

高等学校金融学类英文版教材

Financial Markets and Institutions 6e

Jeff Madura

金融市场 与机构

何丽芬(对外经济贸易大学) 改编
刘红忠(复旦大学) 审校

高等学校金融学类英文版教材

Financial Markets and Institutions 6e

Jeff Madura

金融市场与机构

何丽芬(对外经济贸易大学) 改编
刘红忠(复旦大学) 审校

 高等教育出版社
THOMSON


图字：01-2004-6495 号

Jeff Madura

Financial Markets and Institutions, Sixth Edition

ISBN: 0-324-16261-8

Copyright © 2004 by South-Western, a division of Thomson Learning.

Original language published by Thomson Learning (a division of Thomson Learning Asia Pte Ltd). All Rights reserved. 本书原版由汤姆森学习出版集团出版。版权所有，盗印必究。

Higher Education Press is authorized by Thomson Learning to publish and distribute exclusively this Adaptation edition. This edition is authorized for sale in the People's Republic of China only (excluding Hong Kong, Macao SAR and Taiwan). Unauthorized export of this edition is a violation of the Copyright Act. No part of this publication may be reproduced or distributed by any means, or stored in a database or retrieval system, without the prior written permission of the publisher.

本书改编版由汤姆森学习出版集团授权高等教育出版社独家出版发行。此版本仅限在中华人民共和国境内（不包括中国香港、澳门特别行政区及中国台湾）销售。未经授权的本书出口将被视为违反版权法的行为。未经出版者预先书面许可，不得以任何方式复制或发行本书的任何部分。

981-265-072-5

图书在版编目 (CIP) 数据

金融市场与机构=Financial Markets and Institutions: 英文改编 / (美) 马杜里 (Madura, J.). —北京: 高等教育出版社, 2005. 1
ISBN 7-04-016163-X

I. 金... II. 马... III. ①金融市场—高等学校—教材—英文②金融机构—高等学校—教材—英文
IV. F83

中国版本图书馆CIP数据核字 (2004) 第129549号

策划编辑 于 明 责任编辑 于 明 封面设计 刘晓翔 责任印制 陈伟光

出版发行	高等教育出版社	购书热线	010-64054588
社 址	北京市西城区德外大街 4 号	免费咨询	800-810-0598
邮政编码	100011	网 址	http://www.hep.edu.cn
总 机	010-58581000		http://www.hep.com.cn
经 销	新华书店北京发行所		
印 刷	涿州市星河印刷有限公司		
开 本	850 × 1168 1/16	版 次	2005 年 1 月第 1 版
印 张	30.5	印 次	2005 年 1 月第 1 次印刷
字 数	890 000	定 价	38.00 元

本书如有缺页、倒页、脱页等质量问题，请到所购图书销售部门联系调换。

版权所有 侵权必究

物料号：16163-00

出版前言

自教育部在《关于加强高等学校本科教学工作 提高教学质量的若干意见》【教高(2001)4号】中提出双语教学的要求后,各地高校相继开设了一系列双语教学课程。这对提高学生的学科和外文水平,开阔国际视野,培养创新型人才起到了重要的作用;一大批教师也逐渐熟悉了外文授课,自身的教学水平和能力得到较大提高,具备国际学术思维的中青年教师脱颖而出。同时,经过近几年的双语教学实践,国外原版教材量大、逻辑不够清晰、疏离中国现实等问题也影响了双语教学的效果。因此,对外版教材进行本土化的精简改编,使之更加适合我国的双语教学已提上教材建设日程。

为了满足高等学校经济管理类双语课程本土化教学的需要,在教育部高等教育司的指导和帮助下,高等教育出版社同Thomson Learning等国外著名出版公司通力合作,在国内首次推出了金融、会计、经济学等专业的英文原版改编教材。本套教材的遴选、改编和出版严格遵循了以下几个原则:

1. 择优选取权威的新版本。在各专业选书论证会上,我们要求入选改编的教材不仅是在国际上多次再版的经典之作的最新版本,而且是近年来已在国内被试用的优秀教材。

2. 改编后的教材力求内容规范简明,逻辑更加清晰,语言原汁原味,适合中国的双语教学。选择的改编人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;在改编过程中,高等教育出版社组织了知名专家学者召开了数次改编和审稿会议,改编稿征求了众多教师的意见。

3. 改编后的教材配有较丰富的辅助教学支持资源,教师可在网上免费获取。同时,改编后的教材厚度适中,定价标准较低。

由于原作者所处国家的政治、经济和文化背景等与我国不同,对书中所持观点,敬请广大读者在阅读过程中注意加以分析和鉴别。

此次英文改编教材的出版,得到了很多专家学者的支持和帮助,在此深表谢意!我们期待这批英文改编教材的出版能对我国经济管理类专业的教学能有所帮助,欢迎广大读者给我们提出宝贵的意见和建议。

高等教育出版社
2005年1月

关于本书

内容简介

本书从讨论金融市场的资金流动、利率的决定和利率结构出发，系统阐述了金融市场的运作全貌，不仅全面介绍了债务证券市场、权益证券市场、衍生证券市场，而且深入分析了各种金融工具、衍生工具的估价与风险，本书还着重描述了金融机构对各类金融市场的利用及其在金融市场上所扮演的角色。

