

Mary Alice Hines

*Real Estate
Appraisal*

Appraisal

Macmillan Publishing Co., Inc.
NEW YORK

Collier Macmillan Publishers
LONDON

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Printed in the United States of America

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Macmillan Publishing Co., Inc.
866 Third Avenue, New York, New York 10022
Collier Macmillan Canada, Ltd.

Library of Congress Cataloging in Publication Data

Hines, Mary Alice.

Real estate appraisal.

Includes index.

1. Real property--Valuation. I. Title.

HD1387.H52 1981 333.33'2 80-22387

ISBN O-02-354530-5

Printing: 1 2 3 4 5 6 7 8

Year: 1 2 3 4 5 6 7

Preface

Real Estate Appraisal is designed to serve real estate educators, prospective and current real estate practitioners, students of real estate phenomena, and those who wish to engage in real estate transactions knowledgeably and profitably. *Real Estate Appraisal* may easily and appropriately be used by universities, four-year colleges, junior colleges, private real estate schools, and real estate trade associations in the administration of their educational programs.

The author and the publisher perceived the need for a real estate appraisal text that is pedagogically designed for efficient and comprehensive learning of the appraisal field by any adult student. Like other good textbooks, real estate appraisal texts should be appropriately written for the easy use and comprehension of the typical adult student and the typical instructor. Therefore, to aid the student's learning process, the author has placed multiple-choice and true-false questions and short problems at the end of each of the 22 chapters of *Real Estate Appraisal* for student self-examination. The answers to the multiple-choice and true-false questions are located at the end of the text questions. The instructor finds the suggested answers to the short end-of-chapter problems in the instructor's manual, which is sent to each instructor using the text. The instructor's manual also contains, for exam and quiz purposes, many additional true-false and multiple-choice questions and problems with accompanying suggested solutions.

Each chapter begins with introductory material and ends with a chapter summary. The introduction links the content of the previous chapter to the content of the new chapter. The summary reminds the reader of the important high points or concepts of the chapter and their overall significance.

With this text the student may study real estate appraisal without previous education in real estate. A brief review of real estate principles and practices and urban development is presented in Part I, "Appraisal and Real Estate Fundamentals." Therefore, an institutional prerequisite for the appraisal course is not necessary. Additional students may be attracted to the course who are normally excluded with the use of most real estate appraisal texts.

Within approximately 500 pages the process, methods, and practices of real estate appraising are reviewed as they apply to land and residential, commercial, industrial, and institutional property valuation. Special areas of valuation such as leasehold, condemnation, and tax appraisal are discussed in Part IV in Chapters 15, 16, and 17. The instructor may have the time and the inclination to cover these special areas of valuation.

The chapters of the text are logically organized into six parts. The student reading and comprehension center around each of the six parts. Exams may be administered easily at the end of each of these parts. If a midterm exam is needed when the students have started into the eight chapters of Part III, "General Appraisal Methods and Techniques," the instructor may notice a natural break between the first four chapters of Part III and the last four chapters of the part. Chapters 11 through 14 cover only the income approach, whereas the earlier four chapters of Part III cover the market comparison and cost approaches. The chapter sequence easily may be divided for the administration of two regular exams and a final exam.

Throughout the text, as particular areas of appraisal are covered, possible applications of various quantitative methods are introduced. These brief comments of most of the chapters of Parts I, II, and III are elaborated on in Part V, "Application of Quantitative Methods to Real Estate Appraising," Chapters 18, 19, and 20. The instructor may or may not have time to cover these special chapters. Therefore, Part V on the application of quantitative methods to real estate appraising is located toward the end of the text. The instructor who skips over Part V because of time constraints or inadequate student background may pass on to Part VI, "Professional Standards and the Appraisal Report."

