



**REAL ESTATE FINANCE AND INVESTMENTS**

**WILLIAM B. BRUEGGEMAN**

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# Real Estate Finance and Investments

Twelfth Edition

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# Preface

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Interest in real estate has increased dramatically in recent years as the various ways of investing in and financing real estate continue to evolve. There are a myriad of alternative ways of making equity investments in real estate, ranging from purchasing properties like an apartment building, either as an individual or in a partnership, to investing in publicly traded companies called real estate investment trusts (REITs) that develop and own hundreds of apartment properties throughout the nation. Investments can also be made in mortgages used to finance real estate, ranging from making a mortgage loan (as a lender) or purchasing a publicly traded mortgage-backed security (residential or commercial). This book prepares readers to understand the risks and rewards associated with these various ways of investing and financing both residential and commercial real estate. These concepts and techniques are important for all careers related to real estate, such as investing, financing, appraising, consulting, managing real estate portfolios, leasing, managing property, analyzing site location, and managing corporate real estate. It is also applicable for those who just want to better understand real estate for their own personal investment and financing decisions.

## Excel Spreadsheets and ARGUS Software—NEW Student CD

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The book is rigorous yet practical and blends theory with application to real world problems illustrated through the use of a financial calculator, Excel spreadsheets, and software designed to analyze real estate income property. A CD that accompanies this edition of the book contains Excel spreadsheets that are provided to assist students in their understanding of many of the chapter examples and exhibits displayed throughout the text. Students can modify these spreadsheets to solve many of the end-of-chapter problems. In this way, students do not have to design spreadsheets to solve each problem set.

A trial version of the ARGUS software is also included on the CD. ARGUS is a Windows-based program that is widely used throughout the real estate investment industry to solve complex lease-by-lease investment and valuation problems. Examples containing leases are included in several problems in various chapters. Data files have been replicated so that these examples may be modified to accommodate homework problems at the end of chapters.

## Internet Tools and Assets

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Making informed real estate investment and financing decisions depends on being able to get useful information on national and local market trends, interest rates, available investment and financing alternatives, and opinions from experts about the outlook for various real estate sectors. The evolution of the Internet has provided a rich source of information to real estate investors and lenders, and knowing how to find information on the web is an important part of the “due diligence” that should be done before making a real estate investment, investing in a real estate-related company, or even just purchasing and financing a home.

New to this edition are **Web App** boxes that provide examples of finding relevant information on the Internet related to the chapter material. The Web App boxes provide practical examples of the types of data and other resources that are available on the Internet used by real estate lenders and investors. This also provides a way for readers to stay current on many of the topics discussed in the book.

Also new to the twelfth edition are **URLs** that students can use to research various topics in the real estate discipline. Look for these at the end of each chapter.

McGraw-Hill/Irwin has a new Internet resource called **Real Estate Online**. Real Estate Online lets you stay current and expand your knowledge about the real estate field through online discussion questions, articles, and exercises. Access to this and other student/instructor's resources, including a **new online quiz feature**, is available at [www.mhhe.com/bf12e](http://www.mhhe.com/bf12e).

## Plan of the Twelfth Edition

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This edition is organized in five major sections:

Part I introduces real estate investment and financing by reviewing important legal concepts related to ownership rights and real estate notes and mortgages. The importance of the interest factor in financing is also reviewed. Many students will have been exposed to this material in other courses; however, this chapter provides a framework for many of the applications that are specifically applied to real estate throughout the book.

Part II of this edition focuses on the financing of residential properties. It includes the various types of mortgages and ways to analyze financing alternatives. A new chapter, Chapter 7, has been added in this edition that evaluates single family housing as an investment. This chapter discusses factors that affect the demand for housing and discusses how to analyze whether a residence should be rented or owned based on market rents, tax considerations, expected price appreciation, and other factors.

Part III turns to investment analysis and financing of income properties, including the importance of leases, valuation of income properties, various financing alternatives, risk analysis, and disposition decisions. The role of real estate for corporations not in the real estate business who must make lease versus own decisions is also discussed. Excel spreadsheets, as well as the ARGUS software, are integrated throughout this section of the text.

Part IV discusses the analysis of construction and land development projects. These projects differ from the analysis of existing projects in previous chapters due to the additional risk introduced by the development process. These risks and expected returns are discussed for both lenders and investors. This includes understanding how construction and land development loans are structured, including how the developer receives advances, or “draws,” during development and how they are repaid.

Part V discusses alternative real estate investment vehicles such as partnerships, joint ventures, residential and commercial mortgage backed securities (CMBS), and real estate investment trusts (REITs). This allows readers to see all the different ways that investments can be made in real estate aside from simply buying a property. Readers will also see how “derivatives” can be created using real estate (or mortgages on real estate) as collateral. The last chapter considers the importance of real estate in a diversified investment portfolio that includes stocks and bonds. This provides readers with an understanding of how portfolio managers and institutional investors view real estate.

