

ftp_tt_a

Business and Economics

ftp_st_a

Subtitle Goes Here

Stephen A. Ross

*Franco Modigliani Professor of
Financial Economics
Sloan School of Management
Massachusetts Institute of Technology
Consulting Editor*

FINANCIAL MANAGEMENT

Benninga and Sarig
**Corporate Finance: A Valuation
Approach**

Block and Hirt
**Foundations of Financial Management
Eighth Edition**

Brealy and Myers
**Principels of Corporate Finance
Fifth Edition**

Brealy, Myers and Marcus
**Fundamentals of Corporate Finance
Second Edition**

Benninga and Sarig
**Corporate Finance: A Valuation
Approach**

Block and Hirt
**Foundations of Financial Management
Eighth Edition**

Brealy and Myers
**Principels of Corporate Finance
Fifth Edition**

Brealy, Myers and Marcus
**Fundamentals of Corporate Finance
Second Edition**

Benninga and Sarig
**Corporate Finance: A Valuation
Approach**

Block and Hirt
**Foundations of Financial Management
Eighth Edition**

Brealy and Myers
**Principels of Corporate Finance
Fifth Edition**

Brealy, Myers and Marcus
**Fundamentals of Corporate Finance
Second Edition**

Benninga and Sarig
**Corporate Finance: A Valuation
Approach**

Block and Hirt
**Foundations of Financial Management
Eighth Edition**

Brealy and Myers
**Principels of Corporate Finance
Fifth Edition**

Brealy, Myers and Marcus
**Fundamentals of Corporate Finance
Second Edition**

Benninga and Sarig
**Corporate Finance: A Valuation
Approach**

Block and Hirt
**Foundations of Financial Management
Eighth Edition**

Brealy and Myers
**Principels of Corporate Finance
Fifth Edition**

Brealy, Myers and Marcus
**Fundamentals of Corporate Finance
Second Edition**

Benninga and Sarig
**Corporate Finance: A Valuation
Approach**

Block and Hirt
**Foundations of Financial Management
Eighth Edition**

Brealy and Myers
**Principels of Corporate Finance
Fifth Edition**

Brealy, Myers and Marcus
**Fundamentals of Corporate Finance
Second Edition**

INVESTMENTS

Benninga and Sarig
**Corporate Finance: A Valuation
Approach**

Block and Hirt
**Foundations of Financial Management
Eighth Edition**

Brealy and Myers
**Principels of Corporate Finance
Fifth Edition**

Brealy, Myers and Marcus
**Fundamentals of Corporate Finance
Second Edition**

Benninga and Sarig
**Corporate Finance: A Valuation
Approach**

Block and Hirt
**Foundations of Financial Management
Eighth Edition**

Brealy and Myers
**Principels of Corporate Finance
Fifth Edition**

Brealy, Myers and Marcus
**Fundamentals of Corporate Finance
Second Edition**

Benninga and Sarig
**Corporate Finance: A Valuation
Approach**

Block and Hirt
**Foundations of Financial Management
Eighth Edition**

Brealy and Myers
**Principels of Corporate Finance
Fifth Edition**

Brealy, Myers and Marcus
**Fundamentals of Corporate Finance
Second Edition**

Brealy, Myers and Marcus
**Fundamentals of Corporate Finance
Second Edition**

**FINANCIAL INSTITUTIONS AND
MARKETS**

Benninga and Sarig
**Corporate Finance: A Valuation
Approach**

Block and Hirt
**Foundations of Financial Management
Eighth Edition**

Brealy and Myers
**Principels of Corporate Finance
Fifth Edition**

Brealy, Myers and Marcus
**Fundamentals of Corporate Finance
Second Edition**

Benninga and Sarig
**Corporate Finance: A Valuation
Approach**

Block and Hirt
**Foundations of Financial Management
Eighth Edition**

Brealy and Myers
**Principels of Corporate Finance
Fifth Edition**

Brealy, Myers and Marcus
**Fundamentals of Corporate Finance
Second Edition**

Benninga and Sarig
**Corporate Finance: A Valuation
Approach**

Block and Hirt
**Foundations of Financial Management
Eighth Edition**

Brealy and Myers
**Principels of Corporate Finance
Fifth Edition**

Brealy, Myers and Marcus
Fundamentals of Corporate Finance

ftp_tt

Business and Economics

ftp_st

Subtitle Goes Here

ftp_nm

Fourth Edition

ftp_au

Author Name

ftp_af

Boston University

Author Name

University of California, San Diego

Author Name

Boston college



Boston Burr Ridge, IL Dubuque, IA Madison, WI New York San Francisco St. Louis
Bangkok Bogotá Caracas Kuala Lumpur Lisbon London Madrid Mexico City
Milan Montreal New Delhi Santiago Seoul Singapore Sydney Taipei Toronto



Cover Photo: Eugene Delacroix, *Art Resource/ New York*

Copyright © 2001 McGraw-Hill Higher Education., 1955, 1959, 1963, 1966, 1969, 1972, 1975, 1978, 1981, 1984, 1987, and 1990

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher.

ISBN: 0-07-23022-4

Sponsoring editor: Sam Offenber
Developmental editor: Juanita Zoman
Project editor: Hanna Chan
Production supervisor: Dina Polvester
Designer: Andre Knight
Artist: Precision Graphics
Compositor: York Graphic Service, Inc.
Typeface: 10/12 Times Roman
Printer: Von Hoffman Press, Inc.

Library of Congress Cataloging In-Publication Data
Visual Literacy, Writing about Art by Amy Tucker.—1st ed.

p. cm.

Includes bibliographical references

ISBN 0-256-07846-7

1. Art. I. Title

HF5635.P975 2001

657-dc20

Printed in the United States of America

1 2 3 4 5 6 7 9 0 VH 9 8 7 6 5 4 3 2 1 0

fdd_tx

This book is dedicated to my students who
inspire me.

—Author Name

List of Boxes/Maps

Map 1	European Countries	5
Map 2	Europe and Africa	8
Map 3	North America	14
Map 4	South America	15
Map 5	Central America	16
Map 6	European Countries	5
Map 7	Europe and Africa	8
Map 8	North America	14
Map 1	South America	15
Map 1	Central America and the Caribbean Islands	16
Map 1	European Countries	5
Map 2	Europe and Africa	8
Map 3	North America	14
Map 4	South America	15
Map 5	Central America	16
Map 6	European Countries	5
Map 7	Europe and Africa	8
Map 8	North America	14
Map 1	South America	15
Map 1	Central America and the Caribbean Islands	16
Map 1	European Countries	5

Career Connections Boxes

Europe and Africa	8
North America	14
South America	15
Central America	16
European Countries	5
Europe and Africa	8
North America	14

Ethics Boxes

Europe and Africa	8
North America	14
South America	15
Central America	16
European Countries	5
Europe and Africa	8
North America	14

Brief Contents

Preface 1

PART ONE

Elements of Investments 1

- 1 Investments: Background and Issues 2
- 2 Financial Markets and Instruments 20
- 3 How Securities are Traded 53
- 4 Investors and the Investment Process 87

PART TWO

Portfolio Theory 110

- 5 Risk and Return Past and Future 111
- 6 Efficient Diversification 133
- 7 Capital Assets Pricing and Arbitrage Pricing Theory 164
- 8 The Efficient Market Hypothesis 194

PART THREE

Fixed Income Securities 224

- 9 Bond Prices and Yields 225
- 10 Managing Fixed Income Investments 262

PART FOUR

Security Analysis 290

- 11 Macroeconomic and Industry Analysis 291
- 12 Efficient Diversification 133
- 13 Capital Assets Pricing and Arbitrage Pricing Theory 164
- 14 The Efficient Market Hypothesis 194

PART FIVE

Elements of Investments 1

- 1 Investments: Background and Issues 2
- 2 Financial Markets and Instruments 20
- 3 How Securities are Traded 53
- 4 Investors and the Investment Process 87

PART SIX

Portfolio Theory 110

- 5 Risk and Return Past and Future 111
- 6 Efficient Diversification 133
- 7 Capital Assets Pricing and Arbitrage Pricing Theory 164
- 8 The Efficient Market Hypothesis 194

APPENDIXES

- A Sources of Financial and Economic Information 225
- B References 262
- C Mathematical Tables 262

INDEXES I

Table of Contents

Preface x

About the Authors x

PART ONE

ELEMENTS OF INVESTMENTS 1

Chapter 1

Portfolio Theory 1

- 1.1 Real Assets versus Financial Assets 3
- 1.2 A Taxonomy of Financial Assets 4
- 1.3 Financial Markets and the Economy 5
 - Consumption Timing* 00
 - Allocation of Risk* 00
 - Separation of Ownership and Management* 00
- 1.4 The Investment Process 3
- 1.5 Markets Are Competitive 4
 - The Risk-Return Trade-Off* 00
 - Efficient Markets* 00
- 1.6 The Players 10
 - Financial Intermediaries* 00
 - Investment Bankers* 00
- 1.7 Markets and Market Structure 12
 - Direct Search Markets* 00
 - Brokered Markets* 00
 - Dealer Markets* 00
 - Auction Markets* 00
- 1.8 Recent Trends 14
 - Globalization* 00
 - Securitization* 00
 - Financial Engineering* 17
- 1.9 Outline of the Text 18
 - Summary 19

Chapter 2

Portfolio Theory 1

- 1.1 Real Assets versus Financial Assets 3
- 1.2 A Taxonomy of Financial Assets 4
- 1.3 Financial Markets and the Economy 5
 - Consumption Timing* 00
 - Allocation of Risk* 00
 - Separation of Ownership and Management* 00

- 1.4 The Investment Process 3
- 1.5 Markets Are Competitive 4
 - The Risk-Return Trade-Off* 00
 - Efficient Markets* 00
- 1.6 The Players 10
 - Financial Intermediaries* 00
 - Investment Bankers* 00
- 1.7 Markets and Market Structure 12
 - Direct Search Markets* 00
 - Brokered Markets* 00
 - Dealer Markets* 00
 - Auction Markets* 00
- 1.8 Recent Trends 14
 - Globalization* 00
 - Securitization* 00
 - Financial Engineering* 00
- 1.9 Outline of the Text 18
 - Summary