本书适合作为金融、经济、工商管理专业本科生、研究生和MBA“金融市场学”或“金融市场与机构”课程的教材。对于金融业的研究人员和从业人员，本书也是一本难得的专业参考书。

作者简介

杰夫·马杜拉 (Jeff Madura)，美国佛罗里达亚特兰大大学金融系教授，他在《金融与数量分析》、《货币、信贷与银行》、《风险与保险》等众多一流刊物上发表了有关银行与金融市场研究方面的学术论文。杰夫·马杜拉教授因其在教学和研究方面的突出贡献而多次获奖，并曾担任商业银行、证券公司的顾问，还曾任美国南方金融协会与东方金融协会的理事以及南方金融协会会长。

改编及审校者简介

何丽芬，对外经济贸易大学金融学院副教授。多年从事“金融市场学”、“货币银行学”、“中央银行学”、“投资银行学”等课程的教学，在国内主要学术刊物发表多篇学术论文，并参加编写和翻译了多部教材和专业著作。

刘红忠，经济学博士，复旦大学经济学院金融学教授，博士生导师，国际金融系系主任。主要研究领域为金融市场学、投资学、国际投资、国际金融等。

教学支持资源（见本书教学支持说明页）

1. Instructor's Manual
2. PowerPoint
3. Test Bank
4. Data Bank
5. Excel Templates
6. Others

导 读

本书是根据杰夫·马杜拉(Jeff Madura)教授所著的《金融市场与机构》(第六版)改编而成。全书从讨论金融市场的资金流动、利率的决定和利率结构出发,系统阐述了美国金融市场的运作全貌,不仅全面介绍了债务证券市场、权益证券市场、衍生证券市场,而且深入分析了各种金融工具、衍生工具的估价与风险,本书还着重描述了金融机构对各类金融市场的利用及其在金融市场上所扮演的角色。

改编后,本书共五篇,主要内容如下:

第一篇(第一章至第三章)介绍了主要的金融市场与金融机构的概况,讨论了金融市场中最重要也是最关键的一个概念——利率,阐述了金融市场中影响利率变动的因素,介绍了利率的期限结构理论,解释了各类有价证券收益不同的原因。本篇第一章介绍了主要的金融市场及金融市场的参与者——金融机构;第二章重点讨论影响利率变动的主要因素及利率变动对有价证券价值的影响;第三章列举了除利率之外影响有价证券价格的其他因素。通过本篇的学习,可以深入理解金融市场的参与者如何通过这些信息对有价证券进行估价并做出投资决策。

第二篇(第四章至第五章)主要介绍美国联邦储备体系的功能,分析了美国联邦储备体系作为美国的中央银行如何通过货币政策影响利率及其他经济因素,进而阐明了金融市场的参与者密切关注美国联邦储备体系货币政策的原因。本篇第四章重点阐述了金融市场如何对美联储可能采取的货币政策进行评价;第五章主要分析了美联储货币政策的影响,包括对经济状况预期的影响、对有价证券价格预期的影响和对买卖有价证券决策的影响。通过本篇的学习,可以进一步了解金融市场的参与者怎样通过评估美联储货币政策更加准确地评估有价证券的价格,从而更有效地确定投资决策。

第三篇(第六章至第九章)主要介绍债务证券市场如何使资金从盈余方流向赤字方。本篇第六章主要介绍货币市场及货币市场工具的估价与风险;第七章和第八章重点介绍债券市场及债券的估价与风险;第九章的内容包括抵押贷款市场及抵押贷款的估价与风险。在本篇的第六章、第七章和第九章分别讨论了各类金融机构对货币市场、债券市场和抵押贷款市场的利用及作用。通过本篇的学习,可以深入了解债务证券市场作为金融市场重要组成部分的运作情况,并理解金融市场参与者如何借助各类债务证券市场不同的金融工具进行投资和筹资活动。

第四篇(第十章至第十二章)主要介绍股票市场的有关问题,包括股票发行、投资者对上市公司的控制机制、股票的估价与风险以及股票市场的微观结构等内容。本篇第十章讨论了股票市场的特征和基本情况,分析了各类金融机构对股票市场的利用及其作用;第十一章的主要内容是股票定价原理;第十二章介绍了股票交易的执行。通过本篇的学习,可以了解股票市场作为金融市场的重要组成部分是怎样使资金从个人投资者和机构投资者流向需要资金的公司,并理解金融市场参与者如何借助股票市场进行筹资、投资和投机活动。

第五篇(第十三章至第十六章)是关于衍生证券市场的内容。本篇第十三章介绍期货市场;第十四章介绍期权市场;第十五章介绍利率衍生产品市场;第十六章介绍外汇衍生产品市场。本篇每章都介绍了各类衍生工具的估价和风险,从原理和实例等方面深入分析了机构投资者和投机者如何利用这些衍生产品市场从事套期保值和投机活动。通过本篇的学习,可以全面理解衍生证券市场各