## Supplements

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Several ancillary materials are available for instructor use. These include:

- Instructor's Manual—developed by Jeffrey Fisher and William Brueggeman.
- Test Bank—developed by Jeffrey Fisher and William Brueggeman.
- PowerPoint slides—developed by Tom Epperson, Auburn University.

## Acknowledgments

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We also continue to be indebted to people who have contributed to previous editions, especially the late Henry E. Hoagland, who wrote the first edition of this book and Leo D. Stone, who participated in several editions. Finally, we thank all of the adopters of the previous editions of the book who, based on their feedback, have made us feel that we have helped them prepare students for a career in real estate.

*William B. Brueggeman*

*Jeffrey D. Fisher*

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# Brief Contents

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## **PART ONE**

### **Introduction**

- 1** An Introduction to Real Estate Investment: Legal Concepts 1
- 2** Financing: Notes and Mortgages 13
- 3** The Interest Factor in Financing 38

## **PART TWO**

### **Financing Residential Properties**

- 4** Fixed Rate Mortgage Loans 70
- 5** Adjustable Rate and Variable Payment Mortgages 110
- 6** Residential Financial Analysis 140
- 7** Single Family Housing: Pricing, Investment, and Tax Considerations 172
- 8** Underwriting and Financing Residential Properties 199

## **PART THREE**

### **Financing Income Properties (Debt and Equity)**

- 9** Introduction to Income-Producing Properties: Leases and the Market for Space 228
- 10** Valuation of Income Properties: Appraisal and the Market for Capital 255
- 11** Investment Analysis and Taxation of Income Properties 292

- 12** Financial Leverage and Financing Alternatives 320

- 13** Risk Analysis 355

- 14** Disposition and Renovation of Income Properties 386

- 15** Financing Corporate Real Estate 406

## **PART FOUR**

### **Financing Proposed Projects**

- 16** Financing Project Development 429
- 17** Financing Land Development Projects 466

## **PART FIVE**

### **Alternative Real Estate Investment Vehicles**

- 18** Partnerships, Joint Ventures, and Syndications 495
- 19** The Secondary Mortgage Market: Pass-Through Securities 516
- 20** The Secondary Mortgage Market: CMOs and Derivative Securities 543
- 21** Real Estate Investment Trusts (REITs) 580
- 22** Real Estate Investment Performance and Portfolio Considerations 603

## **INDEX 627**

# Table of Contents

---

## PART ONE

### INTRODUCTION

#### Chapter 1

#### An Introduction to Real Estate Investments: Legal Concepts 1

- Property Rights and Estates 2
  - Definition of Estate* 4
  - Classification of Estates* 4
  - Examples of Freehold Estates* 4
  - Estates Not Yet in Possession (Future Estates)* 5
  - Leasehold Estates* 5
- Interests and Easements 6
- Assurance of Title 7
  - The Meaning of Title* 7
  - Deeds* 7
- Methods of Title Assurance 8
  - Abstract and Opinion Method* 9
  - The Title Insurance Method* 9
- Recording Acts 10
- Limitations on Property Rights 11

#### Chapter 2

#### Financing: Notes and Mortgages 13

- Notes 13
- The Mortgage Instrument 14
  - Definition of a Mortgage* 15
  - Relationship of Note to a Mortgage* 15
  - Interests That Can Be Mortgaged* 15
  - Minimum Mortgage Requirements* 15
  - Important Mortgage Clauses* 17
- Assumption of Mortgage 19
- Acquiring Title “Subject to” a Mortgage 19
  - Property Covered by a Mortgage* 19
  - Junior Mortgages* 20
  - Recording of Mortgages* 20
- Other Financing Sources 21
  - Seller Financing* 21
- Land Contracts 21
- Default 22
  - What Constitutes Default* 22
- Alternatives to Foreclosure: Workouts 23
  - Restructuring the Mortgage Loan* 23
  - Transfer of Mortgage to a New Owner* 25
  - Voluntary Conveyance* 26

- Friendly Foreclosure* 26
- Prepackaged Bankruptcy* 26
- Foreclosure 27
  - Judicial Foreclosure* 27
  - Redemption* 27
  - Sales of Property* 28
  - Effect of Foreclosure on Junior Lienors* 31
  - Deficiency Judgment* 31
  - Taxes in Default* 32
- Bankruptcy 33
  - Chapter 7 Liquidation* 33
  - Chapter 11* 33
  - Chapter 13* 33

#### Chapter 3

#### The Interest Factor in Financing 38

- Compound Interest 38
- Compound or Future Value 39
  - Use of Compound Interest Tables* 42
- Use of Financial Calculators 45
- Present Value 47
  - A Graphic Illustration of Present Value* 47
  - Using Calculators for Finding Present Values* 49
- Compound or Future Value of an Annuity 51
  - Use of Compound Interest Factors for Annuities* 53
- Present Value of an Annuity 55
  - Use of the Present Value of an Annuity Factors* 56
- Accumulation of a Future Sum 59
  - Investments with Single Receipts* 60
- Determining Yields or Internal Rates of Return on Investments 60
  - Yields on Investment Annuities* 63
  - Effective Annual Yields: Extensions* 65
  - Solving for Annual Yields with Partial Periods: An Extension* 66

