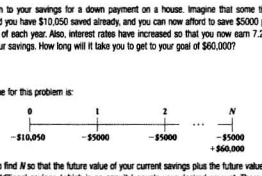
Problem

Let's return to your savings for a down payment on a house. Imagine that some time has passed and you have $10,050 saved already, and you can now afford to save $5000 per year at the end of each year. Also, interest rates have increased so that you now earn 7.25% per year on your savings. How long will it take you to get to your goal of $60,000?

Solution

Plan

The timeline for this problem is:



We need to find *N* so that the future value of your current savings plus the future value of your planned additional savings (which is an annuity) equals your desired amount. There are two contributors to the future value: the initial lump sum of $10,050 that will continue to earn interest, and the annuity contributions of $5,000 per year that will earn interest as they are contributed. Thus, we need to find the future value of the lump sum plus the future value of the annuity.

- **Personal Finance GPS** Examples showcase the use of financial analysis in everyday life by setting problems in scenarios such as purchasing a new car or house, and saving for retirement.

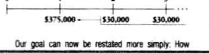
- **Common Mistake** boxes alert students to frequently made mistakes stemming from misunderstanding core concepts and calculations, as well as those made in the field.

Common Mistake Discounting One Too Many Times

The perpetuity formula assumes that the first payment occurs at the end of the first period (at date 1). Sometimes perpetuities have cash flows that start later in the future. In this case, we can adapt the perpetuity formula to compute the present value, but we need to do so carefully to avoid a common mistake.

To illustrate, consider the graduation party described in Example 4.6. Rather than starting immediately, suppose that the first party will be held two years from today. How would this delay change the amount of the donation required?

cash flows are periodic. From the perspective of date 1, this is a perpetuity, and we can apply the formula. From the preceding calculation, we know we need $375,000 on date 1 to have enough to start the parties on date 2. We rewrite the timeline as follows:



Our goal can now be restated more simply. How

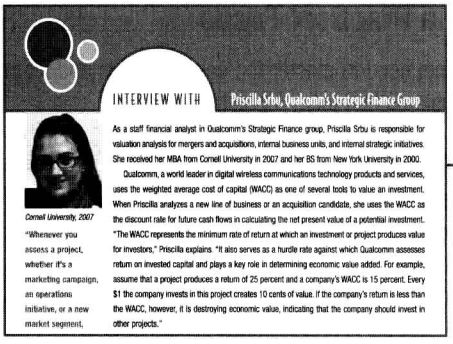
- **Using Excel** boxes describe Excel techniques and include screenshots to serve as a guide for students using this technology.

USING EXCEL Computing NPV and IRR

Here we discuss how to use Microsoft ® Excel to solve for NPV and IRR. We also identify some pitfalls to avoid when using Excel.

NPV Function: Leaving Out Date 0

Excel's NPV function has the format, NPV (rate, value1, value2, . . .) where "rate" is the interest rate per period used to discount the cash flows, and "value1", "value2", etc., are the cash flows (or ranges of cash flows). The NPV function computes the present value of the cash flows *assuming the first cash flow occurs at date 1.* Therefore, if a project's first cash flow occurs at date 0, we cannot use the NPV function by itself to compute the NPV. We can use the NPV function to compute the present value of the cash flows from date 1 onwards, and then we must add the date 0 cash flow to that result to calculate the NPV. The screenshot below shows the difference. The first NPV calculation (outlined in blue) is correct: we used the NPV function for all of the cash flows occurring at time 1 and later and then added on the first cash flow occurring at time 0 since it is already in present value. The second (outlined in green) is incorrect: we used the NPV function for all of the cash flows, but the function assumed that the first cash flow occurs in period 1 instead of immediately.



INTERVIEW WITH **Priscilla Srbu, Qualcomm's Strategic Finance Group**

Cornell University, 2007

"Whenever you assess a project, whether it's a marketing campaign, an operations initiative, or a new market segment,

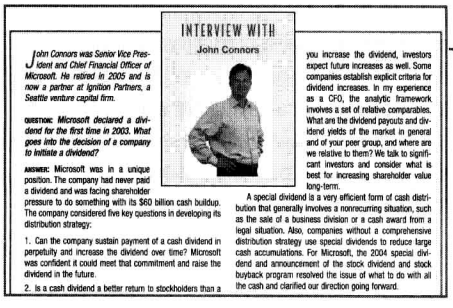
As a staff financial analyst in Qualcomm's Strategic Finance group, Priscilla Srbu is responsible for valuation analysis for mergers and acquisitions, internal business units, and internal strategic initiatives. She received her MBA from Cornell University in 2007 and her BS from New York University in 2000.