类衍生工具的原理和运用,有助于金融市场的参与者进行投资和投机决策。

在阅读本书时,应注意本书篇章结构以下几个方面的特点:(1)结构图。每篇开头都指明篇中将要涉及的重要内容,直观地给出每篇各章的内容构架。(2)学习目的。每章开头列出本章的主要目的,概括本章将要阐述的内容。(3)在线金融市场。每章的在线金融市场给出了特定网站的网址,查阅相关网址有助于深入理解有关概念。(4)全球视野。正文或本书页边的全球视野图标(Global aspects),指示了章节中正在讨论的主题是有关国际化的内容。(5)本章小结。每章结束时列出本章小结,对全章内容进行概括总结。(6)思考应用题。每章末的思考应用题用于考查学生对本章主要内容的理解情况,可帮助教师布置家庭作业或者学生准备复习考试。(7)诠释金融新闻。思考应用题中的诠释金融新闻,要求学生解释行情或有关各章针对重要概念所作的评论,给了学生一个通过应用本书所学的知识去解释金融媒介公告的实战机会。(8)计算题。某些章节在思考应用题之后有计算题,考查学生的计算能力。(9)金融市场管理。这部分习题要求学生针对与各章的重要概念相联系的特定情形做出投资决策。(10)综合测试题。每篇结尾的综合测试题汇集了本篇内各章的重要概念。

本书是一本适合于金融、经济、工商管理专业本科生和研究生、MBA学习的教材,可以作为教师讲授《金融市场学》或《金融市场与机构》课程的教材。同时,对于金融业的研究人员和从业人员,本书也是一本难得的专业参考书。读者在阅读和使用本书时,将会有以下三个方面的体会:

第一,内容深入浅出。本书对许多问题的阐述深入浅出,独特精辟地分析了金融市场的内在机理,符合金融学越来越微观化的发展趋势。

第二,结构条理清晰,本书紧紧围绕着有价证券的估价和金融市场的参与者(特别是金融机构)对金融市场的利用这两条主线对各类金融市场进行深入细致的讨论。

第三,语言简明通俗。本书沿袭了原书作为国外大学经济学教科书的特点,用简明通俗的语言来阐述深奥的金融学原理,易于理解和掌握。本书内容全面、脉络清晰,不仅有深入浅出的理论论述,而且有大量的生动案例和结合实际的练习,使读者能够加深对金融市场运作机制的理解,值得每一位读者细细品味。

审校及改编者

2004年12月

Contents

PART I

1 Overview of the Financial Environment

2 Chapter 1

Role of Financial Markets and Institutions

- Overview of Financial Markets 2
 - Money versus Capital Markets 3
 - Primary versus Secondary Markets 3
 - Organized versus Over-the-Counter Markets 3
- Securities Traded in Financial Markets 3
 - Money Market Securities 3
 - Capital Market Securities 4
 - Derivative Securities 5
- Valuation of Securities in Financial Markets 6
 - Market Pricing of Securities 6
 - Market Efficiency 8
- Financial Market Regulation 8
 - Disclosure 8
 - Other Regulations 9
- Financial Market Globalization 9
 - Role of the Foreign Exchange Market 9
 - Foreign Exchange Rates 10
- Role of Financial Institutions in Financial Markets 10
 - Role of Depository Institutions 11
 - Role of Nondepository financial Institutions 13
 - Comparison of Roles among Financial Institutions 18
- Overview of Financial Institutions 19
 - Competition between Financial Institutions 19
 - Consolidation of Financial Institutions 20
 - Participation in Financial Markets 24
- Global Expansion by Financial Institutions 27
- Summary 27 ■ Questions and Applications 28 ■**

30 Chapter 2

Determination of Interest Rates

- Loanable Funds Theory 30
 - Household Demand for Loanable Funds 31
 - Business Demand for Loanable Funds 31
 - Government Demand for Loanable Funds 33
 - Foreign Demand for Loanable Funds 33
 - Aggregate Demand for Loanable Funds 34
 - Supply of Loanable Funds 34
 - Equilibrium Interest Rate 36
- Economic Forces That Affect Interest Rates 37
 - Impact of Economic Growth on Interest Rates 38
 - Impact of Inflation on Interest Rates 39

- Impact of the Money Supply on Interest Rates 41
- Impact of the Budget Deficit on Interest Rates 42
- Impact of Foreign Flows of Funds on Interest Rates 44
- Summary of Forces That Affect Interest Rates 46

Evaluation of Interest Rates over Time 46

Forecasting Interest Rates 47

Summary 49 ■ Questions and Applications 50 ■
Problems 52 ■

53 Chapter 3

Structure of Interest Rates

Characteristics of Debt Securities That Cause Their Yields to Vary 53

Credit (Default) Risk 54

Liquidity 56

Tax Status 56

Term to Maturity 57

Special Provisions 58

Explaining Actual Yield Differentials 59

Yield Differentials of Money Market Securities 59

Yield Differentials of Capital Market Securities 60

Estimating the Appropriate Yield 61

A Closer Look at the Term Structure 62

Pure Expectations Theory 63

Liquidity Premium Theory 68

Segmented Markets Theory 70

Research on Term Structure Theories 72

Integrating the Theories of the Term Structure 72

Uses of the Term Structure 73

Impact of Debt Management on Term Structure 75

Impact of September 11 on the Term Structure 77

Historical Review of the Term Structure 77

International Structure of Interest Rates 79

Summary 80 ■ Questions and Applications 81 ■

Problems 82 ■

Integrative Problem: Interest Rate Forecasts and Investment Decisions 83

PART II

85 The Fed and Monetary Policy

86 Chapter 4

Functions of the Fed

Organization of the Fed 86

Federal Reserve District Banks 87

Member Banks 87

Board of Governors 88

Federal Open Market Committee (FOMC) 89

ii CONTENTS

Advisory Committees	90
Integration of Federal Reserve Components	90
Monetary Policy Tools	91
Open Market Operations	91
Adjusting the Discount Rate	95
Adjusting the Reserve Requirement Ratio	96
Comparison of Monetary Policy Tools	98
Impact of Technical Factors on Funds	99
Fed Control of the Money Supply	99
Limitations of Controlling Money Supply	100
Monetary Control Act of 1980	102
Global Monetary Policy	103
A Single Euro Zone Monetary Policy	103
Global Central Bank Coordination	104
Summary	104 ■ Questions and Applications 105 ■