## PART TWO

### FINANCING RESIDENTIAL PROPERTIES

#### Chapter 4

#### Fixed Rate Mortgage Loans 70

- Determinants of Mortgage Interest Rates: A Brief Overview 70

<i>The Real Rate of Interest: Underlying Considerations</i>	71
<i>Interest Rates and Inflation Expectations</i>	71
<i>Interest Rates and Risk</i>	72
<i>A Summary of Factors Important to Mortgage Pricing</i>	73
<b>Development of Mortgage Payment Patterns</b>	74
<i>Early Mortgage Lending Patterns</i>	74
<i>The Constant Amortization Mortgage Loan (CAM)</i>	75
<i>Fully Amortizing Constant Payment Mortgage Loans (CPM)</i>	76
<b>Constant Payment and Constant Amortization Loans: A Comparison</b>	79
<i>Determining Loan Balances</i>	82
<i>Loan Closing Costs and Effective Borrowing Costs: Fully Amortized Loans</i>	83
<i>Truth-in-Lending Requirements and the Annual Percentage Rate</i>	86
<i>Loan Fees and Early Repayment: Fully Amortized Loans</i>	86
<i>Charging Fees to Achieve Yields, or Pricing CPMs</i>	91
<b>Other Loan Patterns</b>	91
<i>Partially Amortizing Constant Payment Loans</i>	92
<i>Zero Amortization or "Interest Only" Loans</i>	92
<i>Increasing Loan Balances, or Negative Amortization</i>	93
<i>Amortization Schedules and Callable Loans</i>	93
<b>Inflation and Mortgage Pricing Problems</b>	94
<i>Effects on Lenders and Borrowers</i>	94
<i>The Graduated Payment Mortgage (GPM)</i>	97
<i>Reverse Annuity Mortgages (RAMs)</i>	102
<b>Appendix</b>	
<b>Graduated Payment Mortgages—Extensions</b>	107
 <b>Chapter 5</b>	
<b>Adjustable Rate and Variable Payment Mortgages</b>	110
ARMs and Lender Considerations	111
The Price Level Adjusted Mortgage (PLAM)	114
<i>PLAM: Payment Mechanics</i>	115
<i>ARMs: An Overview</i>	117
<i>ARMs Illustrated</i>	118
<i>Problems Lenders and Borrowers Face with ARMs</i>	120
<i>Risk Premiums, Interest Rate Risk, and Default Risk on ARMs</i>	121
<i>Expected Yield Relationships and Interest Rate Risk</i>	123
<i>ARM Payment Mechanics</i>	126
<i>Expected Yields on ARMs: A Comparison</i>	132
Shared Appreciation Mortgages	134

<b>Chapter 6</b>	
<b>Residential Financial Analysis</b>	140
Incremental Borrowing Cost	140
<i>Early Repayment</i>	142
<i>Origination Fees</i>	143
<i>Incremental Borrowing Cost versus a Second Mortgage</i>	144
<i>Relationship between the Incremental Cost and the Loan-to-Value Ratio</i>	144
<i>Differences in Maturities</i>	147
Loan Refinancing	148
<i>Early Repayment: Loan Refinancing</i>	149
<i>Effective Cost of Refinancing</i>	150
<i>Borrowing the Refinancing Costs</i>	151
Early Loan Repayment: Lender Inducements	152
Market Value of a Loan	153
Effective Cost of Two or More Loans	155
<i>Second Mortgages and Shorter Maturities</i>	156
Effect of Below Market Financing on House Prices	158
<i>Assuming a Lower Loan Balance</i>	159
Cash Equivalency	159
Cash Equivalency: Smaller Loan Balance	160
Cash Equivalency: Concluding Comments	161
Wraparound Loans	162
Buydown Loans	164
<b>Appendix</b>	
<b>After-Tax Effective Interest Rate</b>	168
 <b>Chapter 7</b>	
<b>Single Family Housing: Pricing, Investment, and Tax Considerations</b>	172
Overview	172
<i>Growth in House Prices</i>	172
<i>Demographics</i>	174
<i>Income and Employment</i>	177
<i>Renting versus Owning</i>	177
Supply Overview	186
<i>The Influences of Neighborhoods/Municipalities</i>	186
<i>Capitalization Effects: Price Premiums</i>	187
<i>Pricing Property: Appraisals</i>	188
 <b>Chapter 8</b>	
<b>Underwriting and Financing Residential Properties</b>	199
Underwriting Default Risk	199
Classification of Mortgage Loans	200
<i>Conventional Mortgage Loans</i>	200

