Real Estate Finance & Investments

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ELEVENTH EDITION

REAL ESTATE FINANCE AND INVESTMENTS

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PREFACE

The world of real estate finance and investments continues to evolve as real estate equity investments and mortgages play an expanding role as investments in both private and public markets. Similarly, this book continues to evolve to provide students with the tools that they need to understand and analyze real estate markets and the investment alternatives available to both debt and equity investors. The revisions we have made in this edition of the book reflect the need for students to expand their understanding of these topics when preparing for a career in the field of real estate.

Public market vehicles for financing and investing in commercial real estate such as commercial mortgage-backed securities (CMBS) and real estate investment trusts (REITs) have matured since the last edition of this book. We have completely revised the chapter on REITs and expanded the coverage of CMBS accordingly.

We have also expanded the discussion of the importance of the underlying economic factors that ultimately affect the value of properties. Factors that affect the supply and demand for different property types are very dynamic and ultimately affect the risk and value of residential and commercial properties.

We continue the tradition of having a book that is very "user friendly" for students. Calculator solutions are shown for many of the problems. Traditional table solutions are also shown in the early chapters to aid in the understanding of the time-value-of-money concepts being illustrated. We are also making computer spreadsheets available that can be used to solve many of the end-of-chapter problems.

This book can be used by professionals as well as by academics and students. We have always strived to include material that is used in everyday practice. Our goal continues to be to help everyone advance their ability to analyze and better understand the institutions and instruments common in real estate markets.

We would like to thank several people who contributed to the eleventh edition revision. Eric Clausen updated the information on FHA, VA, and conventional loans in Chapter 6. Ron Donohue with the Hoyt Group made substantial revisions to the chapter on REITs. Jacey Leonard assisted with the revision of the Instructor's Manual and with the creation of Excel spreadsheet templates that are available for use with the book.

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 with their feedback have made us feel that we have helped them prepare students for successful careers in real estate.

William B. Brueggeman
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BRIEF CONTENTS

CONTENTS

CHAPTER

1

OVERVIEW OF REAL ESTATE FINANCE AND INVESTMENTS

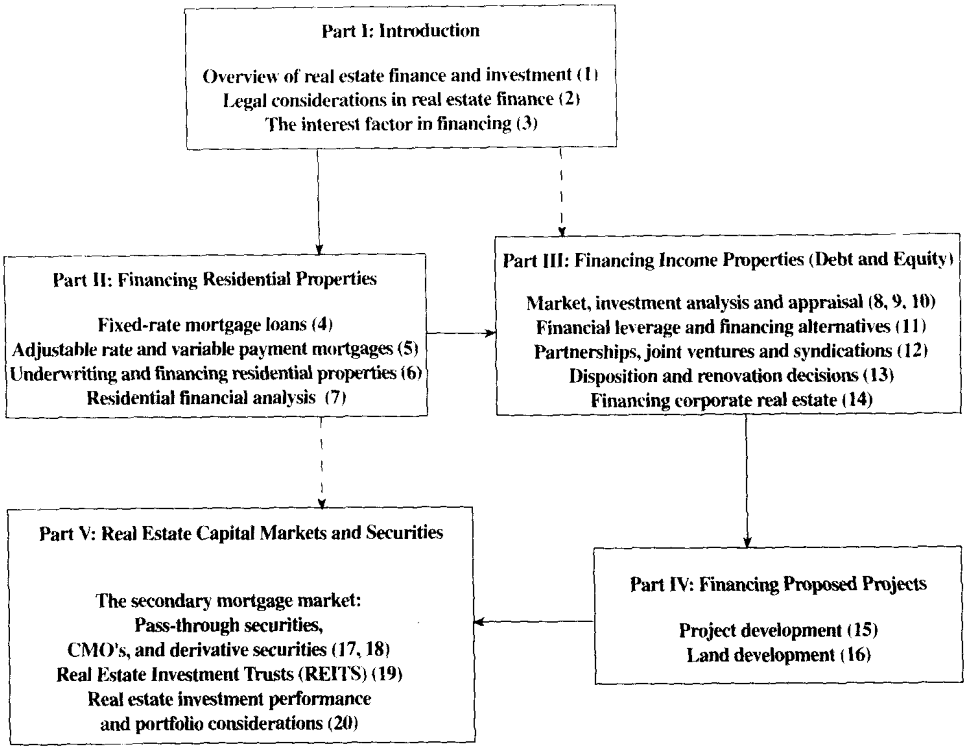
Real estate finance and investments is a field of study that requires an understanding of many important subjects: property law, mortgage underwriting practices, mortgage insurance programs, financial analysis, valuation principles, federal income tax laws, investment analysis, real estate development, and capital markets. This book is intended to provide the reader with a foundation in each of these areas. It is oriented toward the student who has had some exposure to basic finance—and perhaps real estate principles—and desires a more advanced treatment of the subject. The emphasis of the book is real estate financial and investment analysis. However, at various points in the text we give descriptions of important institutional characteristics, which complement our analysis with insights into business practice.