Qualcomm, a world leader in digital wireless communications technology products and services, uses the weighted average cost of capital (WACC) as one of several tools to value an investment. When Priscilla analyzes a new line of business or an acquisition candidate, she uses the WACC as the discount rate for future cash flows in calculating the net present value of a potential investment. "The WACC represents the minimum rate of return at which an investment or project produces value for investors," Priscilla explains. "It also serves as a hurdle rate against which Qualcomm assesses return on invested capital and plays a key role in determining economic value added. For example, assume that a project produces a return of 25 percent and a company's WACC is 15 percent. Every $1 the company invests in this project creates 10 cents of value. If the company's return is less than the WACC, however, it is destroying economic value, indicating that the company should invest in other projects."

Applications That Reflect Real Practice

Fundamentals of Corporate Finance features actual companies and practitioners in the field.

- **Chapter-Opening Interviews** with recent college graduates now working in the field of finance underscore the relevance of these concepts to students who are encountering them for the first time.



INTERVIEW WITH

John Connors

John Connors was Senior Vice President and Chief Financial Officer of Microsoft. He retired in 2005 and is now a partner at Ignition Partners, a Seattle venture capital firm.

QUESTION: *Microsoft declared a dividend for the first time in 2003. What goes into the decision of a company to initiate a dividend?*

ANSWER: Microsoft was in a unique position. The company had never paid a dividend and was facing shareholder pressure to do something with its $60 billion cash buildup. The company considered five key questions in developing its distribution strategy:

1. Can the company sustain payment of a cash dividend in perpetuity and increase the dividend over time? Microsoft was confident it could meet that commitment and raise the dividend in the future.
2. Is a cash dividend a better return to stockholders than a

you increase the dividend, investors expect future increases as well. Some companies establish explicit criteria for dividend increases. In my experience as a CFO, the analytic framework involves a set of relative comparables. What are the dividend payouts and dividend yields of the market in general and of your peer group, and where are we relative to them? We talk to significant investors and consider what is best for increasing shareholder value long-term.

A special dividend is a very efficient form of cash distribution that generally involves a nonrecurring situation, such as the sale of a business division or a cash award from a legal situation. Also, companies without a comprehensive distribution strategy use special dividends to reduce large cash accumulations. For Microsoft, the 2004 special dividend and announcement of the stock dividend and stock buyback program resolved the issue of what to do with all the cash and clarified our direction going forward.

- **Practitioner Interviews** from notable professionals are featured in many chapters.

Bond Ratings and the 2007–2008 Subprime Crisis

Over the last 30 years, bond ratings have taken on an increasingly important role as a means to measure and regulate financial risk—even to the extent that the amount of money banks are required to hold in reserve is based partially on the ratings of the bonds they invest in. How do credit rating companies such as Moody's, Standard & Poor's, and Fitch make their profits? That is, who pays them to issue ratings?

Since the 1970s, it is the bond *issuer* that pays for the rating. A corporation will seek to have its bonds rated in order to certify their quality and make the bonds more attractive to investors, and so will pay and cooperate with the rating agencies. At the same time, for their ratings to be valuable, the credit rating companies must maintain their reputation for impartiality. As a result, they will assign a fair credit rating, despite the fact that the firms who pay them would prefer to receive the highest rating possible.

However, during the housing boom that ended in 2007, the credit rating companies came under intense pressure to issue AAA (the highest) ratings to special kinds of bonds backed by home mortgage payments. Issuers naturally wanted high ratings to be able to sell the bonds for high prices. But it seems that many buyers of the bonds also wanted them to receive high ratings. Specifically, many banks wanted to hold these securities, and a AAA-rating would limit the amount of capital the banks would be required to hold to protect against risk.

In the end, many of these mortgage-backed securities did receive AAA ratings, even those that were backed by the riskiest home loans, known as *subprime mortgages*.

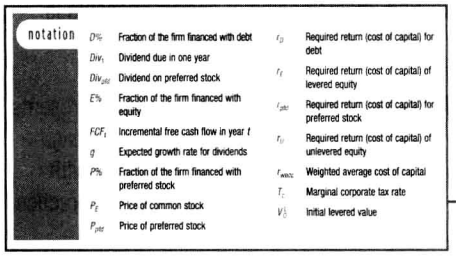
The decline in the U.S. housing market that began in 2007 quickly made it apparent that these ratings were suspect. As homeowners began defaulting on mortgage payments in record numbers, these bonds defaulted as well. Thus, they were not nearly as safe as their AAA ratings indicated.