<i>Insured Conventional Mortgage Loans</i>	201
<i>FHA Insured Mortgage Loans</i>	202
<i>VA Guaranteed Mortgage Loans</i>	202
<b>The Underwriting Process</b>	203
<i>Borrower Income</i>	204
<i>Verification of Borrower Assets</i>	205
<i>Assessment of Credit History</i>	206
<i>Estimated Housing Expense</i>	206
<i>Other Obligations</i>	206
<i>Compensating Factors</i>	206
<b>The Underwriting Process Illustrated</b>	207
<i>Underwriting Standards—Conventional and Insured Conventional Mortgages</i>	207
<i>Underwriting Standards—FHA Insured Mortgages</i>	209
<i>Underwriting Standards—VA Guaranteed Mortgages</i>	212
<i>Underwriting and Loan Amounts—A Summary</i>	212
<b>The Closing Process</b>	214
<i>Fees and Expenses</i>	214
<i>Prorations, Escrow Costs, and Payments to Third Parties</i>	215
<i>Statutory Costs</i>	217
<i>Requirements under the Real Estate Settlement and Procedures Act (RESPA)</i>	217
<b>Settlement Costs Illustrated</b>	219
<i>Federal Truth-in-Lending (FTL) Requirements</i>	219
<i>Truth-in-Lending Sample Disclosure</i>	221
<i>Establishing the APR under Federal Truth-in-Lending Requirements</i>	221
<i>ARMs and Truth-in-Lending Disclosure</i>	223

## **PART THREE**

### **FINANCING INCOME PROPERTIES (DEBT AND EQUITY)**

#### **Chapter 9**

#### **Introduction to Income-Producing Properties: Leases and the Market for Space 228**

Property Types	228
Regional Economic Influences on Property Values	230
<i>Analogy with the Law of Comparative Advantage</i>	230
<i>Economic Base Analysis—Location Quotients</i>	232
Supply and Demand Analysis	234
<i>Local Market Studies of Supply and Demand</i>	237
<i>Location and User-Tenants</i>	238
The Business of Real Estate	240
The “Market” for Income-Producing Real Estate	241

Leases	242
<i>General Lease Terms for Specific Property Types</i>	242
<i>Financial Contents of Leases</i>	243
<i>Effective Rent</i>	247
Income Potential—Real Estate Assets	251
<i>Vacancy</i>	251

#### **Chapter 10**

#### **Valuation of Income Properties: Appraisal and the Market for Capital 255**

Introduction	255
Valuation Fundamentals	255
Appraisal Process and Approaches to Valuation	256
Sales Comparison Approach	257
Income Approach	259
<i>Capitalization Rate</i>	261
<i>Capitalization Rate—A Note of Caution</i>	263
<i>Discounted Present Value Techniques</i>	263
<i>Selection of a Discount Rate (r)</i>	264
<i>Using Approximations to Estimate Reversion Values</i>	266
Land Values: Highest and Best Use Analysis	269
<i>Volatility in Land Prices</i>	270
<i>“Highest and Best Use” Analysis</i>	270
Mortgage-Equity Capitalization	271
Reconciliation: Sales Comparison and Income Capitalization Approaches	273
Exploring the Relationships between Changing Market Conditions, Cap Rates, and Property Values	273
A Closing Note on Cap Rates and Market Conditions	277
A Word of Caution—Simultaneous Effects of Real Estate Market Forces and Interest Rates on Property Values	278
Valuation of a Leased Fee Estate	278
Cost Approach	279
Valuation Case Study—Oakwood Apartments	282
<i>ARGUS Solution</i>	286

#### **Chapter 11**

#### **Investment Analysis and Taxation of Income Properties 292**

Motivation for Investing	292
Real Estate Market Characteristics and Investment Strategies	293
<i>“The Real Estate Cycle”</i>	293
<i>Investment Strategies</i>	295
Marketing Investments: Projecting Cash Flows	295
Office Building Example	295
<i>Base Rent</i>	298
<i>CPI Adjustment</i>	298

<i>Expense Stops</i>	299
<i>Net Operating Income</i>	301
<i>Expected Outlays for Replacements and Capital Improvements</i>	302
<i>Estimated Sale Price</i>	302
Introduction to Investment Analysis	303
<i>Internal Rate of Return (IRR)</i>	303
<i>Present Value</i>	304
<i>ARGUS Solution</i>	304
Introduction to Debt Financing	304
<i>Measures of Investment Performance Using Ratios</i>	306
<i>Before-Tax Cash Flow from Sale</i>	306
<i>Summary of Investment Analysis Calculations</i>	308
Taxation of Income-Producing Real Estate	308
Taxable Income from Operation of Real Estate	309
<i>Depreciation Allowances</i>	309
<i>Loan Points</i>	310
<i>Tax Liability and After-Tax Cash Flow</i>	311
Taxable Income from Disposal of Depreciable Real Property	311
After-Tax Investment Analysis	312
<i>After-Tax Cash Flow from Operations</i>	312
<i>After-Tax Cash Flow from Sale</i>	313
<i>After-Tax IRR</i>	314
<i>Effective Tax Rate</i>	314
A Note about Passive Losses	315
<i>Special Expectations to PAL Rules</i>	316