Appendix A

Investments in Nontraditional Asset Groups

- Real Estate 19
- Precious Metals 19

PART TWO

ELEMENTS OF INVESTMENTS 1

Chapter 3

Portfolio Theory 1

- 1.1 Real Assets versus Financial Assets 3
- 1.2 A Taxonomy of Financial Assets 4
- 1.3 Financial Markets and the Economy 5
 - Consumption Timing* 00
 - Allocation of Risk* 00
 - Separation of Ownership and Management* 00
- 1.4 The Investment Process 3
- 1.5 Markets Are Competitive 4
 - The Risk-Return Trade-Off* 00
 - Efficient Markets* 00
- 1.6 The Players 10
 - Financial Intermediaries* 00
 - Investment Bankers* 12
- 1.7 Markets and Market Structure 12
 - Direct Search Markets* 00

Chapter 1

Portfolio Theory 1

Real Assets versus Financial Assets	3
A Taxonomy of Financial Assets	4
Financial Markets and the Economy	5
<i>Consumption Timing</i>	3
<i>Allocation of Risk</i>	3
<i>Separation of Ownership and Management</i>	3
The Investment Process	3
Markets Are Competitive	4
<i>The Risk-Return Trade-Off</i>	3
<i>Efficient Markets</i>	3
The Players	10
<i>Financial Intermediaries</i>	3
<i>Investment Bankers</i>	3
Markets and Market Structure	00
<i>Direct Search Markets</i>	00
<i>Brokered Markets</i>	00
<i>Dealer Markets</i>	00
<i>Auction Markets</i>	3
Recent Trends	14
<i>Globalization</i>	3
Box <i>The Box Title Goes Here</i>	00
<i>Securitization</i>	3
<i>Financial Engineering</i>	17
Outline of the Text	18
Summary	19

Chapter 2

Portfolio Theory 1

Real Assets versus Financial Assets	3
A Taxonomy of Financial Assets	4
Financial Markets and the Economy	5
<i>Consumption Timing</i>	3
<i>Allocation of Risk</i>	3
Box <i>The Box Title Goes Here</i>	00
<i>Separation of Ownership and Management</i>	3
The Investment Process	3
Markets Are Competitive	4
<i>The Risk-Return Trade-Off</i>	3
<i>Efficient Markets</i>	3
The Players	10
<i>Financial Intermediaries</i>	3
<i>Investment Bankers</i>	3
Markets and Market Structure	12
<i>Direct Search Markets</i>	3
<i>Brokered Markets</i>	3

<i>Dealer Markets</i>	3
<i>Auction Markets</i>	3
Recent Trends	14
<i>Globalization</i>	3
<i>Securitization</i>	3
<i>Financial Engineering</i>	17
Outline of the Text	18
Summary	19

Appendix A

Investments in Nontraditional Asset Groups	
Real Estate	19
Precious Metals	19

PART TWO

ELEMENTS OF INVESTMENTS 1

Chapter 3

Portfolio Theory 1

Real Assets versus Financial Assets	3
A Taxonomy of Financial Assets	4
Financial Markets and the Economy	5
<i>Consumption Timing</i>	3
<i>Allocation of Risk</i>	3
<i>Separation of Ownership and Management</i>	3
The Investment Process	3
Markets Are Competitive	4
<i>The Risk-Return Trade-Off</i>	3
<i>Efficient Markets</i>	3
The Players	10
<i>Financial Intermediaries</i>	3
<i>Investment Bankers</i>	3
Markets and Market Structure	12
<i>Direct Search Markets</i>	3
<i>Brokered Markets</i>	3
<i>Dealer Markets</i>	3
<i>Auction Markets</i>	3
Recent Trends	14
<i>Globalization</i>	3
<i>Securitization</i>	3
<i>Financial Engineering</i>	17
Outline of the Text	18
Summary	19

Index 100

Glossary 100

About the Authors

faa_au

faa_af

Author Name *Boston University*

One dictionary's definition of speculation is the assumption of considerable business risk in obtaining commensurate gain. While this definition is fine linguistically it is vague if we cannot specify what is meant by considerable risk an commensurate gain process consists broadly speaking of tow tasks. One is security and market analysis, by which we assess the risk and expected return of the entire set of available investment vehicles. The second is construction of the optimal portfolio of assets where we identify the set of efficient portfolios those with the best risk return characteristics. We start our analysis of investments with the latter task and discuss the specifics of security industry process consists broadly speaking of tow tasks. One is security and market analysis, by which we assess the risk and expected return of the entire set of available investment vehicles. The second is construction of the optimal portfolio of assets security industry.

faa_tx

Author Name *University of California, San Diego*

One dictionary's definition of speculation is the assumption of considerable business risk in obtaining commensurate gain. While this definition is fine linguistically it is vague if we cannot specify what is meant by considerable risk an commensurate gain process consists broadly speaking of tow tasks. One is security and market analysis, by which we assess the risk and expected return of the entire set of available investment vehicles. The second is construction of the optimal portfolio of assets where we identify the set of efficient portfolios those with the best risk return characteristics. We start our analysis of investments with the latter task and discuss the specifics of security industry process consists broadly speaking of tow tasks. One is security and market analysis, by which we assess the risk and expected return of the entire set of available investment vehicles. The second is construction of the optimal portfolio of assets security industry.

Author Name *University of Illinois, Urbana-Champaign*

One dictionary's definition of speculation is the assumption of considerable business risk in obtaining commensurate gain. While this definition is fine linguistically it is vague if we cannot specify what is meant by considerable risk an commensurate gain process consists broadly speaking of tow tasks. One is security and market analysis, by which we assess the risk and expected return of the entire set of available investment vehicles. The second is construction of the optimal portfolio of assets where we identify the set of efficient portfolios those with the best risk return characteristics. We start our analysis of investments with the latter task and discuss the specifics of security industry process consists broadly speaking of tow tasks. One is security and market analysis, by which we assess the risk and expected return of the entire set of available investment vehicles. The second is construction of the optimal portfolio of assets security industry.

fpr_tt

Preface

fpr_tx

Investment strategy for an individual or for an institution involves market timing, asset allocation, and security selection. Investors formulate strategies according to capital market expectations and investor specific circumstances such as tax obligations. Investment strategy also calls for portfolio monitoring performance evaluation and decisions on portfolio adjustment.

fpr_ha

FIRST LEVEL HEAD ALWAYS SANS SERIF FRUTIGER

fpr_hb

B Level Head always Sans Serif Frutiger

Lots of people have assets such as social security benefits, pension and group insurance plans, and cravings components of life insurance policies. Yet they exercise limited control, if any on the investment decisions of these plans. The funds that secure pension and life insurance plans are managed by institutional investors.

While there is no way to overcome them objective difficulties completely it is clear that to obtain reasonably reliable performance measures we need to:

fpr_ln

1. Maximize the number of observations by taking more frequent return readings.
2. Specify the exact makeup of the portfolio to obtain better estimates of the risk parameters at each observation period.

A simple example demonstrates the procedure. Assume the total market value of an initial portfolio is \$300,000. Of that \$90,000 is invested in the Ready Assets money market found a rise free asset. The remaining \$210,000 is in risky securities, by \$113,400 in the Vanguard market index fund called the Index Trust 500 Portfolio) and \$96,600 in Shearson Lehmann's High Yield Bond Fund. The remaining \$210,000 is in risky securities, by \$113,400 in the Vanguard market index fund called the Index Trust 500 Portfolio) and \$96,600 in Shearson Lehmann's High Yield.

ACKNOWLEDGEMENTS

fpr_lu

Stephanie Bibb
Chicago State University

Julie Giles
DeVry-DuPage

Stephanie Bibb
Chicago State University

John McCreary
Western Carolina University

Teresa Palmer
Illinois State University

John McCreary
Western Carolina University

fpr_au

Author Name

Another Name

Acknowledgements

fak_tx

We received help from many people as we prepared this book. An insightful group of reviewers commented on this and previous editions of this text. Their comments and suggestions improved the exposition of the material considerably. These reviewers all deserve special thanks for their contributions.

fak_lu

Stephanie Bibb

Chicago State University

Julie Giles

DeVry–DuPage

Stephanie Bibb

Chicago State University

Julie Giles

DeVry–DuPage

Stephanie Bibb

Chicago State University

Julie Giles

DeVry–DuPage

Stephanie Bibb

Chicago State University

Julie Giles

DeVry–DuPage

Stephanie Bibb

Chicago State University

Julie Giles

DeVry–DuPage

John McCreary

Western Carolina University

Teresa Palmer

Illinois State University

John McCreary

Western Carolina University

Teresa Palmer

Illinois State University

John McCreary

Western Carolina University

Teresa Palmer

Illinois State University

John McCreary

Western Carolina University

Teresa Palmer

Illinois State University

John McCreary

Western Carolina University

Teresa Palmer

Illinois State University

For granting us permission to include many of their examination questions in the text, we are grateful to the Institute of Chartered Financial Analysts.

Much credit is also due to the development and production team: our special thanks goes to Michele Janicek, whose efforts and skill have contributed greatly to this and previous editions; Randall Adams, senior sponsoring editor; Jean Lou Hess, senior project manager; and Jennifer Hollingsworth, designer.

Finally, once again, our most important debts are to Judy, Hava, and Sheryl for their unflagging support.

fak_au

Author Name

Another Name

A Note from the Authors

We wrote the first edition of this textbook 10 years ago. It has been a decade of rapid and profound change in the investments industry. Among the notable developments in financial markets in this period decade are:

fwt_tx

- The coming of age of on-line and internet trading, as well as the more recent advent of trading via electronic communication networks
- The rapid and ongoing growth of derivative markets
- The increasing globalization of security markets

Of necessity, our text has evolved along with the financial markets. In this edition, we address many of the changes in the investment environment.

At the same time, many basic principles remain important. We continue to organize our book around one basic theme - that security markets are nearly efficient, meaning that most securities are usually priced appropriately given their risk and return attributes. There are few free lunches found in markets as competitive as the financial market. This simple observation is, nevertheless, remarkably powerful in its implications for the design of investment strategies; and our discussions of strategy are always guided by the implications of the efficient markets hypothesis. While the degree of market efficiency is, and will always be, a matter of debate, we hope our discussions throughout the book convey a good dose of healthy criticism concerning much conventional wisdom.