This chapter provides an overview of the contents of the book. The subjects addressed throughout form the basis for much of what is needed for professionals who are in or about to enter the field of real estate finance. Although the breadth of coverage may seem to include very diverse topics, these topics contain analytic approaches and methodologies that can be transferred to many different problem areas. Students may find that they have a much better understanding of basic finance after they have learned to apply it to real estate.

Exhibit 1–1 is a flowchart of the organization of the book, its major parts, and the chapters within those parts. The student will obtain the necessary background for each chapter by reading the chapters in numerical order. However, there are other ways to progress through the material, particularly for the more advanced student. For example, a course of study emphasizing real estate finance could proceed from Part II, "Financing Residential Properties," to Part V, "Real Estate Capital Markets and Securities" with emphasis on mortgage-backed securities. Similarly, a course of study focusing on income property financing and investment could proceed from Part I directly to Part III.

Part IV is important for courses of study that illustrate the differences between the analysis of existing and proposed (construction and land development) projects. Techniques used to evaluate and finance these projects differ significantly. The student who wants to proceed from Part II or Part III directly to Part V can do so without any loss of continuity.

EXHIBIT 1–1 Chapter Flowchart—Real Estate Finance and Investments



Introduction

Part I provides the background information necessary for an in-depth study of real estate finance and investment. Many readers may already be familiar with this material. Chapter 2 contains a summary of important legal considerations in real estate finance while Chapter 3 reviews compound interest calculations that form the basis for mortgage calculations and much of the financial analysis throughout the remainder of the text.

When transactions involving a specific good or service occur repetitively in a free market economy, a number of institutional and legal arrangements evolve to standardize and facilitate this activity. Financing real estate is no exception. When the acquisition or development of residential or commercial properties is financed, the nature of the borrower's interest in the property, which is generally used as security for a loan, must be identified and acceptable to the lender who advances the funds. Real estate transactions are significant in economic magnitude and societal importance. Many interests in real estate can be either conveyed or used as security for lending. Our legal system has evolved to accommodate commercial activities related to the vast number of transactions that occur in our economy. For example, to be legally valid, real estate transactions must meet the following requirements: They have to be documented, put in writing, and take the form of a contract. Commitments made to finance these transactions are also documented, usually in the form of a mortgage and a note. Mortgages identify the property that is used to secure a loan and contain promises made by the borrower to fulfill certain other obligations to the lender. Notes identify the amount of indebtedness between lender and borrower and the terms of repayment.

Chapter 2 contains a summary of the rights and interests in real estate that may be conveyed or used as security for mortgage loans. Covered in more detail are the legal nature of mortgages and the contents normally included in most mortgages. Because changes in property law are most important at the state and local levels, the nature of interests acquired by lenders and the remedies available to them should borrowers default will vary from state to state and among localities. While the scope of this book makes it impossible to compare the differences between states, we can distinguish the major differences in mortgage contracts. Further, various covenants (promises) commonly included in mortgage agreements are described in some detail. Much of the necessary documentation in residential financing has been standardized to facilitate the eventual sale of many mortgages in the secondary mortgage market. Finally, foreclosure and alternatives to foreclosure by the lender are explored and discussed in some detail.