## Chapter 12

### Financial Leverage and Financing Alternatives 320

Introduction to Financial Leverage	320
<i>Conditions for Positive Leverage—Before Tax</i>	321
<i>Conditions for Positive Leverage—After Tax</i>	325
Break-Even Interest Rate	326
Risk and Leverage	328
Underwriting Loans on Income Properties	330
<i>Market Study and Appraisal</i>	330
<i>Borrower Financials</i>	330
<i>The Loan-to-Value Ratio</i>	331
<i>The Debt Coverage Ratio</i>	331
Other Loan Terms and Mortgage Covenants	332
Alternatives to Fixed Rate Loan Structures	334
Participation Loans	335
<i>Lender Motivations</i>	335
<i>Investor Motivations</i>	336
<i>Participation Example</i>	336
Sale-Leaseback of the Land	340
<i>Effective Cost of the Sale-Leaseback</i>	342
Interest-Only Loans	342

Accrual Loans	342
<i>Structuring the Payment for a Target Debt Coverage Ratio</i>	344
Convertible Mortgages	346
<i>Lender's Yield on Convertible Mortgage</i>	346
Comparison of Financing Alternatives	348
Monument Office Example—ARGUS Solution with a Loan	350

## Chapter 13

### Risk Analysis 355

Introduction	355
<i>Comparing Investment Returns</i>	355
<i>Types of Risk</i>	356
<i>Due Diligence in Real Estate Investment Risk Analysis</i>	358
<i>Sensitivity Analysis</i>	358
<i>Partitioning the IRR</i>	362
<i>Variations in Returns and Risk</i>	363
Retail Case Study—Westgate Shopping Center	367
<i>Westgate Shopping Center Scenario Analysis</i>	368
<i>Westgate Shopping Center—ARGUS Analysis</i>	370
Lease Rollover Risk	370
Market Leasing Assumptions with Renewal Probabilities	372
<i>Market Rent</i>	373
<i>Months Vacant</i>	373
<i>Leasing Commissions</i>	373
<i>Tenant Improvements</i>	373
Industrial Case Study—Worthington Distribution Center	373
<i>Solution with ARGUS</i>	376
Risk and Leverage	376
A “Real Options” Approach to Investment Decisions	379
<i>Traditional Approach to Land Valuation</i>	380
<i>Real Option Approach to Land Valuation</i>	381
<i>Real Options Extensions and Strategy</i>	382

## Chapter 14

### Disposition and Renovation of Income Properties 386

Disposition Decisions	386
<i>A Decision Rule for Property Disposal</i>	387
IRR for Holding versus Sale of Property	388
Returns to a New Investor	391
<i>Marginal Rate of Return</i>	391
Refinancing as an Alternative to Disposition	395
<i>Incremental Cost of Refinancing</i>	395
<i>Refinancing at a Lower Interest Rate</i>	396

Renovation as an Alternative to Disposition	397
Renovation and Refinancing	399
Rehabilitation Investment Tax Credits	400
<i>Low-Income Housing</i>	402

## Chapter 15

### Financing Corporate Real Estate 406

Lease-versus-Own Analysis	407
<i>Leasing versus Owning—An Example</i>	407
<i>Cash Flow from Leasing</i>	408
<i>Cash Flow from Owning</i>	408
<i>Cash Flow from Owning versus Leasing</i>	410
<i>Return from Owning versus Leasing</i>	410
<i>Importance of the Residual Value of Real Estate</i>	411
<i>The Investor's Perspective</i>	413
<i>A Note on Project Financing</i>	414
<i>Factors Affecting Loan-versus-Lease Decisions</i>	415
The Role of Real Estate in Corporate	
Restructuring	420
Sale-Leaseback	421
Refinancing	424
Investing in Real Estate for Diversification	424

## Appendix

Real Estate Asset Pricing and Capital Budgeting	
Analysis: A Synthesis	427

## PART FOUR

### FINANCING PROPOSED PROJECTS

## Chapter 16

### Financing Project Development 429

Introduction	429
Overview: The Planning and Permitting Process	429
The Development of Income-Producing Property	432
<i>Market Risks and Project Feasibility</i>	434
<i>Project Risks</i>	436
Project Development Financing—An Overview	436
Lender Requirements in Financing Project	
Development	438
<i>Loan Submission Information for Loan Requests—An Overview</i>	438
<i>Contingencies in Lending Commitments</i>	442
<i>The Construction or Interim Loan</i>	443
<i>Methods of Disbursement—Construction Lending</i>	444
<i>Interest Rates and Fees</i>	444
<i>Additional Information for Interim Loan Submission</i>	445
<i>Requirements to Close the Interim Loan</i>	445
<i>The Permanent Loan Closing</i>	446