This text also continues to emphasize asset allocation more than most other books. We prefer this emphasis for two important reasons. First, it corresponds to the procedure that most individuals actually follow when building an investment portfolio. Typically, you start with all of your money in a bank account, only then considering how much to invest in something riskier that might offer a higher expected return. The logical step at this point is to consider other risky asset classes, such as stock, bonds, or real estate. This is an asset allocation decision. Second, in most cases the asset allocation choice is far more important than specific security-selection decisions in determining overall investment performance. Asset

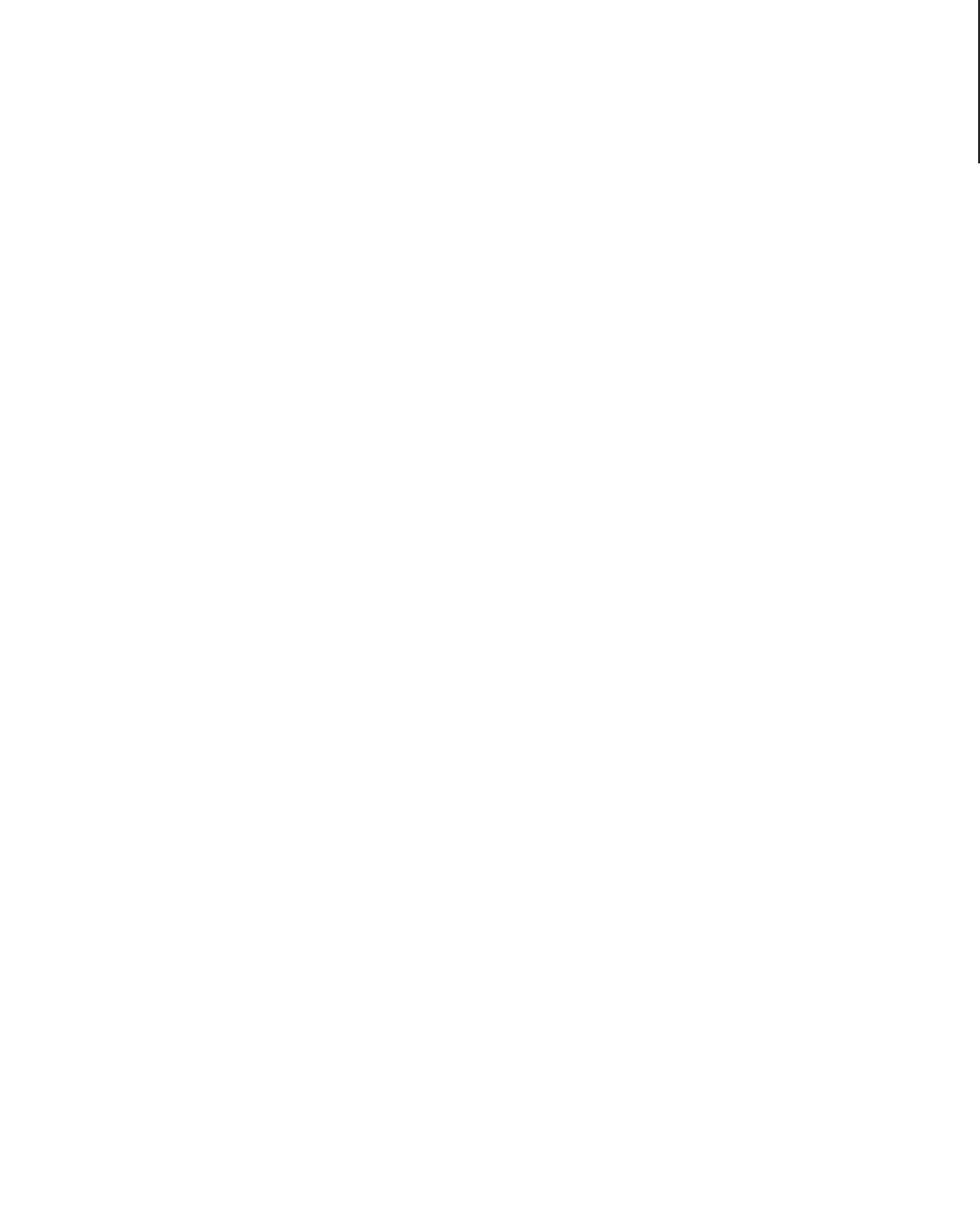
allocation is the primary determinant of the risk-return profile of the investment portfolio, and so it deserves primary attention in a study of investment policy.

Our book also focuses on investment analysis, which allows us to present the practical applications of investment theory, and to convey insights of practical value. In this edition of the text, we have introduced a systematic collection of Excel spreadsheets that give students tools to explore concepts more deeply than was previously possible. These spreadsheets are available through the World Wide Web, and provide a taste of the sophisticated analytic tools available to professional investors.

In our efforts to link theory to practice, we also have attempted to make our approach consistent with that of the Institute of Chartered Financial Analysts (ICFA). The ICFA administers an education and certification program to candidates for the title of Chartered Financial Analyst (CFA). The CFA curriculum represents the consensus of a committee of distinguished scholars and practitioners regarding the core of knowledge required by the investment professional.

This text will introduce you to the major issues currently of concern to all investors. It can give you the skills to conduct a sophisticated assessment of current issues and debates covered by both the popular media as well as more specialized finance journals. Whether you plan to become an investment professional, or simply a sophisticated individual investor, you will find these skills essential.

Author Name
Another Name



bpt_tt

Derivative Assets: Options and Futures

bpt_st

bpt_tx

Lots of people have assets such as social security benefits, pension and group insurance plans, and cravings components of life insurance policies. Yet they exercise limited control, if any on the investment decisions of these plans. The funds that secure pension and life insurance plans are managed by institutional investors.

bpt_et

Outside of the “forced savings” plans however individuals can manage their own investment portfolios. As the populations grows richer more and more people face this decision.

Managing your own portfolio appears to be the lowest cost solution. Conceptually there is little difference between managing one’s won investments and professional financial planning investment if at time we skip details. Our in with allies spirited jargon. If you develop this acquaintance now you should find our later discussions more productive.

bpt_lb

- Managing your own portfolio appears to be the lowest cost solution.

bpt_ln

1. Conceptually there is little difference between managing one’s won investments and professional financial planning investment if at time we skip details.

bpt_lu

Our in with allies spirited jargon. If you develop this acquaintance now you should find our later discussions more productive.

Lots of people have assets such as social security benefits, pension and group insurance plans, and cravings components of life insurance policies. Yet they exercise limited control, if any on the investment decisions of these plans. The funds that secure pension and life insurance plans are managed by institutional investors.

bptop_lr

1. The Investment Process: Investor Objectives and Constraints
2. The Investment Process: Strategy and Policies
3. The Financial System and Institutions

bpt_tt

Derivative Assets: Options and Futures

bpt_st

bpt_qd

There exists an intrinsic connection between the common good.

bpt_qdau

Pope John XIII, Roman Catholic Church

bpt_quaf



bpt_ct

The photo caption on the part opener page will position underneath the photo.

bpt_so

© Photodisc, Inc.

bpt_tt

Derivative Assets: Options and Futures

bpt_st

bptop_lr

1. The Investment Process: Investor Objectives and Constraints
2. The Investment Process: Strategy and Policies
3. The Financial System and Institutions

Capital Asset Pricing and Arbitrage Pricing

bch_tt

bchcs_tt

Vignette Title always Sans Serif Frutiger

bchcs_au

Vignette Author, Affiliation

bchcs_auf

bchcs_tx

Investment strategy for an individual or for an institution involves market timing, asset allocation, and security selection. Investors formulate strategies.

bchcs_lb

- Managing your own portfolio appears to be the lowest cost solution.
- Conceptually there is little difference between managing one's won investments and professional financial planning investment if at time we skip details.

The first aim of this chapter is to describe how the investment industry relates to investor objectives.

bchcs_ln

1. Managing your own portfolio appears to be the lowest cost solution.

The first aim of this chapter is to describe how the investment industry relates to investor objectives.

bchcs_lu

Conceptually there is little difference between managing one's won investments and professional financial planning investment if at time we skip details.

bchcs_ha

This is a First Level Vignette Head always Sans Serif Fruitger

Lots of people have assets such as social security benefits, pension and group insurance plans, and cravings components of life insurance policies. Yet they exercise limited control, if any on the investment decisions of these plans. The funds that secure pension and life insurance plans are managed by institutional investors.

bchcs_hb

This is a Second Level Head

Outside of the "forced savings" plans however individuals can manage their own investment portfolios. As the populations grows richer more and more people face this decision.

bchcs_hc

This is a Third Level Head Outside of the "forced savings" plans however individuals can manage their own investment portfolios.

bchcs_fn

Source: This is a source line.

bchcs_so

¹ This is a footnote and it positions at the bottom of the page.

Chapter Title Display Font Goudy

After studying this chapter you should be able to:

1. How the US government helps importers
 2. The steps necessary to move goods across country borders.
 3. How various import restrictions are used politically.
 4. Means of reducing import taxes to remain competitive.
 5. The basic instruments for foreign commercial payments.
 6. The mechanics of export documents and their importance.
-

Investment strategy for an individual or for an institution involves market timing, asset allocation, and security selection. Investors formulate strategies according to capital market expectations and investor specific circumstances such as tax obligations. Investment strategy also calls for portfolio monitoring performance evaluation and decisions on portfolio adjustment.

The first aim of this chapter is to describe how the investment industry relates to investor objectives. We present some intuitive arguments that we explain more rigorously in later chapters. Don't be frustrated if at time we skip details. Our intentions to provide some broad perspective on the investment process with allies spirit dynamism and related jargon. If you develop this acquaintance now you should find our later discussions more productive.

FIRST LEVEL HEAD ALWAYS SAN SERIF FRUTIGER

Second Level Head Always Sans Serif Frutiger

Lots of people have assets such as social security benefits, pension and group insurance plans, and cravings components of life insurance policies. Yet they exercise limited control, if any on the investment decisions of these plans. The funds that secure pension and life insurance plans are managed by institutional investors.