107 Chapter 5 Monetary Theory and Policy

Monetary Theory	107
Pure Keynesian Theory	107
Quantity Theory and the Monetarist Approach	111
Theory of Rational Expectations	112
Which Theory is Correct?	114
Tradeoff Faced by the Fed	114
Impact of Other Forces on the Tradeoff	115
Economic Indicators Monitored by the Fed	119
Indicators of Economic Growth	119
Indicators of Inflation	120
How the Fed Uses Indicators	120
Lags in Monetary Policy	121
Assessing the Impact of Monetary Policy	121
Forecasting Money Supply Movements	122
Forecasting the Impact of Monetary Policy	126
Integrating Monetary and Fiscal Policies	127
History	128
Monetizing the Debt	129
Market Assessment of Integrated Policies	131
Global Effects of Monetary Policy	131
Impact of the Dollar	132
Impact of Global Economic Conditions	132
Transmission of Interest Rates	132
Fed Policy during the Asian Crisis	133
Summary	133 ■ Questions and Applications 134 ■
Integrative Problem: Fed Watching	136

PART III

139 Debt Security Markets

140 Chapter 6 Money Markets

Money Market Securities	140
Treasury Bills	141
Commercial Paper	144
Negotiable Certificates of Deposit (NCDs)	146
Repurchase Agreements	146

Federal Funds	147
Banker's Acceptances	148
Institutional Use of Money Markets	150
Valuation of Money Market Securities	151
Explaining Money Market Price Movements	152
Indicators of Future Money Market Security Prices	153
Risk of Money Market Securities	153
Measuring Risk	154
Interaction among Money Market Yields	155
Globalization of Money Markets	155
Eurodollar Deposits and Euronotes	156
Euro-Commercial Paper	156
Performance of Foreign Money Market Securities	157
Summary	155 ■ Questions and Applications 159 ■
Problems	160 ■

162 Chapter 7 Bond Markets

Background on Bonds	162
Bond Yields	162
Treasury and Federal Agency Bonds	163
Treasury Bond Auction	163
Trading Treasury Bonds	164
Treasury Bond Quotations	165
Stripped Treasury Bonds	166
Inflation-Indexed Treasury Bonds	166
Brady Bonds	166
Federal Agency Bonds	167
Municipal Bonds	167
Trading and Quotations	168
Corporate Bonds	168
Private Placements of Corporate Bonds	169
Characteristics of Corporate Bonds	169
Trading Corporate Bonds	171
Corporate Bond Quotations	171
Junk Bonds	172
How Corporate Bonds Facilitate Restructuring	175
Institutional Use of Bond Markets	176
Globalization of Bond Markets	177
Eurobond Market	178
Tax Effects	179
Summary	179 ■ Questions and Applications 180 ■

182 Chapter 8 Bond Valuation and Risk

Bond Valuation Process	182
Bond Valuation with a Present Value Table	183
Impact of the Discount Rate on Bond Valuation	184
Impact of the Timing of Payments on Bond Valuation	184
Valuation	184
Valuation of Bonds with Semiannual Payments	184
Use of Annuity Tables for Valuation	186
Relationships Between Coupon Rate, Required Return, and Bond Price	186
Implications for Financial Institutions	188
Explaining Bond Price Movements	189
Factors That Affect the Risk-Free Rate	189

Factors That Affect the Credit (Default) Risk Premium	191
Summary of Factors Affecting Bond Prices	193
Sensitivity of Bond Prices to Interest Rate Movements	194
Bond Price Elasticity	195
Duration	197
Bond Investment Strategies Used by Investors	199
Matching Strategy	199
Laddered Strategy	199
Barbell Strategy	200
Interest Rate Strategy	200
Return and Risk of International Bonds	200
Influence of Foreign Interest Rate Movements	201
Influence of Credit Risk	201
Influence of Exchange Rate Fluctuations	201
International Bond Diversification	202
Summary	203 ■
Questions and Applications	203 ■
Problems	205 ■

APPENDIX 8: Forecasting Bond Prices and Yields 207

Forecasting Bond Portfolio Values	209
Forecasting Bond Portfolio Returns	210

216 Chapter 9 **Mortgage Markets**

Background on Mortgages	216
Residential Mortgage Characteristics	217
Insured versus Conventional Mortgages	218
Fixed-Rate versus Adjustable-Rate Mortgages	218
Mortgage Maturities	219
Creative Mortgage Financing	221
Graduated-Payment Mortgage (GPM)	222
Growing-Equity Mortgage	222
Second Mortgage	222
Shared-Appreciation Mortgage	222
Activities in the Mortgage Market	223
How the Secondary Market Facilitates Mortgage Activities	223
Unbundling of Mortgage Activities	223
Institutional Use of Mortgage Markets	224
Valuation of Mortgages	226
Factors That Affect the Risk-Free Interest Rate	227
Factors That Affect the Risk Premium	228
Summary of Factors Affecting Mortgage Prices	228
Indicators of Changes in Mortgage Prices	229
Risk from Investing in Mortgages	230
Interest Rate Risk	230
Prepayment Risk	231
Credit Risk	231
Measuring Risk	232
Use of Mortgage-Backed Securities	233
Ginnie Mae Mortgage-Backed Securities	234
Fannie Mae Mortgage-Backed Securities	234
Publicly Issued Pass-Through Securities (PIPs)	235
Participation Certificates (PC)s	235
Collateralized Mortgage Obligations (CMOs)	235
Mortgage-Backed Securities for Small Investors	236
Globalization of Mortgage Markets	237