### Project Development Illustrated 447

<i>Project Description and Project Costs</i>	447
<i>Market Data and Tenant Mix</i>	452
<i>Pro Forma Construction Costs and Cash Flow Projections</i>	453
Feasibility, Profitability, and Risk—Additional Issues	456
<i>Profitability before and after Taxes</i>	456
<i>Sensitivity Analysis, Risk, and Feasibility Analysis</i>	459

## Chapter 17

### Financing Land Development Projects 466

Characterization of the Land Development Business	466
The Land Development Process—An Overview	468
<i>Acquisition of Land—Use of the Option Contract</i>	468
<i>Financing and Development</i>	470
Lender Requirements in Financing Land Development	473
<i>Detailed Cost Breakdowns</i>	475
<i>General Contracts and Subcontracts</i>	475
Residential Land Development Illustrated	476
<i>Market Conditions and Site Plan</i>	476
<i>Estimating Development Cost and Interest Carry</i>	479
<i>Estimating Release Prices per Parcel Sold</i>	487
<i>Loan Request and Repayment Schedule</i>	487
Project Feasibility and Profitability	487
<i>Project IRR and Net Present Value</i>	490
<i>Entrepreneurial Profits</i>	491
<i>Sensitivity Analysis</i>	491

## PART FIVE

### ALTERNATIVE REAL ESTATE INVESTMENT VEHICLES

## Chapter 18

### Partnerships, Joint Ventures, and Syndications 495

Introduction: What Is a Syndicate?	495
Use of the Limited Partnership in Private and Public Syndicates	496
Private Syndication Problem Illustrated	496
<i>Financial Considerations—Partnership Agreement</i>	497
<i>Operating Projections</i>	498
<i>Statement of Before-Tax Cash Flow (BTCF)</i>	499
<i>Calculation of Net Income or Loss</i>	500
<i>Calculation of Capital Gain from Sale</i>	500

## Capital Accounts 500

- Distribution of Cash from Sale of Asset* 502
- Calculation of After-Tax Cash Flow and ATIRR on Equity* 502

## Partnership Allocations and Substantial Economic Effect 504

## Capital Accounts and Gain Charge-Backs 505

## Use of the Limited Partnership in Private and Public Syndicates 507

- Use of Corporate General Partners* 508

## Private versus Public Syndicates 508

- Accredited Investors—Regulation D* 509

## Regulation of Syndicates 510

- Investment Objectives and Policies* 510
- Promoters' and Managers' Compensation* 511
- Investor Suitability Standards* 511

## Federal and State Securities Authorities 512

## Joint Ventures 512

## Chapter 19

### The Secondary Mortgage Market: Pass-Through Securities 516

#### Introduction 516

#### Evolution of the Secondary Mortgage Market 516

- Early Buyers of Mortgage Loans* 517

#### A Secondary Market after 1954 517

- FNMA's Changing Role* 518

#### The Government National Mortgage Association 518

- Mortgage-Backed Securities and the GNMA Payment Guarantee* 519

#### The Federal Home Loan Mortgage Corporation 520

#### Operation of the Secondary Mortgage Market 520

- Direct Sale Programs* 520
- The Development of Mortgage-Related Security Pools* 521

#### Mortgage-Backed Bonds 522

- Pricing Mortgage-Backed Bonds* 523
- Subsequent Prices* 524

#### Mortgage Pass-Through Securities 526

- Important Characteristics of Mortgage Pools* 527
- Mortgage Pass-Through Securities: A General Approach to Pricing* 531
- Mortgage Pass-Through Payment Mechanics Illustrated* 533
- Prepayment Patterns and Security Prices* 534
- Prepayment Assumptions* 536

#### The Effects of Prepayment Illustrated 537

- Security Prices and Expected Yields* 539
- Market Interest Rates and Price Behavior on Mortgage Pass-Throughs* 539
- A Note on MBBs and MPTs* 540

## Chapter 20

### The Secondary Mortgage Market: CMOs and Derivative Securities 543

#### Introduction 543

#### Mortgage Pay-Through Bonds (MPTBs) 543

#### Collateralized Mortgage Obligations 544

- CMOs Illustrated* 545
- CMO Mechanics* 547
- CMOs: Pricing and Expected Maturities* 552
- CMO Price Behavior and Payment Rates* 555
- CMO Tranche Variations* 556

#### Derivatives Illustrated 558

- Yield Enhancement* 561
- IO and PO Strips* 561
- Convexity* 564

#### Residential Mortgage-Related Securities:

##### A Summary 564

#### Residential Mortgage-Related Securities: Some

##### Closing Observations 566

#### Commercial Mortgage-Backed Securities

##### (CMBSs) 566

- Rating Commercial Mortgage-Backed Securities* 570
- Mortgage-Related Securities and REMICs* 572
- REMICs: Other Considerations* 573