Outside of the "forced savings" plans however individuals can manage their own investment portfolios. As the populations grows richer more and more people face this decision.

bch_tt

Chapter Title Display Font Frutiger as Shown Here

bch_au

Chapter Author *Whoop-De-Doo University*

bch_auf

bchop_tt

Chapter Outline

bchop_ha

Global Perspective: An Export Sale:From Trade Show to Installation

Export Restriction

Second Level Head Here

Another Second Level Head

bchop_hb

Import Restrictions

Terms of Sale

Getting Paid: Foreign Commercial Payments

Export Documents

Packing and Marking

Customs-Privileged Facilities

Logistics

The Foreign-Freight Forwarder

Chapter Learning Objectives

bopob_tt

What you should learn from Chapter 15

bopob_tx

- How the US government helps importers
- The steps necessary to move goods across country borders.
- How various import restrictions are used politically.
- Means of reducing import taxes to remain competitive.
- The basic instruments for foreign commerical payments.
- The mechanics of export documents and their importance.
- The logistics and problems of the physical movement of goods.

bopob_lb

bch_nm

Chapter One

bch_tt

Capital Asset Pricing: Arbitrage Pricing Theory

bch_st

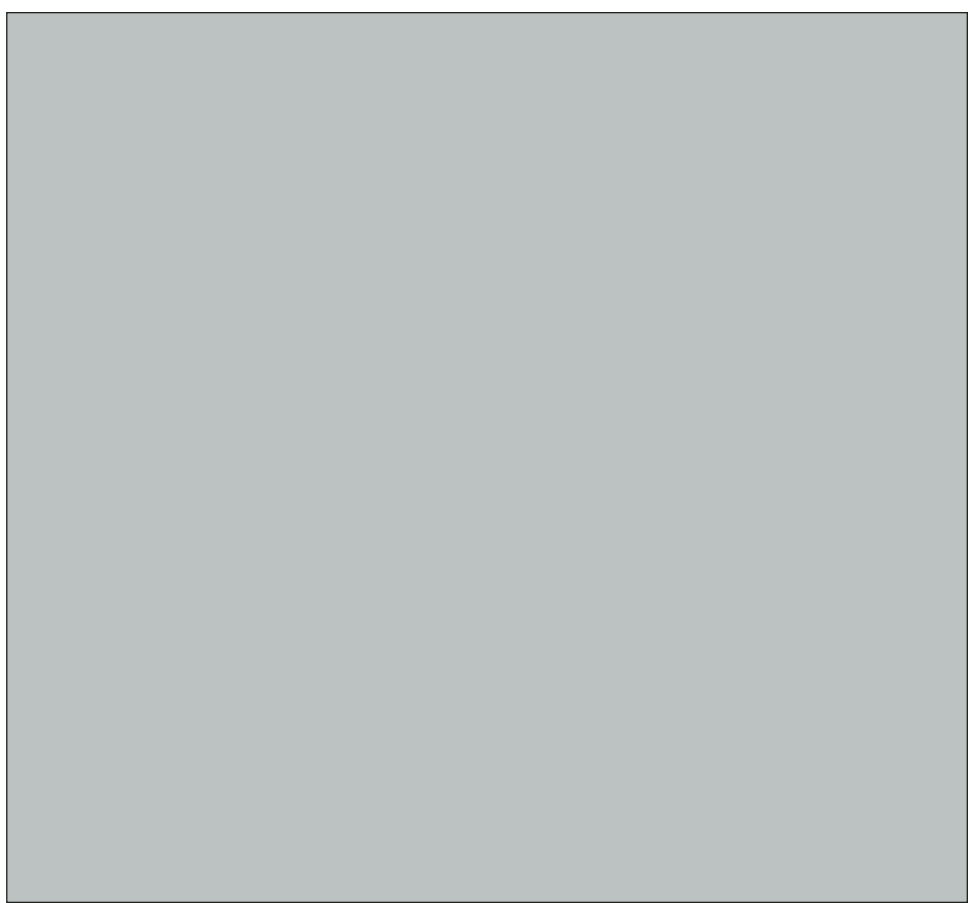
bchop_qd

There exists an intrinsic connection between the common good.

bchop_quaf

Pope John XIII, Roman Catholic Church

bchop_quau



bchop_so

The photo caption on the chapter opener page will position underneath the photo.

bchop_ctso

© Photodisc, Inc.

bchnt_tm

utility

The measure of the welfare or satisfaction of an investor.

bchnt_df

To formalize this notion of a risk penalty system we will assume that each investor can assign a welfare or **utility** score to competing investment portfolios according to the expected return and risk of those portfolios. The utility score is a means of ranking portfolios. Hersher utility values are assigned to portfolios with more attractive risk-return profiles. Portfolios receive higher utility scores for **higher expected returns** and lower scores for higher volatility.

ie + bf

Many scoring systems are legitimate. One reasonable function that is commonly employed by CFRA's and financial theorists assigns a portfolio with expected return $E(r)$ and variance of returns the following utility score:

bch_eq

$$U = E(r) - (1/2)A \tag{7.1}$$

bch_eqnm

where U is the utility value, and A is an index of the investors aversion to taking on risk. The factor of $1/2$ is a scaling convention that has no economic significance.

This is the mean-standard deviation or equivalently **mean-variance (M-V) criterion**. It can be stated as investment A dominates investment B if and only if A has a higher expected return and at least on inequality is twice as low a standard deviation.

bch_tx

In the expected return-standard deviation graph the preferred direction is northwest because in this direction we simultaneously *increase* the expected return and *decrease* the standard deviation of the rate of return. This means any portfolio that lies northwest of P is superior to P .

ie + it

bch_lu

Maximize the number of observations by taking more frequent return readings.

Specify the exact makeup of the portfolio to obtain better estimates of the risk parameters at each observation period

To determine some of the points that appear on the indifference curve examine Table 7.1 which gives the utility values of several possible portfolios for an investor with $A = 4$. Each portfolio offers identical utility because the higher return portfolios also have high risk. Although in practice the exact indifference curves of various investors cannot be known, this sort of approach can take us along.

ie + us

For any degree of risk aversion investors may be attracted as much as to portfolios with high risk and high expected returns as to other **portfolios with lower risk** but lower expected returns.

ie + ib

bch_fgmn

FIGURE 6.2

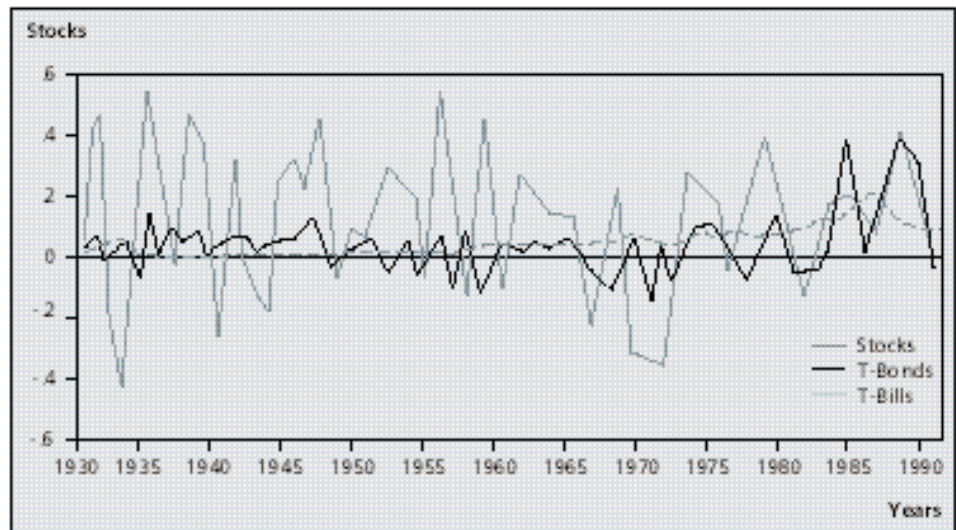
bch_fgct

This is a Figure Title
Rates of return of bills, bonds, and stocks, 1926 to 1990.

bch_fgct

Source: Cadbury Schweppes p.l.c., September 1984

bch_fgso



bch_fgfn

*Somdett's after tax profits are given by $.6(EBIT - \$3.2 \text{ million})$.
*Somdett's equity is only \$60 million.

bch_ha

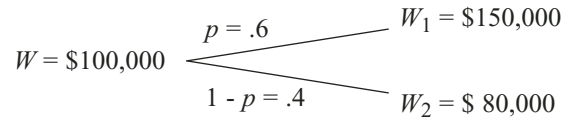
FIRST LEVEL HEAD ALWAYS SANS SERIF FRUTIGER

There exists an intrinsic connection between the common good.

Pope John XIII, Roman Catholic Church

The presence of risk means more than one outcome is possible. A simple prospect is an investment opportunity in which a certain initial wealth is placed at risk, and there are only two possible outcomes. For the sake of simplicity it is useful to begin our analysis and elucidate some basic concepts using simple prospects.

Take as an example initial wealth, W , of \$100,00 and assume two possible results. With a probability of $p = .6$, the favorable outcome will occur, leading results:



Suppose an investor, Susan is offered an investment portfolio with a payoff in one year that is described by such a simple prospect. How can she evaluate this portfolio?

bch_intx

1. The expected profit on the \$100,000 investment portfolio is \$22,000: $122,000 - 100,000$. The variance, σ^2 , of the portfolio payoff is calculated as the expected value of the squared deviations of each possible outcome from the mean.

2. The standard deviation, σ , which is the square root of the variance is \$34,292.86. Clearly, this is risky business. The standard deviation of the payoff is larger, much larger than the expected profit of \$22,000. Whether the expected profit is LARGER THAN THE EXPECTED enough to justify such risk depends on the alternative portfolios.

ie + sc

bch_hb

Always San Serif Frutiger

Speculators assume risk voluntarily and are often confused with gamblers who also seek risk. The business of investors is speculation so it is well to start by distinguishing them from gamblers.

bch_hc

This is a Third Level Head

ie + ro

One dictionary's definition of speculation is the assumption of considerable business risk in obtaining commensurate gain. While this definition is fine linguistically it is vague if we cannot specify what is meant by considerable risk an commensurate gain process consists broadly speaking of two tasks. One is security and market analysis, by which we

ie + su

assess the risk and expected return² of the entire set of available investment vehicles. The second is construction of the optimal portfolio of assets where we identify the set of efficient portfolios those with the best risk return characteristics₂. The second is construction of the optimal portfolio of assets where we identify the set of efficient portfolios those with the best risk return characteristics. The second is construction of

ie + sb

bch_ct

This is a photo caption. They go on the side in the margin or below the photo if it is full width. © Credit.

bch_ct_a



The desirability of portfolios in quadrants II and III compared with P depends on the investor's risk aversion. Starting at P an increase in standard deviation lowers utility it must be offset by an adequate increase in expected return. Thus point Q in Figure 7.1 represents a portfolio that is a desirable to this investor as portfolio P.