Summary	237 ■
Questions and Applications	238 ■
Integrative Problem: Asset Allocation	239

PART IV

241 Equity Markets

242 Chapter 10

Stock Offerings and Investor Monitoring

Background on Stock	242
Ownership and Voting Rights	242
Preferred Stock	242
Issuer Participation in Stock Markets	243
Initial Public Offerings	244
Process of Going Public	244
Underwriter Efforts to Ensure Price Stability	245
Timing of IPOs	247
Initial Returns of IPOs	248
Long-Term Performance Following IPOs	249
Secondary Stock Offerings	250
Shelf-Registration	251
Stock Exchanges	251
Organized Exchanges	251
Over-the-Counter Market	253
Consolidation of Stock Exchanges	254
Late Trading Provided by Exchanges	254
Stock Quotations Provided by Exchanges	255
Stock Index Quotations	257
Investor Participation in the Secondary Market	258
How Investor Decisions Affect the Stock Price	259
Types of Investors	260
Monitoring by Investors	262
Shareholder Activism	262
The Corporate Monitoring Role	263
Stock Repurchases	264
Market for Corporate Control	264
Barriers to Corporate Control	265
Globalization of Stock Markets	266
Foreign Stock Offerings in the United States	266
International Placement Process	267
Global Stock Exchanges	267
Emerging Stock Markets	268
Methods Used to Invest in Foreign Stocks	269

Summary	270 ■
Questions and Applications	270 ■

272 Chapter 11

Stock Valuation and Risk

Stock Valuation Methods	272
Price-Earnings (PE) Method	272
Dividend Discount Model	273
Adjusting the Dividend Discount Model	275
Determining the Required Rate of Return to Value Stocks	277
Capital Asset Pricing Model	277
Arbitrage Pricing Model	279
Factors That Affect Stock Prices	279
Economic Factors	279
Market-Related Factors	281

Firm-Specific Factors	282
Integration of Factors Affecting Stock Prices	283
Role of Analysts in Valuing Stocks	285
Conflicts of Interest	285
Impact of Disclosure Regulations	285
Unbiased Analyst Rating Services	286
Stock Risk	286
Measures of Risk	287
Applying Value at Risk	290
Methods of Determining the Maximum Expected Loss	290
Deriving the Maximum Dollar Loss	291
Common Adjustments to the Value-at-Risk Applications	292
Forecasting Stock Price Volatility and Beta	293
Methods of Forecasting Stock Price Volatility	293
Forecasting a Stock Portfolio's Volatility	294
Forecasting a Stock Portfolio's Beta	294
Stock Performance Measurement	295
Sharpe Index	295
Treynor Index	295
Stock Market Efficiency	296
Forms of Efficiency	296
Tests of the Efficient Market Hypothesis	297
Foreign Stock Valuation, Performance, and Efficiency	299
Valuation of Foreign Stocks	299
Measuring Performance from Investing in Foreign Stocks	299
Performance from Global Diversification	300
International Market Efficiency	302
Summary	302 ■
Questions and Applications	303 ■
Problems	304 ■
APPENDIX 11A: Stock Valuation: Lessons from Enron's Demise	306
313 Chapter 12	
Market Microstructure and Strategies	
Stock Market Transactions	313
Placing an Order	313
Margin Trading	314
Short Selling	316
Investing in Stock Indexes	317
How Trades are Executed	319
Floor Brokers	319
Specialists and Market-Makers	319
Electronic Communication Networks (ECNs)	320
Program Trading	323
Regulation of Stock Trading	324
Circuit Breakers	324
Securities and Exchange Commission (SEC)	324
How Barriers to International Stock Trading Have Decreased	327
Reduction in Transaction Costs	327
Reduction in Information Costs	327
Reduction in Exchange Rate Risk	328
Summary	328 ■
Questions and Applications	328 ■
Problems	330 ■
Integrative Problem: Stock Market Analysis	331