## Appendix

### Duration—An Additional Consideration in Yield Measurement 577

## Chapter 21

### Real Estate investment Trusts (REITs) 580

#### Introduction 580

- Legal Requirements* 580
- Tax Treatment* 583
- Violation Penalties and Status Termination* 583
- Taxable REIT Subsidiaries* 583

#### Types of Trusts 583

- Equity Trusts* 584
- The Investment Appeal of Equity Trusts* 585
- Private REITs* 586
- Importance of FFO (Funds from Operations)* 586
- REIT Expansion and Growth* 588

#### Important Issues in Accounting and Financial

##### Disclosure: Equity REITs 591

- Tenant Improvements and Free Rents: Effects on FFO* 591
- Leasing Commissions and Related Costs* 592
- Use of Straight-Line Rents* 592
- FFO and Income from Managing Other Properties* 593
- Types of Mortgage Debt and Other Obligations* 593
- Existence of Ground Leases* 593

<i>Lease Renewal Options and REIT Rent Growth</i>	594
<i>Occupancy Numbers: Leased Space or Occupied Space?</i>	594
<i>Retail REITs and Sales per Square Foot</i>	595
<i>Additional Costs of Being a Public Company</i>	595
The Investment Appeal of Mortgage REITs	595
<i>Financial Analysis of an Equity REIT Illustrated</i>	597

## Chapter 22

### Real Estate Investment Performance and Portfolio Considerations 603

Introduction	603
The Nature of Real Estate Investment Data	603
Sources of Data Used for Real Estate Performance Measurement	604
<i>REIT Data: Security Prices</i>	604
<i>Hybrid and Mortgage REITs</i>	604
<i>NCREIF Property Index: Property Values</i>	606

<i>Data Sources for Other Investments</i>	606
Cumulative Investment Return Patterns	606
Computing Holding Period Returns	607
<i>Computing Investment Returns</i>	609
Risk, Return, and Performance Measurement	609
<i>Risk-Adjusted Returns: Basic Elements</i>	610
Elements of Portfolio Theory	611
<i>Calculating Portfolio Returns</i>	613
<i>Portfolio Risk</i>	613
<i>Portfolio Weighting: Trading Off Risk and Return</i>	616
Real Estate Returns, Other Investments, and the Potential for Portfolio Diversification	615
<i>Portfolio Diversification: EREITs and Other Investments</i>	618
<i>Public versus Private Real Estate Investments</i>	620
<i>Real Estate Performance and Inflation</i>	621

## INDEX 627

# Chapter 1

## An Introduction to Real Estate Investment: Legal Concepts

This is not a book about real estate law; however, a considerable amount of legal terminology is used in the real estate business. It is very important to understand both the physical nature and property rights being acquired when making real estate investments. In this chapter, we survey many important terms pertaining to real estate. Additional legal terms and concepts will appear in later chapters of this book on a “need to know” basis.

Many of the legal terms currently used in the real estate business have evolved from English common law, which serves as the basis for much of the property law currently used in the United States. For example, the term *real* in real estate comes from the term *realty*, which has, for centuries, meant land and all things permanently attached (the latter would include immovable things such as buildings and other structures). All other items not considered realty have been designated as *personalty*, which includes all movable things (e.g., automobiles, shares of stock, bank accounts, patents). The term *estate* has evolved to mean “all that a person owns,” including both realty and personalty. Hence, the portion of a person’s estate that consists of realty has come to be known as *real estate*. However, in current business practice, although the term realty is sometimes used, we generally use the term *real estate* to mean land and all things permanently attached.

Understanding the distinction between realty and personalty is important because our legal system has evolved in a way that treats the two concepts very differently. For example, long ago in England, disputes over real estate usually involved issues such as rightful ownership, possession land boundaries, and so forth. When such disputes were brought before the court, much of the testimony was based on oral agreements, promises, and the like, allegedly made between the opposing parties, and these disputes were difficult to resolve. Decisions that had to be rendered were extremely important (recall that England’s economy was very heavily dependent on agriculture at that time) and affected people’s livelihood. Court decisions may have required one of the parties to vacate the land plus turn over any permanent improvements that had been made (houses, barns, etc.) to other parties. As the number of disputes increased, a pragmatic solution evolved requiring that all transactions involving real estate be evidence by a *written, signed contract* in order to be enforceable.<sup>1</sup>

<sup>1</sup> This requirement was included as part of the *Statute of Frauds and Perjuries*, which was passed in England in 1677 with the intent of reducing the number of disputes and questionable transactions brought before the court.

Parallel developments included (1) a system whereby land locations and boundaries could be more accurately surveyed and described in contracts and (2) an elaborate system of public record keeping whereby ownership of all realty within a political jurisdiction could be catalogued. Any transactions involving realty could then be added to this record, thereby creating a historical record of all changes in ownership and providing notice of such changes to the general public and especially to any parties contemplating purchasing or lending money on real estate. Similar practices continue today in the United States as we require written contracts, requirements, survey methods, and public record systems detailing the ownership of real estate within all counties in every state. We should note that many transactions involving personalty are not subject to the same contractual requirements as real estate and that oral contracts may be enforceable.