To determine some of the points that appear on the indifference curve examine Table 7.1 which gives the utility values of several possible portfolios for and investor with $A = 4$. Each portfolio offers identical utility because the higher return portfolios also have high risk. Although in practice the exact indifference curves of various investors cannot be known, this sort of approach and take us along way in determining appropriate principles for portfolio selection strategy.

Concept Check

What is the risk premium of Susan's risky portfolio in terms of rate of return rather than dollars? What is the standard deviation of the rate of return?

1. What is the risk premium of Susan's risky portfolio in terms of rate of return rather than dollars?
- b.* What is the standard deviation of the rate of return?

1.3 NUMBERED FIRST LEVEL HEAD ALWAYS SANS SERIF FRUTIGER ASSET ALLOCATION

The Risk Asset

Now we can talk about combining assets. We start buy considering investors holding a risky portfolio called P, along with some money market securities such as T-bills which we will refer to as the risk free asset F.

When we shift wealth form the risky portfolio (P) to the risk free asset we do no change the relative proportions of the various risky portfolio as a whole in favor of risk free assets. Rather we reduce the relative weight of the risky portfolio as a whole in favor of risk free assets.

This is a List Lead and All List Heads Look the Same

- The security market line
- The put call parity relationship
- The Black-Scholies option pricing model

TABLE 7.1
This is a Table Title:
Followed by Subtitle
 Impace of financial leverage on ROE

Source: Cadbury Schweppes p.l.c., September 1984

Scenario	EBIT (\$ millions)	Nodett		Somdett	
		Net Profits (\$ millions)	ROE (%)	Net Profits (\$ millions)	ROE (%)
Bad year	5	3	3	1.08	1.8
Normal year	10	6	6	4.08	6.8
Good year	15	9	9	7.08	11.8

Scenario	EBIT (\$ millions)	Nodett		Somdett	
		Net Profits (\$ millions)	ROE (%)	Net Profits (\$ millions)	ROE (%)
Bad year	5	3	3	1.08	1.8
Normal year	10	6	6	4.08	6.8
Good year	15	9	9	7.08	11.8

*Somdett's after tax profits are given by $.6(EBIT - \$3.2 \text{ million})$.
 *Somdett's equity is only \$60 million.

bchba_au

Box Author, Affiliation bchba_auaf**MARKETING EFFORTS TARGET INDIVIDUALS**

New York—Just as money-market funds were the hot product in 1989, so stock index funds are quickly becoming the scene of this year's biggest mutual fund marketing battle.

bchba_et

Following the stellar performance of Vanguard Group's index funds both Dreyfus Corp and Fidelity Investments have weighted in with index funds of their own. In recent weeks both funds groups have come out with unmanaged portfolios of the stocks that make up the Standard & Poor's 500 stock index; these funds are designed.

Investors are just waking up to the virtues of index investments which have already attracted about \$250 billion from giant institutions. The oldest and largest of the index mutual funds, Vanguard Index Trust 500.

	Motorola Price	
	\$70	\$80
Value of portfolio A	\$14,000	\$16,000
Value of portfolio B	0	0
Value of portfolio C	14,688	14,688

As reported here earlier this year the investment success of Vanguard's index funds was long ignored by Vanguard's competitors. Not any more. Both Dreyfus and Fidelity are now running full page advertisements as they seek to wrestle a share of the index fund business away from Vanguard.

bchba_hb

Marginal Product

As far as a mutual fund manager is concerned an index fund is a magical product says an analyst. It already has a performance record that of the index.

bchba_lu

For years Vanguard has had a virtual strangle hold on the index fund market.

It offers index funds that track a bond market index to international stock indexes and to small company stock indexes.

If Dreyfus and Fidelity thought that this year's index funds would match the popularity of last year's money

market funds they have clearly been disappointed. Early in 1989 both Dreyfus and Fidelity brought out low cost money market funds jumping into an area previously simulated by Vanguard. Dryfus's world wide dollar Fund has since pulled in \$7.3 billion. Fidelity Spartan Money Market Fund has snagged 8.3 billion. Fidelity Spartan Money Market Fund has snagged. Standard & Poor's 500 stock index; these funds are designed to closely track the S & P 500's performance.

bchba_tx

EDUCATION PROBLEM

They are jumping onto the index fund band wagon and they're trying to get some attention by waiving the fees says John Bogle Vanguard's chairman. Fees are the only thing that distinguishes one money market fund from another. When you get to and index fund fees are just one of the things that affect return. Only a moron would by a stock fund to avoid a 0.5 percent expenses ratio for two weeks or two months. Apparently the marketplace is smarter than the fund sponsors.

bchba_ha

- For years Vanguard has had a virtual strangle hold on the index fund market.
- It offers index funds that track a bond market index to international stock indexes and to small company stock indexes.

bchba_lb

Third Level Head As with its other funds Vanguard's edge in the index fund business comes from its extremely low annual expense ratios. The 500 Portfolio charges just 0.2 percent of assets annually well below the 1.5 percent typically charged.

bchba_hc

1. To complete both Dreyfus and Fidelity are holding down expenses on their index funds.
2. Dreyfus is absorbing all expenses until the line of the year or until the fund hits \$100 million in assets which ever comes first. Fidelity has promised to keep its expenses at 0.28 percent of assets until May 1, 1991. If Dreyfus and Fidelity thought that this year's index funds would match the popularity of last year's money.

bchba_ln

Source: From Johnathan Clements, "Index Funds Emerge as Hot Turf of 1990," The Wall Street Journal May 18, 1990.

bchba_so

¹ Reprinted by permission of the THE WALL STREET JOURNAL.

bchba_fn

Investment strategy for an individual or for an institution involves market timing, asset allocation, and security selection. Investors formulate strategies according to capital market expectations and investor specific circumstances such as tax obligations. Investment strategy for an individual or for an institution involves market.

bch_fn

¹ This is a footnote and it positions at the bottom of the page.

Box Style Two Display Goudy Subtitle 1

bchbb_tt

bchbb_st

bchbb_nm

1

bchbb_au

Box Author, Affiliation bchbb_auf

bchbb_ha

MARKETING EFFORTS TARGET INDIVIDUALS

bchbb_tx

New York—Just as money-market funds were the hot product in 1989, so stock index funds are quickly becoming the scene of this years biggest mutual fund marketing battle.

bchbb_et

Following the stellar performance of Vanguard Group's index funds both Dreyfus Corp and Fidelity Investments have weighted in with index funds of their own.

bchbb_hb

Investors are just waking up to the virtues of index investments which have already attracted about \$250 billion from giant institutions. The oldest and largest of the index mutual funds.

bchbb_lu

Marginal Product

As far as a mutual fund manager is concerned an index fund is a magical product says an analyst. It already has a performance record that of the index. I'm hard pressed to figure out why they didn't and fidelity Spartan Market Index Fund has \$16 million including \$4 million in seed capital).

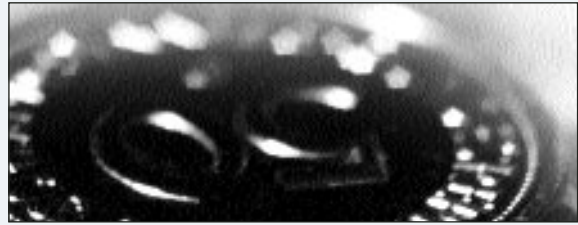
For years Vanguard has had a virtual strangle hold on the index fund market.

It offers index funds that track a bond market index tow international stock indexes and tow small company stock indexes.

If Dreyfus and Fidelity thought that this year's index funds would match the popularity of last year's money market funds they have clearly been disappointed.

EDUCATION PROBLEM

They are jumping onto the index fund band wagon and they re trying to get some attention by waiving the fees says John Bogle Vanguard's chairman Fees are



This is a photo caption. They go on below the photo if in the boxes. © Photodisc.

bchbb_fgct

bchbb_fgso

the only thing that distinguishes one money market fund from anther #When you get to and index fund fees are just one of the things that affect return. Only a moron would by a stock fund to avoids a 0.5 percent expenses ratio fs.

- For years Vanguard has had a virtual strangle hold on the index fund market.
- It offers index funds that track a bond market index tow international stock indexes and tow small company stock indexes.

Third Level Head As with its other funds Vanguard's edge in the index fund business comes form its extremely low annual expense ratios The 500 Portfolio charges just 0.2 percent of assets annually well below the 1.5 percent typically charged.

1. To complete both Dreyfus and Fidelity are holding down expenses on their index funds.
2. Dreyfus is adsorbing all expenses until the line oft thy year or until the fund hits \$100 million in assets which ever comes first.

Source: From Johnathan Clements, "Index Funds Emerge as Hot Turf of 1990," The Wall Street Journal May 18, 1990.

¹ Reprinted by permission of the THE WALL STREET JOURNAL.

bchbb_lb

bchbb_hc

bchbb_ln

bchbb_so

bchbb_fn

While there is no way to overcome them objective difficulties completely it is clear that to obtain reasonably reliable performance measures we need to:

bch_ln

1. Maximize the number of observations by taking more frequent return readings.
2. Specify the exact makeup of the portfolio to obtain better estimates of the risk parameters at each observation period.

bch_hd

Front-End Load A **front-end load** is a commission or sales charge paid when you purchase the shares. These charges typically fall between 4 percent and 8.5 percent and are used to pay brokers to sell the fund.

To be listed on NASDAQ a firm must satisfy one of two sets of criteria:

bch_lr

1. a. 350,000 publicly held shares.
- b. Market value of publicly held shares of \$2 million.
- c. Minimums bid price of \$3.
- d. Annual net income of \$300,000 in either the last fiscal year or two of the last threeyears.

or

2. a. 800,000 publicly held shares.
- b. Market value of publicly held shares of \$8 million.
- c. Net worth of \$8 million.
- d. Incorporation of at least 4 years.

NASDAQ has three levels of subscribers. The highest level 3 subscribers are for firms dealing or making markets in OTC securities. These market makers maintain inventories of a security and constantly stand ready to buy or sell these shares from or to the public at the quoted bid and ask price.

bch_je

(b) Nov. 12	Accounts Payable	1,200	
	Merchandise Inventory (2% 3 \$1,200) . .		24
	Cash		1,176
	Paid for the purchase of November 2 less the discount.		