The review of compound interest (time value of money) calculations in Chapter 3 includes understanding compounding (future value) and present value (discounting) calculations. The basic mathematics of compound interest and discounting are reviewed for annual as well as other, particularly monthly, compounding periods needed for mortgage calculations.

Financing Residential Properties

We often take home ownership and mortgage financing of residential properties for granted. However, not until after the Great Depression of the 1930s did Congress take the responsibility for improving housing standards and providing the framework for the vast system of housing finance that we know today. The mortgage insurance programs of the Federal Housing Administration (FHA) followed by the mortgage and guarantee programs of the Veterans Administration (VA) put into place mechanisms for vastly reducing default losses on loans made to households seeking mortgage financing. These programs provided lenders with sufficient protection to encourage them to make mortgage loans in substantial volume.

Part II covers many important topics in residential financing. Exhibit 1–2 outlines the many considerations that borrowers and lenders must make when borrowers seek residential financing. The process involves deciding on the type of mortgage with respect to the pattern of repayment (i.e., fixed or adjustable interest rates) and whether a conventional mortgage loan or a mortgage with FHA insurance or a VA guarantee should be chosen. These decisions are sometimes complex, particularly when one chooses between fixed and adjustable interest rates and compares closing cost requirements. Chapters 4 through 6 contain a detailed analysis of these topics for all types of mortgages with emphasis on loan selection and underwriting.

Deciding how a property should be financed at the time of acquisition is important, but other considerations at that time and subsequently are also important to most borrowers. Chapter 7 deals with these issues:

1. Computing the effective cost of financing, including loan fees and charges. This methodology allows for a comparison of loans with different terms such as the interest rate, fees, and maturity.

EXHIBIT 1–2 Residential Mortgage Financing (borrower and lender considerations)

Stage I: Loan Selection	*Stage II: Loan Underwriting*	*Stage III: Loan Closing*
A. Type of mortgage 1. Fixed interest rate 2. Adjustable interest rate 3. Other	A. Verification of income/assets 1. Determination of payment-to-income ratios 2. Credit history 3. Other savings and assets	A. Documentation 1. RESPA 2. Federal Truth in Lending
B. Type of mortgage insurance/guaranty 1. None—conventional loan 2. Private insurance 3. FHA 4. VA	B. Appraisal of property value 1. Relationship to loan amount 2. Determination of maximum loan-to-value amount	B. Transfer of title 1. Deed to buyer 2. Funds to seller from buyer and lender

2. Computing the marginal or incremental cost of acquiring additional loan amounts (i.e., 75 percent, 80 percent, 90 percent, 95 percent of value). This analysis will help the buyer decide whether to make a large or small down payment when acquiring a property.
3. Calculating the benefits and costs of refinancing. This decision must be made when interest rates decline after a loan has been made. The borrower must usually decide whether benefits from savings due to lower payments will exceed the costs that must be paid to undertake refinancing.
4. Comparing financing options provided by a lender or the option of assuming a mortgage previously made by the seller. These alternatives, coupled with the possibility of acquiring second mortgage financing, are also of concern to borrowers.
5. Identifying the many different tax treatments that apply to interest deductions for each type of mortgage. This task is necessary because a borrower has many mortgage payment alternatives to consider.

Financing Income-Producing Properties

Part III (Chapters 8 to 14) provides an in-depth look at some of the more important aspects of financing and pricing income-producing properties. Exhibit 1–3 provides an outline of the topics and techniques used to analyze income properties. The outline is a logical progression of steps that an investor would take when (1) acquiring a property, (2) considering the tax consequences of the transaction, (3) deciding what type and how much, if any, financing to use in making the acquisition, and (4) attempting to gauge the amount of risk taken for a specific type of property and how that risk could change with the application of financial leverage.

The above four areas are usually undertaken when the investor purchases a property at a specific price; that is, the investor is usually asking, "If I pay a specific price for the property and I use a certain amount of debt, what will be my rate of return on