Worse still, the problems with these bonds created a vicious cycle that impacted the entire economy. As the credit rating companies reduced the ratings on the bonds, banks found themselves with losses on their bond portfolios (the prices of the bonds dropped as their ratings dropped and their yields increased). As more and more holders of these bonds moved to sell them, the prices dropped further. These losses reduced banks' capital, while at the same time the lower ratings of the bonds meants that banks were required to hold more capital. This shortage of capital caused many banks to greatly curtail the amount of funds they made available for lending. The end result was a weakened financial system and a severe lack of credit availability, often referred to as a "credit crunch." The crisis made it difficult for many companies to borrow or issue new debt at reasonable rates, which in some cases caused firms to forgo or delay new investment.

- **General Interest boxes** highlight timely material from financial publications that shed light on business problems and real-company practices.

Teaching Students to Think Finance

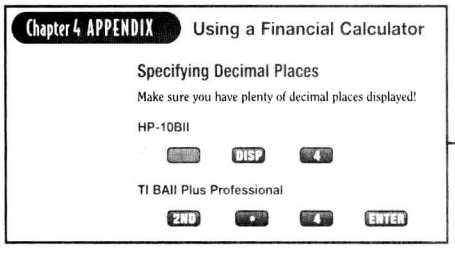
With consistency in presentation and an innovative set of learning aids, *Fundamentals of Corporate Finance* simultaneously meets the needs of both finance majors and non-finance business majors. This textbook truly shows every student how to "think finance."



Simplified Presentation of Mathematics

Because one of the hardest parts of learning finance is mastering the jargon, math, and non-standardized notation, *Fundamentals of Corporate Finance* systematically uses:

- **Notation Boxes.** Each chapter begins with a Notation box that defines the variables and the acronyms used in the chapter and serves as a 'legend' for students' reference.



- **Numbered and Labeled Equations.** The first time a full equation is given in notation form it is numbered. Key equations are titled and revisited in the summary and in end papers.

- **Financial Calculator** instructions, including a box in Chapter 4 on solving for future and present values, and appendices to Chapters 4, 6, and 14 with keystrokes for HP-10BII and TI BAII Plus Professional, highlight this problem-solving tool.

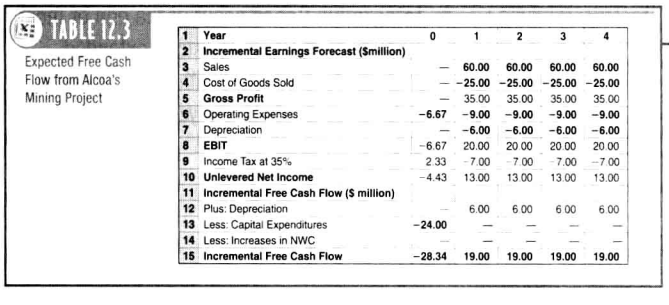


TABLE 12.3

Expected Free Cash Flow from Alcoa's Mining Project

	Year	0	1	2	3	4
2	**Incremental Earnings Forecast ($million)**					
3	Sales	—	60.00	60.00	60.00	60.00
4	Cost of Goods Sold	—	−25.00	−25.00	−25.00	−25.00
5	**Gross Profit**	—	35.00	35.00	35.00	35.00
6	Operating Expenses	−6.67	−9.00	−9.00	−9.00	−9.00
7	Depreciation	—	−6.00	−6.00	−6.00	−6.00
8	**EBIT**	−6.67	20.00	20.00	20.00	20.00
9	Income Tax at 35%	2.33	−7.00	−7.00	−7.00	−7.00
10	**Unlevered Net Income**	−4.43	13.00	13.00	13.00	13.00
11	**Incremental Free Cash Flow ($ million)**					
12	Plus: Depreciation	—	6.00	6.00	6.00	6.00
13	Less: Capital Expenditures	−24.00	—	—	—	—
14	Less: Increases in NWC	—	—	—	—	—
15	**Incremental Free Cash Flow**	−28.34	19.00	19.00	19.00	19.00

- **Spreadsheet Tables.** Select tables are available on the textbook Web site as Excel files, enabling students to change inputs and manipulate the underlying calculations.

Practice Finance to Learn Finance

Working problems is the proven way to cement and demonstrate an understanding of finance.

- **Concept Check questions** at the end of each section enable students to test their understanding and target areas in which they need further review.

- **End-of-chapter problems written personally by Jonathan Berk, Peter DeMarzo, and Jarrad Harford** offer instructors the opportunity to assign first-rate materials to students for homework and practice with the confidence that the problems are consistent with the chapter content. Both the problems and solutions, which were also written by the authors, have been class-tested and accuracy checked to ensure quality.

myfinancelab

Here is what you should know after reading this chapter. MyFinanceLab will help you identify what you know, and where to go when you need to practice.