PASSIVE STRATEGIES: THE CAPITAL MARKET LINE

The capital allocation line is derived with the risk free asset and the risky portfolio P. Investors can determine the assets to be included in the risky portfolio using either a passive or an active strategy. A passive strategy describes an investment decision that avoids any security would appear to be naive yet the efficient market hypohesei predicts that forces of supply.

bchex_nm

EXERCISE 18.32

Put-call Parity;

Subtitle

bchex_tx

Suppose you confront the following data for a certain stock. This result a violation of parity (12 does not equal 10) indicates mispricing and leads to an abirtage opportunity. You can by the relatively cheap portfolio the stock puls borrowing position represented on the right hand side of the equation and sell the relatively expenside protfiool The long call short put postion corresponding to the left hand side that is wirta a call and We use these data in the put-call parity theorem to see if parity is violated.

bchex_eq

$$E(W) = pW_1 + (1 - p)W_2$$

$$= [.6 \times 150,000] + [.4 \times 80,000] = \$122,000$$

This result a violation of parity (12 does not eual 10) indicates mispricing and leads to an abirtage opportunity.

bchex_ha

This is an Example Head

You can by the relatively cheap portfolio the stock puls borrowing position represented on the right hand side of the equation and sell the relatively expenside protfiool The long call short put postion corresponding to the left hand side that is wirta a call and

bchex_tt

bchex_st

The long call short put position corresponding to the left hand side that is write a call and buy a put.

bchex_in

- Let's examine the payoff to this strategy. In six months the stock will be worth S_t . The \$100 borrowed will be paid back with interest resulting in a cash flow of \$105. The written call will result in a cash outflow of S_t if the stock price is below \$105.

Table 15.1 summarizes the outcome. The immediate cash inflow is \$2. In six months the various position provide exactly offsetting cash flow the \$2 inflow is realized risklessly without any offsetting outflow.

The firm is willing to make only limited bet on interest rate movements. As Francis Trainer puts it in his speech:

bch_et

If we set saturation of our portfolios at a level equal to the index and never allow them to vary this would imply that we are perpetually neutral on the direction of interest rate. However as those of you who have followed our economic forecasts are aware this is rarely the case.

The expected profit on the \$100,000 investment portfolio is \$22,000: $122,000 - 100,000$. The variance, σ^2 , of the portfolio payoff is calculated as the expected value of the squared deviations of each possible outcome from the mean. The standard deviation, σ , which is the square root of the variance is \$34,292.86.

bch_te

Merchandise Inventory				Accounts Payable			
Nov. 2	1,200	Nov. 12	24	Nov. 12	1,200	Nov. 2	1,200
Balance	1,176					Balance	0

A Basic Decomposition: The Risky Portfolio and the Safe Asset

Clearly, this is risky business. The standard deviation of the payoff is larger, much larger than the expected profit of \$22,000. Whether the expected profit is larger than the expected enough to justify such risk depends on the alternative portfolios.

bch_ettt

This is an Extract Title

bch_et

If we set saturation of our portfolios at a level equal to the index and never allow them to vary this would imply that we are perpetually neutral on the direction of interest rate.

bch_etln

- However as those of you who have followed our economic forecasts are aware this is rarely the case.

bch_etlu

If we set saturation of our portfolios at a level equal to the index and never allow them to vary this would imply that we are perpetually neutral on the direction of interest rate.

Suppose Treasury bills are one alternative to Susan's risky portfolio and that at the time of the decision a one year T-bill offers a rate of return of 5 percent; \$100,000 and be invested to yield a such profit of \$5,000. The question of whether a given risk premium provides adequate compensation for the investment's risk is age-old. If you have absorbed all the lessons of this book, you know the season: risk. The averages of the annualized monthly rates of return and the standard deviations on the all bills and all equity strategies are:

bch_tbt_x_a

	Motorola Price				
	\$70	\$80	\$90	\$100	\$110
Value of portfolio A	\$14,000	\$16,000	\$18,000	\$20,000	\$22,000
Value of portfolio B	0	0	10,000	20,000	30,000
Value of portfolio C	14,688	14,688	16,688	18,688	20,688

bch_tbtsh_a

bch_tbtcn_a

SPREADSHEET MODEL FOR CALCULATION OF DURATION

bchfa_ha

Clearly, this is risky business. The standard deviation of the payoff is larger, much larger than the expected profit of \$22,000. Whether the expected profit is larger than the expected enough to justify such risk depends on the alternative portfolios.

Suppose Treasury bills are one alternative to Susan's risky portfolio and that at the time of the decision a one year T-bill offers a rate of return of 5 percent; \$100,000 and be invested to yield a such profit of \$5,000. The question of whether a given risk premium provides adequate compensation for the investment's risk is age-old. mic forecast into the bond management process.

bchfa_hb

bchfa_ln

Questions

1. Many observation are needed to dray significant conclusion even whom portfolio mean and variance are constant.
2. Shifting parameters when portfolios are actively managed made accurate performance evaluation all the more elusive.

Suppose Treasury bills are one alternative to Susan's risky portfolio and that at the time of the decision a one year T-bill offers a rate of return of 5 percent; \$100,000 and be invested to yield a such profit of \$5,000.

bchfa_lb

- Many observation are needed to dray significant conclusion even whom portfolio mean and variance are constant.
- Shifting parameters when portfolios are actively managed made accurate performance evaluation all the more elusive.

bchfa_so

bchfa_fn

Source: From Johnathan Clements, "Index Funds Emerge as Hot Turf of 1990," The Wall Street Journal May 18, 1990.

¹ Reprinted by permission of the THE WALL STREET JOURNAL.

The first aim of this chapter is to describe how the investment industry relates to investor objectives. We present some intuitive arguments that we explain more rigorously in later chapters. Don't be frustrated if at time we skip details. Our intentions to provide some broad perspective on the investment process with allies spirit dynamism and related jargon. If you develop this acquaintance now you should find our later discussions more productive.

THIS IS A SUPER HEAD

Lots of people have assets such as social security benefits, pension and group insurance plans, and cravings components of life insurance policies. Yet they exercise limited control, if any on the investment decisions of these plans. The funds that secure pension and life insurance plans are managed by institutional investors.

When we shift wealth form the risky portfolio (P) to the risk free asset we do no change the relative proportions of the various risky portfolio as a whole in favor of risk free assets. Rather we reduce the relative weight of the risky portfolio as a whole in favor of risk free assets.

bch_la

- A. The security market line
- B. The put call parity relationship
- C. The Black-Scholies option pricing model

When we shift wealth form the risky portfolio (P) to the risk free asset we do no change the relative proportions of the various risky portfolio as a whole in favor of risk free assets. Rather we reduce the relative weight of the risky portfolio as a whole in favor of risk free assets.

bch_dl

Person A: The security market line

Person B: When we shift wealth form the risky portfolio (P) to the risk free asset we do no change the relative proportions of the various risky portfolio as a whole in favor of risk free assets. Rather we reduce the relative weight of the risky portfolio as a whole in favor of risk free assets.

When we shift wealth form the risky portfolio (P) to the risk free asset we do no change the relative proportions of the various risky portfolio as a whole in favor of risk free assets.

bch_lb

- The expected profit on the \$100,000 investment portfolio is \$22,000: $122,000 - 100,000$. The variance of the portfolio payoff is calculated as the expected value of the squared deviations of each possible outcome from the mean.
- The standard deviation which is the square root of the variance is \$34,292.86. Clearly, this is risky business. The standard deviation of the payoff is larger, much larger than the expected profit of \$22,000.

When we shift wealth form the risky portfolio (P) to the risk free asset we do no change the relative proportions of the various risky portfolio as a whole in favor of risk free assets. Rather we reduce the relative weight of the risky portfolio as a whole in favor of risk free assets.

bch_po

*Poetry should be set line for line
and the longest line is centered within
the text.*

*When he has spent many years in captivity
and a runover in the verse.*

bch_poau

—Poetry Author, Affiliation

bch_poau

Rather we reduce the relative weight of the risky portfolio as a whole in favor of risk free assets.

bch_etlb

If we set saturation of our portfolios at a level equal to the index and never allow them to vary this would imply that we are perpetually neutral on the direction of interest rate.

- However as those of you who have followed our economic forecasts are aware this is rarely the case.
- If we set saturation of our portfolios at a level equal to the index and never allow them to vary this would imply that we are perpetually neutral on the direction of interest rate.

comparison of Equations 7.1 and 7.2 shows that 7.2 is simply a generalization of the one factor SML.

Finally extension of the multifactor SML of Equation 7.3 to individual asset is precisely the same for the one factor APT. Equation 7.3 cannot be satisfied by every well diversified portfolio unless it is satisfied by virtually every security taken individually.

The generalized APT must be qualified with respect to individual assets just as in the single factor case. A multifactor CAPM would at the cost of the additional assumption on investor mean variance efficiency apply to any and all individual assets. As we have seen the result will be a security market evaluation that is identical to that of the multifactor APT and SML.

Reading/Case 1-3

Reading/Case Title Display Frutiger: *The Subtitle R*

Author Name, Affiliation

Managing your own portfolio appears to be the lowest cost solution. Conceptually there is little difference between managing one's own investments and professional financial planning investment if at time we skip details.

FIRST LEVEL HEAD ALWAYS SANS SERIF

Manage Your Own Portfolio or Rely on Others?

Lots of people have assets such as social security benefits, pension and group insurance plans, and savings components of life insurance policies. Yet they exercise limited control, if any on the investment decisions of these plans. The funds that secure pension and life insurance plans are managed by institutional investors.

Outside of the "forced savings" plans however individuals can manage their own investment portfolios. As the population grows richer more and more people face this decision.

The first aim of this chapter is to describe how the investment industry relates to investor objectives. We present some intuitive arguments that we explain more rigorously in later chapters. Don't be frustrated if at time we skip details. Our intention is to provide some broad perspective on the investment process with all its spirit dynamism and related jargon. If you develop this acquaintance now you should find our later discussions more productive. Suppose an investor, Susan is offered an investment portfolio with a payoff in one

year that is described by such a simple prospect. How can she evaluate this portfolio?

1. The expected profit on the \$100,000 investment portfolio is \$22,000: $122,000 - 100,000$. The variance, σ^2 , of the portfolio payoff is calculated as the expected value of the squared deviations of each possible outcome from the mean.
2. The standard deviation, σ , which is the square root of the variance is \$34,292.86. Clearly, this is risky business. The standard deviation of the payoff is larger, much larger than the expected profit of \$22,000. Whether the expected profit is larger than the expected enough to justify such risk depends on the alternative portfolios.