PART V

333 Derivative Security Markets**334 Chapter 13**

Financial Futures Markets

Background on Financial Futures	334
Steps Involved in Trading Futures	335
Purpose of Trading Financial Futures	336
Interpreting Financial Futures Tables	336
Valuation of Financial Futures	338
Impact of the Opportunity Costs	338
Explaining Price Movements of Bond Futures Contracts	338
Speculating with Interest Rate Futures	340
Impact of Leverage	340
Closing Out the Futures Position	341
Hedging with Interest Rate Futures	342
Using Interest Rate Futures to Create a Short Hedge	343
Using Interest Rate Futures to Create a Long Hedge	345
Hedging Net Exposure	346
Bond Index Futures	346
Stock Index Futures	347
Valuing Stock Index Futures Contracts	348
Speculating with Stock Index Futures	349
Hedging with Stock Index Futures	349
Dynamic Asset Allocation with Stock Index Futures	351
Prices of Stock Index Futures versus Stocks	352
Arbitrage with Stock Index Futures	352
Circuit Breakers on Stock Index Futures	353
Risk of Trading Futures Contracts	354
Market Risk	354
Basis Risk	354
Liquidity Risk	355
Credit Risk	355
Prepayment Risk	355
Operational Risk	355
Regulation in the Futures Markets	356
Institutional Use of Futures Markets	356
Globalization of Futures Markets	357
Non-U.S. Participation in U.S. Futures Contracts	357
Foreign Stock Index Futures	357
Currency Futures Contracts	358

Summary	359 ■
Questions and Applications	359 ■
Problems	361 ■

362 Chapter 14

Options Markets

Background on Options	362
Markets Used to Trade Options	363
How Option Trades Are Executed	364
Types of Orders	365
Stock Option Quotations	365
Speculating with Stock Options	366
Speculating with Call Options	366
Speculating with Put Options	368

Determinants of Stock Option Premiums	370
<i>Determinants of Call Option Premiums</i>	370
<i>Determinants of Put Option Premiums</i>	371
Explaining Change In Option Premiums	373
<i>Indicators Monitored by Participants in the Options Market</i>	374
Hedging with Stock Options	375
<i>Hedging with Call Options</i>	375
<i>Hedging with Put Options</i>	375
Using Options to Measure a Stock's Risk	377
Stock Index Options	377
<i>Hedging with Stock Index Options</i>	378
<i>Dynamic Asset Allocation with Stock Index Options</i>	378
<i>Using Index Options to Measure the Market's Risk</i>	379
Options on Futures Contracts	381
<i>Speculating with Options on Futures</i>	381
Hedging with Options on Futures	384
<i>Hedging with Options on Interest Rate Futures</i>	384
<i>Hedging with Options on Stock Index Futures</i>	386
Institutional Use of Options Markets	387
Globalization of Options Markets	388
<i>Currency Options Contracts</i>	388
Summary	398 ■
Questions and Applications	389 ■
Problems	391 ■

APPENDIX 14: Option Valuation 393

401 Chapter 15 Interest Rate Derivative Markets

Background	401
Participation by Financial Institutions	403
Types of Interest Rate Swaps	404
<i>Plain Vanilla Swaps</i>	405
<i>Forward Swaps</i>	405
<i>Callable Swaps</i>	407
<i>Putable Swaps</i>	408
<i>Extendable Swaps</i>	408
<i>Zero-Coupon-for-Floating Swaps</i>	409
<i>Rate-Capped Swaps</i>	409
<i>Equity Swaps</i>	410
<i>Other Types of Swaps</i>	411
Risk of Interest Rate Swaps	412
<i>Basis Risk</i>	412
<i>Credit Risk</i>	413
<i>Sovereign Risk</i>	413
Pricing Interest Rate Swaps	414
<i>Prevailing Market Interest Rates</i>	414
<i>Availability of Counterparties</i>	414
<i>Credit and Sovereign Risk</i>	414
Factors Affecting the Performance of Interest Rate Swaps	414
<i>Indicators Monitored by Participants in the Swap Market</i>	415
Interest Rate Caps, Floors, and Collars	416
<i>Interest Rate Caps</i>	416
<i>Interest Rate Floors</i>	417
<i>Interest Rate Collars</i>	417
Globalization of Swap Markets	419

Currency Swaps	420
Risk of Currency Swaps	422

Summary	422 ■
Questions and Applications	422 ■
Problems	421 ■

425 Chapter 16 Foreign Exchange Derivative Markets

Background on Foreign Exchange Markets	425
<i>Institutional Use of Foreign Exchange Markets</i>	426
<i>Exchange Rate Quotations</i>	427
<i>Types of Exchange Rate Systems</i>	427
Factors Affecting Exchange Rates	430
<i>Differential Inflation Rates</i>	431
<i>Differential Interest Rates</i>	431
<i>Central Bank Intervention</i>	432
<i>Indirect Intervention</i>	433
<i>Foreign Exchange Contracts</i>	434
Movements in Exchange Rates	434
Forecasting Exchange Rates	434
<i>Technical Forecasting</i>	435
<i>Fundamental Forecasting</i>	436
<i>Market-Based Forecasting</i>	437
<i>Mixed Forecasting</i>	437
Forecasting Exchange Rate Volatility	438
Speculation in Foreign Exchange Markets	440
Foreign Exchange Derivatives	440
<i>Forward Contracts</i>	441
<i>Currency Futures Contracts</i>	442
<i>Currency Swaps</i>	442
<i>Currency Options Contracts</i>	442
<i>Use of Foreign Exchange Derivatives for Speculating</i>	444
International Arbitrage	446
<i>Locational Arbitrage</i>	446
<i>Covered Interest Arbitrage</i>	447
Explaining Price Movements of Foreign Exchange Derivatives	449
<i>Indicators of Foreign Exchange Derivative Prices</i>	449
Summary	450 ■
Questions and Applications	451 ■
Problems	452 ■
APPENDIX 16A: Impact of the Asian Crisis on Foreign Exchange Markets and Other Financial Markets	453
APPENDIX 16B: Currency Option Pricing	463
Integrative Problem: Choosing among Derivative Securities	467