When investing in real estate, in addition to acquiring the physical assets of land and all things permanently attached, investors also acquire certain *rights*. Examples of these rights include the right to control, occupy, develop, improve, exploit, pledge, lease and sell real estate. These have come to be known as *property rights*. Hence, the terms real property and real property rights have evolved.<sup>2</sup> As a practical matter, in business discussions, the terms real estate and real property are sometimes used interchangeably. However, as we will see, many of the property rights acquired when investing in real estate are independent and can be separated. For example, these may be leased or pledged to others in exchange for rent or other consideration. This may be done without giving up ownership of the real estate. Indeed, understanding the nature of property rights and how they can be bundled and creatively used to enhance value is one goal of this textbook. The reader should refer to exhibit 1–1 for an outline of these concepts.

## Property Rights and Estates

---

As pointed out above, the term **real estate** is used to refer to things that are not movable such as *land* and *improvements* permanently attached to the land, and **ownership rights** associated with the real estate are referred to as **real property**. Real property has also been contrasted with **personal property**.<sup>3</sup>

It is important to distinguish between physical real estate assets and ownership rights in real property because many parties can have different ownership rights in a given parcel of real estate. Our legal system offers ways for the person financing or investing in real estate to be creative and to apportion these various interests among parties.

We generally refer to **property rights** as the right of a person to the possession, use, enjoyment, and disposal of his or her property. With respect to its application to real estate, *interest* is a broad legal term used to denote a property right. The holder of an interest in real estate enjoys some right, or degree of control or use, and, in turn, may receive payment for the sale of such an interest. This interest, to the extent that its value can be determined, may also be bought, sold, or used as collateral for a loan.

The value of a particular parcel of real estate can be viewed as the total price individuals are willing to pay for the flow of benefits associated with all of these rights. An individual does not have to be an owner per se to have rights to some of the benefits of real

<sup>2</sup> For nonrealty, the term *personal property* has evolved, and personal property rights would include the bundle of rights which are similar to those listed above but pertaining to personalty.

<sup>3</sup> We should also point out that there are some items known as *fixtures*. These are items that were once personal property but have become real property because they have either been attached to the land or building in a somewhat permanent manner or are intended to be used with the land and building on a permanent basis. Examples include built-in dishwashers, furnaces, and garage door openers.

**EXHIBIT 1-1 Basic Property Concepts Important in Real Estate Finance and Investment**

(1)	(2)	(3)	(4)
The General Nature of Property	Classification of "Things"	Examples	Property Ownership: Evolution of Legal Requirements/Evidence
Any "thing" that can be possessed, used, enjoyed, controlled, or conveyed is generally considered to be property.	A. Real Property (Realty)	A. Land and all things permanently affixed (buildings, sidewalks, etc.). Immovables. Fixtures.	A. Written contracts, legal descriptions, surveys, deeds, wills, possession. Public notice.
	B. Personal Property (Personalty)	B. Intangibles and all movable things (e.g., autos, stocks, patents, furniture).	B. Contracts oral or written, purchase orders/invoices, etc.
<b>Property Rights</b>			
Rights that can be exercised by the property owner. These include possession, use, enjoyment, control, and the creation of interests in property.			
<b>Interests in Property</b>			
Created by owners of real estate who pledge and encumber property in order to achieve an objective without giving up ownership.		Property owner pledges real estate as security for a loan. Property owner grants an easement to another party to cross land in order to gain access to another site.	Mortgage liens, easements, etc.

estate. For example, a person who leases the land, a **lessee**, has the right to exclusive use of the property for a period of time. This right of use has value to the lessee, even though the term of the lease is fixed. In exchange for the right to use the property, the lessee is willing to pay a rent for the term of the lease. A holder of a mortgage also has some rights as a nonowner in real estate pledged as security for a loan. These rights vary with state law and the terms of the mortgage, but, in general, the lender (or mortgagee) has a right to repossess or bring about the sale of a property if the borrower defaults on the mortgage loan. The mortgage provides the lender with what is referred to as a **secured interest**. Obviously this right has value to the lender in the event of default and reduces the quantity of rights possessed by the owner.

It should be clear that some understanding of the legal characteristics of real estate is essential to analyzing the relative benefits that accrue to the various parties who have some rights in a particular property. In most real estate financing and investment transactions, we generally think in terms of investing, selling, or borrowing based on one owner possessing all property rights in the real estate. However, as we have discussed, all or a portion of these rights may be restricted or transferred to others. Remarkably, the various holders of these separate rights generally enjoy their respective rights in relative harmony. However, conflicts arise occasionally concerning the relative rights and priorities to be accorded to the holders of these interests. The potential for such conflicts may also affect the value or price individuals may be willing to pay for an interest in real estate and, ultimately, the value of property.