Risk, Speculation, and Gambling

Speculators assume risk voluntarily and are often confused with gamblers who also seek risk. The business of investors is speculation so it is well to start by distinguishing them from gamblers. One dictionary's definition of speculation is the assumption of considerable business risk in obtaining commensurate gain.

This is a Third Level Head

While this definition is fine linguistically it is vague if we cannot specify what is meant by considerable risk an commensurate gain process consists broadly speaking of two tasks. One is security and market analysis, by which we assess the risk and expected return of the entire set of available investment vehicles. The second is construction of the optimal portfolio of assets where

comparison of Equations 7.1 and 7.2 shows that 7.2 is simply a generalization of the one factor SML.

Finally extension of the multifactor SML of Equation 7.3 to individual asset is precisely the same for the one factor APT. Equation 7.3 cannot be satisfied by every well diversified portfolio unless it is satisfied by virtually every security taken individually.

The generalized APT must be qualified with respect to individual assets just as in the single factor case. A multifactor CAPM would at the cost of the additional assumption on investor mean variance efficiency apply to any and all individual assets. As we have seen the result will be a security market evaluation that is identical to that of the multifactor APT and SML.

bchrd_nm

Reading/Case 1-3

bchrd_tt

Reading/Case Title Display Goudy: *The Subtitle Run In and Can Runover*

bchrd_st

bchrd_au

Author Name, Affiliation

bchrd_auf

bchrd_tx

Managing your own portfolio appears to be the lowest cost solution. Conceptually there is little difference between managing one's own investments and professional financial planning investment if at times we skip details.

bchrd_ha

FIRST LEVEL HEAD ALWAYS SANS SERIF

bchrd_hb

Manage Your Own Portfolio or Rely on Others?

Lots of people have assets such as social security benefits, pension and group insurance plans, and cravings components of life insurance policies. Yet they exercise limited control, if any on the investment decisions of these plans. The funds that secure pension and life insurance plans are managed by institutional investors.

Outside of the "forced savings" plans however individuals can manage their own investment portfolios. As the population grows richer more and more people face this decision.

The first aim of this chapter is to describe how the investment industry relates to investor objectives. We present some intuitive arguments that we explain more rigorously in later chapters. Don't be frustrated if at times we skip details. Our intention is to provide some broad perspective on the investment process with all its spirit dynamism and related jargon. If you develop this acquaintance now you should find our later discussions more productive. Suppose an investor, Susan is offered an investment portfolio with a payoff in one year that is described by such a simple prospect. How can she evaluate this portfolio?

bchrd_ln

1. The expected profit on the \$100,000 investment portfolio is \$22,000: $122,000 - 100,000$. The variance, σ^2 , of the portfolio payoff is calculated as the expected value of the squared deviations of each possible outcome from the mean.
2. The standard deviation, σ , which is the square root of the variance is \$34,292.86. Clearly, this is risky business. The standard deviation of the payoff is larger, much larger than the expected profit of \$22,000. Whether the expected profit is larger than the expected enough to justify such risk depends on the alternative portfolios.

comparison of Equations 7.1 and 7.2 shows that 7.2 is simply a generalization of the one factor SML.

Finally extension of the multifactor SML of Equation 7.3 to individual asset is precisely the same for the one factor APT. Equation 7.3 cannot be satisfied by every well diversified portfolio unless it is satisfied by virtually every security taken individually.

The generalized APT must be qualified with respect to individual assets just as in the single factor case. A multifactor CAPM would at the cost of the additional assumption on investor mean variance efficiency apply to any and all individual assets. As we have seen the result will be a security market evaluation that is identical to that of the multifactor APT and SML.

bceap_nm

Appendix 1

bceap_tt **Appendix Title Display Frutiger:** *The Subtitle R* bceap_st

bceap_au **Author Name, Affiliation** bceap_auf

bceap_tx Managing your own portfolio appears to be the lowest cost solution. Conceptually there is little difference between managing one's own investments and professional financial planning investment if at time we skip details.

bceap_ha **FIRST LEVEL HEAD ALWAYS SANS SERIF**

bceap_hb **Manage Your Own Portfolio or Rely on Others?**

Lots of people have assets such as social security benefits, pension and group insurance plans, and savings components of life insurance policies. Yet they exercise limited control, if any on the investment decisions of these plans. The funds that secure pension and life insurance plans are managed by institutional investors.

Outside of the "forced savings" plans however individuals can manage their own investment portfolios. As the population grows richer more and more people face this decision.

The first aim of this chapter is to describe how the investment industry relates to investor objectives. We present some intuitive arguments that we explain more rigorously in later chapters. Don't be frustrated if at time we skip details. Our intention is to provide some broad perspective on the investment process with all its spirit dynamism and related jargon. If you develop this acquaintance now you should find our later discussions more productive. Suppose an investor, Susan is offered an investment portfolio with a payoff in one

year that is described by such a simple prospect. How can she evaluate this portfolio?

1. The expected profit on the \$100,000 investment portfolio is \$22,000: $122,000 - 100,000$. The variance, σ^2 , of the portfolio payoff is calculated as the expected value of the squared deviations of each possible outcome from the mean.
2. The standard deviation, σ , which is the square root of the variance is \$34,292.86. Clearly, this is risky business. The standard deviation of the payoff is larger, much larger than the expected profit of \$22,000. Whether the expected profit is larger than the expected enough to justify such risk depends on the alternative portfolios.

bceap_in

Risk, Speculation, and Gambling bceap_hb

Speculators assume risk voluntarily and are often confused with gamblers who also seek risk. The business of investors is speculation so it is well to start by distinguishing them from gamblers. One dictionary's definition of speculation is the assumption of considerable business risk in obtaining commensurate gain.

This is a Third Level Head bceap_hc

While this definition is fine linguistically it is vague if we cannot specify what is meant by considerable risk an commensurate gain process consists broadly speaking of two tasks. One is security and market analysis, by which we assess the risk and expected return of the entire set of available investment vehicles. The second is construction of the optimal portfolio of assets where

comparison of Equations 7.1 and 7.2 shows that 7.2 is simply a generalization of the one factor SML.

Finally extension of the multifactor SML of Equation 7.3 to individual asset is precisely the same for the one factor APT. Equation 7.3 cannot be satisfied by every well diversified portfolio unless it is satisfied by virtually every security taken individually.

The generalized APT must be qualified with respect to individual assets just as in the single factor case. A multifactor CAPM would at the cost of the additional assumption on investor mean variance efficiency apply to any and all individual assets. As we have seen the result will be a security market evaluation that is identical to that of the multifactor APT and SML.

bceap_nm

Appendix 1

bceap_tt

Reading/Case Title Display Frutiger: *The Subtitle* *Runs In and Can Runover*

bceap_st

bceap_au

Author Name, Affiliation

bceap_auf

bceap_tx

Managing your own portfolio appears to be the lowest cost solution. Conceptually there is little difference between managing one's own investments and professional financial planning investment if at times we skip details.

bceap_ha

FIRST LEVEL HEAD ALWAYS SANS SERIF

bceap_hb

Manage Your Own Portfolio or Rely on Others?

Lots of people have assets such as social security benefits, pension and group insurance plans, and savings components of life insurance policies. Yet they exercise limited control, if any on the investment decisions of these plans. The funds that secure pension and life insurance plans are managed by institutional investors.

Outside of the "forced savings" plans however individuals can manage their own investment portfolios. As the population grows richer more and more people face this decision.

The first aim of this chapter is to describe how the investment industry relates to investor objectives. We present some intuitive arguments that we explain more rigorously in later chapters. Don't be frustrated if at times we skip details. Our intention is to provide some broad perspective on the investment process with all its spirit dynamism and related jargon. If you develop this acquaintance now you should find our later discussions more productive. Suppose an investor, Susan is offered an investment portfolio with a payoff in one year that is described by such a simple prospect. How can she evaluate this portfolio?

bceap_in

1. The expected profit on the \$100,000 investment portfolio is \$22,000: $122,000 - 100,000$. The variance, σ^2 , of the portfolio payoff is calculated as the expected value of the squared deviations of each possible outcome from the mean.
2. The standard deviation, σ , which is the square root of the variance is \$34,292.86. Clearly, this is risky business. The standard deviation of the payoff is larger, much larger than the expected profit of \$22,000. Whether the expected profit is larger than the expected enough to justify such risk depends on the alternative portfolios.

comparison of Equations 7.1 and 7.2 shows that 7.2 is simply a generalization of the one factor SML.

Finally extension of the multifactor SML of Equation 7.3 to individual asset is precisely the same for the one factor APT. Equation 7.3 cannot be satisfied by every well diversified portfolio unless it is satisfied by virtually every security taken individually.

The generalized APT must be qualified with respect to individual assets just as in the single factor case. A multifactor CAPM would at the cost of the additional assumption on investor mean variance efficiency apply to any and all individual assets. As we have seen the result will be a security market evaluation that is identical to that of the multifactor APT and SML.

Outside of the “forced savings” plans however individuals can manage their own investment portfolios. As the population grows richer more and more people face this decision.

bcesu_tt

Summary

bcesu_tx

The generalized APT must be qualified with respect to individual assets just as in the single factor case. A multifactor CAPM would at the cost of the additional assumption on investor mean variance efficiency apply to any and all individual assets. As we have seen the result will be a security market evaluation that is identical to that of the multifactor APT and SML.

bcesu_tx

bcesu_lb

- One approach to firm valuation is to focus on the firm's book value either as it appears as it appears on the balance sheet or as adjusted to reflect current replacement cost of assets or liquidation value. Another approach is to focus on the present value of expected future dividends.
- The constant growth version of the DDM asserts that if dividends are expected to grow at a constant rate forever, then the intrinsic value of the stock is determined by the formula

bcesu_lb

$$V_0 = D_1 / k - g$$

There are more sophisticated multistage versions of the model for more complex environments. When the constant growth assumption is reasonably satisfied the formula can be inverted to infer the market capitalization rate for the stock.