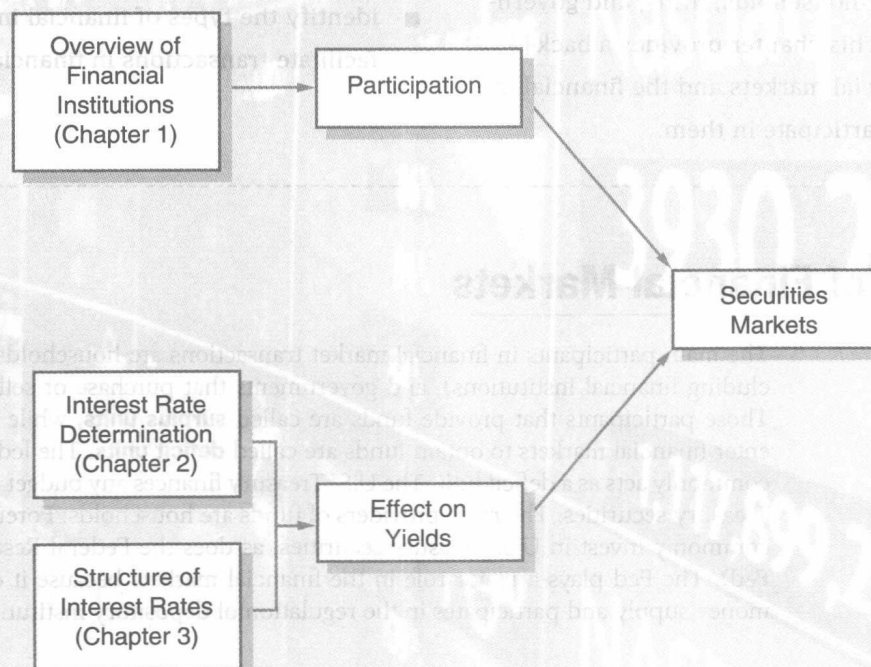
G-1 Glossary

PART I

Overview of the Financial Environment

Part I focuses on the flow of funds across financial markets, interest rates, and security prices. Chapter 1 introduces the key financial markets and the financial institutions that participate in those markets. Chapter 2 explains how various factors influence interest rates and how interest rate movements in turn affect

the values of securities purchased by financial institutions. Chapter 3 identifies factors other than interest rates that influence security prices. Participants in financial markets use this information to value securities and make investment decisions within financial markets.





1 Role of Financial Markets and Institutions

A **financial market** is a market in which financial assets (securities) such as stocks and bonds can be purchased or sold. One party transfers funds in financial markets by purchasing financial assets previously held by another party. Financial markets facilitate the flow of funds and thereby facilitate financing and investing by households, firms, and government agencies. This chapter provides a background on financial markets and the financial institutions that participate in them.

The specific objectives of this chapter are to:

- describe the types of financial markets that accommodate various transactions,
- describe the role of financial institutions within financial markets,
- introduce the concept of security valuation within financial markets, and
- identify the types of financial institutions that facilitate transactions in financial markets.

Overview of Financial Markets

The main participants in financial market transactions are households, businesses (including financial institutions), and governments that purchase or sell financial assets. Those participants that provide funds are called **surplus units**, while participants that enter financial markets to obtain funds are called **deficit units**. The federal government commonly acts as a deficit unit. The U.S. Treasury finances any budget deficit by issuing Treasury securities. The main providers of funds are households. Foreign investors also commonly invest in U.S. Treasury securities, as does the Federal Reserve System (the Fed). The Fed plays a major role in the financial markets because it controls the U.S. money supply and participates in the regulation of depository institutions.

Money versus Capital Markets

Financial markets facilitate the flow of funds from surplus units to deficit units. Those financial markets that facilitate the flow of short-term funds (with maturities of less than one year) are known as **money markets**, while those that facilitate the flow of long-term funds are known as **capital markets**.

Primary versus Secondary Markets

[http://](http://www.nyse.com)

www.nyse.com New York Stock Exchange market summary, quotes, financial statistics, and more.

www.nasdaq.com Comprehensive historic and current data on all Nasdaq transactions.

Whether referring to money market securities or capital market securities, it is necessary to distinguish between transactions in the primary market and transactions in the secondary market. **Primary markets** facilitate the issuance of new securities, while **secondary markets** facilitate the trading of existing securities. Primary market transactions provide funds to the initial issuer of securities; secondary market transactions do not. The issuance of new corporate stock or new Treasury securities is a primary market transaction, while the sale of existing corporate stock or Treasury security holdings by any business or individual is a secondary market transaction.

An important characteristic of securities that are traded in secondary markets is **liquidity**, which is the degree to which securities can easily be liquidated (sold) without a loss of value. Some securities have an active secondary market, meaning that there are many willing buyers and sellers of the security at a given point in time. Investors prefer that a security is liquid, so that they can easily sell it whenever they want (without a loss in value). If a security is illiquid, investors may not be able to find a willing buyer for that security in the secondary market and may have to sell it at a large discount just to attract a buyer.

Organized versus Over-the-Counter Markets

Some secondary stock market transactions occur at an **organized exchange**, or a visible marketplace for secondary market transactions. The New York Stock Exchange and American Stock Exchange are organized exchanges for secondary stock market transactions. Other financial market transactions occur in the **over-the-counter (OTC) market**, which is a telecommunications network.