Key Points and Equations	Terms	Online Practice Opportunities
7.1 Using the NPV Rule		
▸ If your objective is to maximize wealth, the NPV rule always gives the correct answer. ▸ The difference between the cost of capital and the IRR is the maximum amount of estimation error that can exist in the cost of capital estimate without altering the original decision.	NPV profile, p. 207	MyFinanceLab Study Plan 7.1 Using Excel: Making an NPV Profile
7.2 Alternative Decision Rules		
▸ Payback investment rule: Calculate the amount of time it takes to pay back the initial investment (the payback period). If the payback period is less than a prespecified length of time, accept the project. Otherwise, turn it down. ▸ IRR investment rule: Take any investment opportunity whose IRR exceeds the opportunity cost of capital. Turn down any opportunity whose IRR is less than the opportunity cost of capital. ▸ The IRR rule may give the wrong answer if the cash flows have an upfront payment (negative investment). When there are multiple IRRs or the IRR does not exist, the IRR rule cannot be used.	internal rate of return (IRR) investment rule, p. 210 modified internal rate of return (MIRR), p. 215 payback investment rule, p. 209 payback period, p. 209	MyFinanceLab Study Plan 7.2 Interactive IRR Analysis

End-of-Chapter Materials Reinforce Learning

Testing understanding of central concepts is crucial to learning finance.

▸ **MyFinanceLab Chapter Summary** presents the key points and conclusions from each chapter, provides a list of key terms with page numbers, and indicates online practice opportunities.

Data Case

You have just been hired by Dell Computers in its capital budgeting division. Your first assignment is to determine the net cash flows and NPV of a proposed new type of portable computer system similar in size to a Blackberry handheld, but which has the operating power of a high-end desktop system.

Development of the new system will initially require an investment equal to 10% of net property, plant, and equipment (PPE) for the fiscal year ended Feb. 1, 2008. The project will then require an additional investment equal to 10% of the initial investment after the first year of the project, a 5% of initial investment after the second year, and 1% of initial investment after the third, fourth, and fifth years. The product is expected to have a life of five years. First-year revenues for the new product are expected to be 3% of total revenue for Dell's fiscal year ended Feb. 1, 2008. The new product's revenues are expected to grow at 15% for the second year, then 10% for the third, and 5% annually for the final two years of the expected life of the project. Your job is to determine the rest of the cash flows associated with this project. Your boss has indicated that the operating costs and net working capital requirements are similar to the rest of the company's products and that depreciation is straight-line for capital budgeting purposes. Welcome to the "real world." Since your boss hasn't been much help, here are some tips to guide your analysis:

1. Obtain Dell's financial statements. (If you "really" worked for Dell you would already have this data, but at least here you won't get fired if your analysis is off target.) Download the annual income statements, balance sheets, and cash flow statements for the last four fiscal years from MarketWatch (www.marketwatch.com). Enter Dell's ticker symbol (DELL) and then go to "Financials." Export the statements to Excel by right-clicking while the cursor is inside each statement.
2. You are now ready to determine the free cash flow. Compute the free cash flow for each year using Eq. 8.6 from this chapter:

▸ **Data Cases** present in-depth scenarios in a business setting with questions designed to guide students' analysis. Many questions involve the use of Internet resources.

▸ **Integrative Cases** occur at the end of most parts and present a capstone extended problem for each part with a scenario and data for students to analyze based on that subset of chapters.

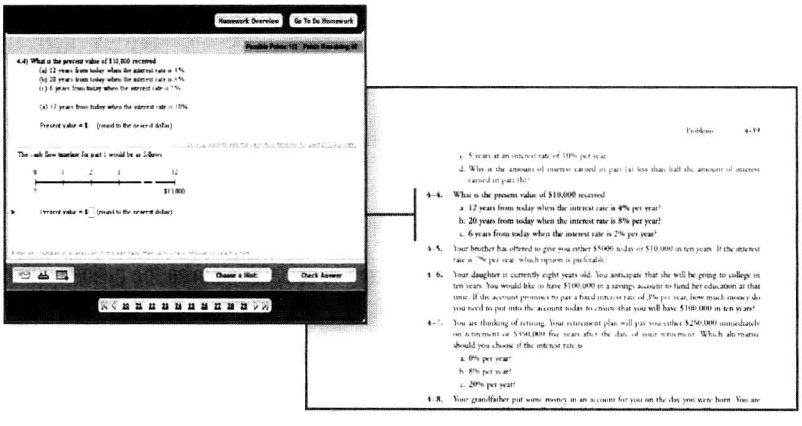
myfinancelab

Because practice with homework problems is crucial to learning finance, *Fundamentals of Corporate Finance* is available with MyFinanceLab, a fully integrated homework and tutorial system.