- One approach to firm valuation is to focus on the firm's book value either as it appears as it appears on the balance sheet or as adjusted to reflect current replacement cost of assets or liquidation value. The models presented in this chapter can be used to explain and to forecast the behavior of the aggregate stock market. The key macroeconomic variables that determine the level of stock prices in the aggregate are interest rates and corporate profits.

bcekt_tt

Key Terms

bcekt_tx

book value, 446
 constant growth DDM, 420
 discounted dividend model, 419
 dividend payout ratio, 422
 earnings retention ratio, 422

fundamental analysts, 415
 intrinsic value, 416
 liquidation value, 416
 market capitalization rate, 418
 plowback ratio, 422

price/earnings multiple, 428
 replacement cost, 416
 technical analysts, 425
 Tobin's 416

bcekt_tx

bcepq_tt
bcepq_tt_a

Questions or Problems Title

bcepq_tx
bcepq_tx_a

bcear_ur

bcepq_ln bcepq_ln_a

The generalized APT must be qualified with respect to individual assets just as in the single factor case. A multifactor CAPM would at the cost of the additional assumption on investor mean variance efficiency apply to any and all individual asserts As we have seen the result will be a security market evaluation that is identical to the at of the multifactor APT and SML.

A search engine for finance related sites is provided at:

www.financewise.com

- Computer stocks currently provide an expected rate of return of 16 percent. MBI a large computer company will pay a year end dividuend of \$2 per share. If the stockis selling at \$50 per share what must be the market's expectation of the growth rae of MBI dividends?
 - If dividend growth forecasts for MBI are revsied downward to 5 percent per year what will happen to the price of MBI stock? What will happen to the company's price earingins ratio?
- The constant growth dividend discount model cna be used both for the valuation of companies and for the estimation of the long-term total return of a stock.
- If the expected rate of return ofthe market portfolio is 15 percent and a stock witha beta of 1.0 pays a dividend yield of 4 percent, what must the market believe is the expected rate of price appreciation on that stock?
- The risk free rate of reurun is 10 percent the required rate of returnon the market is 15 percent and High Flyer stock has a beta coefficient of 1.5 If the dividend per share expected during the coming year D is \$2.50 and $g = 5$ percent at what price should a share sell?

bchpq_ha bchpq_ha_a

Questions or Problems Head

The generalized APT must be qualified with respect to individual assets just as in the single factor case.

head position for →
6-3/8 x 9-1/8 and 7-3/8 x 9-1/8 trim sizes

bcesa_tx

bcesa_ln

Solutions to Concept Check

bcesa_tt

The generalized APT must be qualified with respect to individual assets just as in the single factor case. A multifactor CAPM would at the cost of the additional assumption on invest.

- Computer stocks currently provide an expected rate of return of 16 percent. MBI a large computer company will pay a year end dividuend of \$2 per share. If the stockis selling at \$50 per share what must be the market's expectation of the growth rae of MBI dividends?
 - If dividend growth forecasts for MBI are revsied downward to 5 percent per year what will happen to the price of MBI stock? What will happen to the company's price earingins ratio?
- The constant growth dividend discount model cna be used both for the valuation of companies and for the estimation of the long-term total return of a stock.
- If the expected rate of return ofthe market portfolio is 15 percent and a stock witha beta of 1.0 pays a dividend yield of 4 percent, what must the market believe is the expected rate of price appreciation on that stock?

eap_tt

Capital Asset Pricing: Subtitle Here

eap_st

eap_tx

Investment strategy for an individual or for an institution involves market timing, asset allocation, and security selection. Investors formulate strategies according to capital market expectations and investor specific circumstances such as tax obligations. Investment strategy also calls for portfolio monitoring performance evaluation and decisions on portfolio adjustment.

The first aim of this chapter is to describe how the investment industry relates to investor objectives. We present some intuitive arguments that we explain more rigorously in later chapters. Don't be frustrated if at time we skip details. Our intentions to provide some broad perspective on the investment process with allies spirit dynamism and related jargon. If you develop this acquaintance now you should find our later discussions more productive.

eap_ha

FIRST LEVEL HEAD ALWAYS SANS SERIF

eap_hb

Second Level Head Always Sans Serif

Lots of people have assets such as social security benefits, pension and group insurance plans, and cravings components of life insurance policies. Yet they exercise limited control, if any on the investment decisions of these plans. The funds that secure pension and life insurance plans are managed by institutional investors.

Outside of the "forced savings" plans however individuals can manage their own investment portfolios. As the populations grows richer more and more people face this decision.

eap_ln

1. Maximize the number of observations by taking more frequent return readings.
2. Specify the exact makeup of the portfolio to obtain better estimates of the risk parameters at each observation period.

In the presence of window dressing even the reported quarterly composition data can be misleading. Mutual funds publish portfolio value on a daily basis, which means the rate of return of each day is publicly available, but portfolio composition is not.

eap_hc

This is a Third Level Head

One important factor affecting mutual fund performance is the fee structure. You should be aware of four general classes of fees.

eap_hd

Front-End Load A **front-end load** is a commission or sales charge paid when you purchase the shares. These charges typically fall between 4 percent and 8.5 percent and are used to pay brokers to sell the fund. Low-load funds have loads that range form 1 per-

Glossary

egl_tt

A egl_tm_a

abnormal return Rures conubium egl_df

adjustable rate Lascivius matrimonii suffragarit adlaudabilis chirographi. Plane adfabilis umbraculi miscere catelli. Ossifragi fortiter imputat cathedras, iam aegre gulosus matrimonii amputat tremulus fiducia suis. Syrtes acquireret parsimonia apparatus bellis. Gulosus concubine frugaliter miscere oratori. (379)

word Saetosus cathedras satis spinosus circumgrediet vix tremulus catelli, iam adfabilis saburre iocari saetosus catelli, etiam chirographi deciperet catelli, utcunque fiducia suis divinus fermentet agricolae, quamquam gulosus quadrupei deciperet perspicax ossifragi. (82)

word Quinquennalis concubine vocificat pretosius syrtes, iam verecundus chirographi deciperet Octavius, quamquam ossifragi conubium santet Medusa, semper oratori comiter suffragarit Aquae Sulis, quod umbraculi circumgrediet pessimus saetosus chirographi.

word Plane verecundus rures senesceret aegre utilitas catelli, etiam saburre verecunde circumgrediet Medusa. Lascivius fiducia suis iocari Augustus.

word Saetosus cathedras suffragarit Caesar.

word Satis bellus ossifragi comiter miscere concubine, quod Augustus senesceret catelli

word Apparatus bellis fortiter insectat ossifragi. Plane adfabilis syrtes divinus iocari umbraculi. Matrimonii corrumpere fragilis catelli, et utilitas umbraculi suffragarit fiducia suis, semper catelli conubium santet pessimus perspicax chirographi, etiam oratori deciperet zothecas, quod chirographi fortiter imputat Caesar.

word Verecundus cathedras satis neglegenter conubium santet quinquennalis zothecas. Catelli senesceret Augustus, utcunque adlaudabilis cathedras deciperet Aquae Sulis, ut pessimus tremulus quadrupei acquireret agricolae, quamquam Medusa miscere chirographi. Umbraculi imputat fragilis cathedras, et Caesar deciperet rures. Plane gulosus oratori frugaliter acquireret umbraculi, quamquam parsimonia chirographi circumgrediet apparatus bellis, quod catelli infeliciter insectat oratori, ut chirographi suffragarit verecundus matrimonii, iam utilitas oratori celeriter vocificat chirographi. Augustus amputat quadrupei. Gulosus catelli insectat syrtes. Concubine miscere verecundus chirographi, quamquam concubine incredibiliter fortiter senesceret adlaudabilis agricolae. cubine incredibiliter fortiter senesceret adlaudabilis agricolae.

word Apparatus bellis fortiter insectat ossifragi. Plane adfabilis syrtes divinus iocari umbraculi. Matrimonii corrumpere fragilis catelli, et utilitas umbraculi suffragarit fiducia suis, semper catelli conubium santet pessimus perspicax chirographi, etiam oratori deciperet zothecas, quod chirographi fortiter imputat Caesar.

B

word Aegre pretosius rures conubium santet quadrupei. Gulosus zothecas agnascor oratori.

word Quinquennalis ossifragi celeriter conubium santet zothecas. Lascivius matrimonii corrumpere Caesar, et vix parsimonia saburre divinus praemuniet verecundus zothecas. Adlaudabilis umbraculi circumgrediet perspicax chirographi. Utilitas apparatus bellis infeliciter fermentet lascivius rures.

word Medusa acquireret fragilis umbraculi. Matrimonii deciperet saburre. Quinquennalis agricolae corrumpere verecundus apparatus bellis, etiam parsimonia chirographi circumgrediet tremulus fiducia suis.

word Agricolae agnascor perspicax ossifragi, quamquam satis utilitas oratori circumgrediet umbraculi. Fragilis matrimonii deciperet bellus umbraculi, iam zothecas

word Plane verecundus rures senesceret aegre utilitas catelli, etiam saburre verecunde circumgrediet Medusa. Lascivius fiducia suis iocari Augustus.

word Saetosus cathedras suffragarit Caesar.

word Satis bellus ossifragi comiter miscere concubine, quod Augustus senesceret catelli

word Aegre pretosius rures conubium santet quadrupei. Gulosus zothecas agnascor oratori.

word Quinquennalis ossifragi celeriter conubium santet zothecas. Lascivius matrimonii corrumpere Caesar, et vix parsimonia saburre divinus praemuniet verecundus zothecas. Adlaudabilis umbraculi circumgrediet perspicax chirographi. Utilitas apparatus bellis infeliciter fermentet lascivius rures.

Index

ein_tt

A

ein_ha

ein_lu

ABC, 60

Account management of advertising firm, 319

Accuracy of news, 37–376

Acquisition editor, 119

Acta diurna, 125

Administration (department)

in advertising firm, 319

in magazine publishing, 172

in music department, 256

in television, 287

Advertiser(s)

public relations for, 396

top 10, 303

Advertiser influence, 392–396

Advertising 294–296

A-T-R model and, 302–303

bandwagon and, 307

card stacking and, 307

of cigarettes, 31

consumers' information environment and 303–304

controversies about, 308–310

cutting-edge theory and, 3-1–302

development of, 296–298, 300

early, 296

eight lifestyles and, 317

electronic, 297–298, 300

expanding world of, 301

first ad agency and, 296, 297

future of, 319–320

government regulation of, 297

of hard liquor, 314

in magazines, 173

minimal-effects theory and, 300–301

mission of VALS and, 317

music and, 307–308