Securities Traded in Financial Markets

Securities can be classified as money market securities, capital market securities, or derivative securities. Each type of security tends to have specific return and risk characteristics. The term **risk** is used here to represent the uncertainty surrounding the expected return.

Money Market Securities

Money market securities are debt securities that have a maturity of one year or less. They generally have a relatively high degree of liquidity. Money market securities tend to have

a low expected return but also a low degree of risk. Various types of money market securities are listed in the top section of Exhibit 1.1, and capital market securities are listed in the bottom section.

Capital Market Securities

Securities with a maturity of more than one year are called **capital market securities**. Three common types of capital market securities are bonds, mortgages, and stocks.

Bonds and Mortgages. Bonds are long-term debt obligations issued by corporations and government agencies to support their operations. Mortgages are long-term debt obligations created to finance the purchase of real estate.

Debt securities provide a return to investors in the form of interest income (coupon payments) every six months. Since bonds and mortgages represent debt, they specify the amount and timing of interest and principal payments to investors who purchase them. At maturity, investors holding the debt securities are paid the principal. Debt securities can be sold in the secondary market if investors do not want to hold them until matu-

Exhibit 1.1 Summary of Popular Securities

Money Market Securities	Issued by	Common Investors	Common Maturities	Secondary Market Activity
Treasury bills	Federal government	Households, firms, and financial institutions	13 weeks, 26 weeks, 1 year	High
Retail certificates of deposit (CDs)	Banks and savings institutions	Households	7 days to 5 years or longer	Nonexistent
Negotiable certificates of deposit (NCDs)	Large banks and savings institutions	Firms	2 weeks to 1 year	Moderate
Commercial paper	Bank holding companies, finance companies, and other companies	Firms	1 day to 270 days	Low
Eurodollar deposits	Banks located outside the U.S.	Firms and governments	1 day to 1 year	Nonexistent
Banker's acceptances	Banks (exporting firms can sell the acceptances at a discount to obtain funds)	Firms	30 days to 270 days	High
Federal funds	Depository institutions	Depository institutions	1 day to 7 days	Nonexistent
Repurchase agreements	Firms and financial institutions	Firms and financial institutions	1 day to 15 days	Nonexistent
Capital Market Securities				
Treasury notes and bonds	Federal government	Households, firms, and financial institutions	3 to 30 years	High
Municipal bonds	State and local governments	Households and firms	10 to 30 years	Moderate
Corporate bonds	Firms	Households and firms	10 to 30 years	Moderate
Mortgages	Individuals and firms	Financial institutions	15 to 30 years	Moderate
Equity securities	Firms	Households and firms	No maturity	High (for stocks of large firms)

ity. Since the prices of debt securities can change over time, investors may be able to enhance their return by selling the securities for a higher price than they paid for them.

Some debt securities are risky because the issuer could default on its obligation to repay the debt. Under these circumstances, the debt security will not provide the entire amount of coupon payments and principal that was promised. Long-term debt securities tend to have a higher expected return than money market securities, but they have more risk as well.

Stocks. Stocks (also referred to as equity securities) are certificates representing partial ownership in the corporations that issued them. They are classified as capital market securities because they have no maturity and therefore serve as a long-term source of funds. Some corporations provide income to their stockholders by distributing a portion of their quarterly earnings in the form of dividends. Other corporations retain and reinvest all of their earnings, which allows them more potential for growth.

Equity securities differ from debt securities in that they represent partial ownership. As corporations grow and increase in value, the value of the stock increases, and investors can earn a capital gain from selling the stock for a higher price than they paid for it. Thus, investors can earn a return from stocks in the form of periodic dividends (if there are any) and a capital gain when they sell the stock. However, investors can experience a negative return if the corporation performs poorly and its stock price declines over time as a result. Equity securities have a higher expected return than most long-term debt securities, but they also exhibit a higher degree of risk.

Derivative Securities

In addition to money market and capital market securities, derivative securities are also traded in financial markets. **Derivative securities** are financial contracts whose values are derived from the values of underlying assets (such as debt securities or equity securities). Many derivative securities enable investors to engage in speculation and hedging.

Speculation. Derivative securities allow an investor to speculate on movements in the underlying assets without having to purchase those assets. Some derivative securities allow investors to benefit from an increase in the value of debt securities, while others allow investors to benefit from a decrease in the value of debt securities. Similarly, investors can use different types of derivative securities to benefit from an increase or a decline in the value of equity securities. Since derivative securities allow investors to speculate on movements in underlying assets without purchasing the assets, they enable investors to take a large investment position without a large initial outlay and therefore to have a high degree of financial leverage. As a result of this financial leverage, the returns from investing in derivative securities are more pronounced than from simply investing in the underlying assets themselves. Investors who speculate in derivative contracts can achieve higher returns than if they had speculated in the underlying assets, but they are also exposed to higher risk.

Hedging. Derivative securities can be used in a manner to generate gains if the value of the underlying assets declines. Consequently, financial institutions and other firms can use derivative securities as a means of hedging their existing investments in securities. If a firm maintains investments in bonds, for example, it can take specific positions in derivative securities that will generate gains if bond values decline. In this way, de-

<http://>

www.cboe.com

Information about
derivative securities.