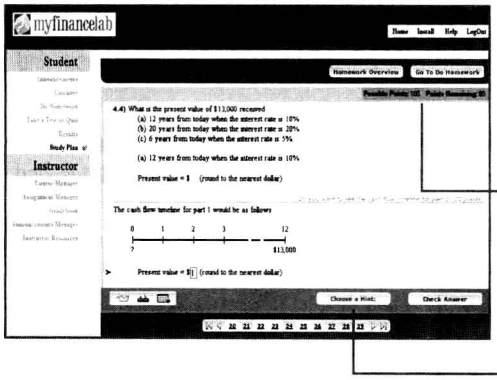
MyFinanceLab revolutionizes homework and practice with a unique hint and partial credit system written and developed by Jonathan Berk, Peter DeMarzo, and Jarrad Harford.

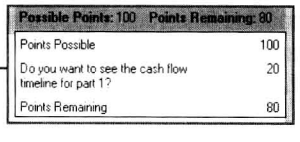
Online Assessment Using End-of-Chapter Problems

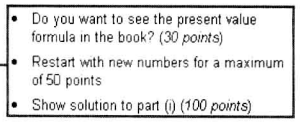
The seamless integration among the textbook, assessment materials, and online resources sets a new standard in undergraduate corporate finance education.



- End-of-chapter problems appear online. The values in the problems are algorithmically generated, giving students many opportunities for practice and mastery. Problems can be assigned by professors and completed online by students.
- Helpful tutorial tools, along with the same pedagogical aids from the text, support students as they study. Links to the eText direct students right to the material they most need to review.







Revolutionary Hint and Partial Credit System

MyFinanceLab provides 'hints' that coach students through difficult problems. Rather than scoring an entire problem right or wrong, the partial credit system rewards students for their efforts.

Additional Resources in MyFinanceLab

- **Video clips** profile firms through interviews and analysis. The videos focus on core topical areas such as capital budgeting and feature well-known companies.
- **Interactive animations**, which enable students to manipulate inputs, cover topics such as bonds, stock valuation, NPV, IRR, financial statement modeling, and others.
- Live **news and video feeds** from *The Financial Times* and ABC News provide real-time news updates.

Hands-on Practice, Hands-off Grading.

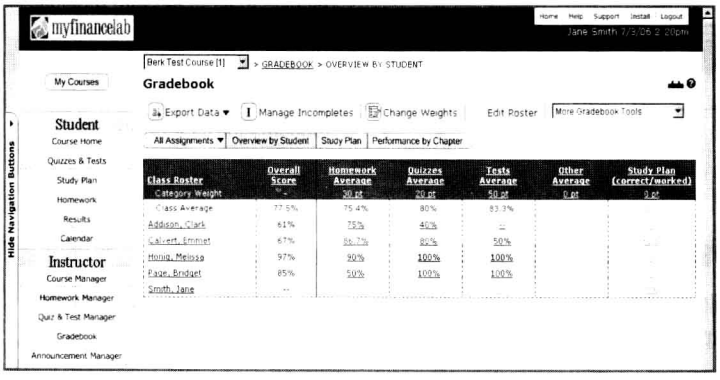
Hands-on, Targeted Practice

Students can take pre-loaded Sample Tests for each chapter, and their test results will generate an individualized Study Plan. With the Study Plan, students learn to focus their energies on the topics they need to be successful in class, on exams, and, ultimately, in their future careers.

Powerful Instructor Tools

MyFinanceLab provides flexible tools that enable instructors to easily customize the online course materials to suit their needs.

- **Easy-to-Use Homework Manager.** Instructors can easily create and assign tests, quizzes, or graded homework assignments. In addition to pre-loaded MyFinanceLab questions, the Test Bank is also available so that instructors have ample material with which to create assignments.
- **Flexible Gradebook.** MyFinanceLab saves time by automatically grading students' work and tracking results in an online Gradebook.
- **Downloadable Classroom Resources.** Instructors also have access to online versions of each instructor supplement, including the Instructor's Manual, PowerPoint Lecture Notes, and Test Bank.



To learn more about MyFinanceLab, contact your local Pearson representative or go online to www.myfinancelab.com

目 录

第1篇 导论

第2篇 利率与现金流估值