The appraisal trade associations have promoted for many years the use of quantitative methods in real estate appraising. Since they continue to support the use of quantitative analysis in professional real estate appraising, their educational programs have long integrated fundamental statistics into fundamental appraisal education. Few texts have been written for the instruction that integrates appraisal fundamentals with statistical methodology. The blending of the two areas becomes possible as most adult students of appraisal have previously learned basic statistical methods and techniques. Most adult students have also become accustomed to the use of hand-held calculators, desk-top calculators, and computer systems, small and large. Students, therefore, may appreciate the usefulness of basic statistical analysis in real estate appraising.

The text content and illustrations cover nationwide real estate appraising conditions, not just regional or local conditions. The student gains up-to-date coverage of the highlights of real estate appraising principles

and practices. Many complicated ideas become easier to understand through the viewing of uncomplicated exhibits and illustrations.

The 22 chapters of the text may be used for a semester- or quarter-length course in introductory real estate appraising. Even shorter courses may be administered with the use of the text, as parts are selectively included and excluded to suit the specific time and program dimensions. For example, Part V on the application of quantitative methods may have to be excluded if the course covers only a 10-week quarter. Shorter courses may have to exclude portions of the income capitalization chapters, Chapters 12, 13, and 14.

The author classroom-tested the text content while teaching real estate appraisal courses at the University of Alabama. Most of the manuscript was written in 1979 and 1980 while the author was employed as a professor of real estate and finance at the University of Alabama. The text production was concluded while the author was a visiting professor of real estate at the University of Tennessee at Knoxville. Therefore the administrations of both the University of Alabama and the University of Tennessee supported and promoted the development of this needed, comprehensive real estate appraisal text. Dr. H. K. Wu, Lee Bidgood Professor of Finance and group chairman, College of Commerce and Business Administration, The University of Alabama, and Dr. Richard M. Duvall, chairman, Department of Finance, College of Business Administration, The University of Tennessee-Knoxville, added administratively to the development and classroom testing of the book.

The author's background for the writing of the text originates from appraisal experience and instruction gained primarily from American Institute of Real Estate Appraisers and Society of Real Estate Appraisers courses. Several seminars conducted by both of these trade associations have been attended recently. One seminar, sponsored by the Continuing Education Division of the University of Alabama and the College of Business Administration, on "Latest Methods and Techniques in Income Property Appraising," was arranged at the University of Alabama for interested appraisers of the Southeast region by the author in April, 1980.

Suggestions were made by a leading Tuscaloosa appraiser, Owen Meredith of Owen Meredith & Sons, as the manuscript took shape. Earlier discussions with many appraisers led to other portions of the manuscript development. James D. West and Walter Smith, active Tuscaloosa appraisers, have long been close associates in the appraisal field. The friendship and discussions with many Birmingham and other Alabama real estate appraisers have also provided background for the manuscript. Bob Hearn, Gene Dilmore, Raymond Monroe, Alvan Outland, and Harold Lewis should particularly be mentioned. Very influential appraisal instructors have included Al Lomax of Albuquerque; Lew Garber of Nashville; Jim Gibbons of Garden City, New York; Dick Lodge of St. Louis; Steve Messner of Storrs, Connecticut; Don Dorchester of Tulsa; and Arlen Mills of San Francisco. Finally, I would like to express special thanks to Bernard Saler at the Waukesha County Technical Institute School of Real Estate, who read the complete manuscript and supplied many useful suggestions.

Other real estate associates and friends have provided background and support for the development of the comprehensive text. They are too numerous to mention. Through the writing of this text as well as the author's previous eight texts and text supplements in real estate, my parents, John W. and Alberta E. Hines, have provided the continual encouragement and support necessary to the long struggle to the final production and distribution of the book.

M. A. H.

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Part One

*Appraisal and
Real Estate
Fundamentals*

Chapter 1

Introduction to Appraising

The Nature of Appraising

Purposes of Real Estate Appraising

Reasons for Studying Real Estate Appraising

Recent Changes in the United States That Affect Real Estate Appraising

Appraising, a Principal Function of the Real Estate Business

The Unique Physical and Economic Characteristics of Real Estate

The Business and Government Environment of Appraising

The Development of Professional Appraising

Recent Developments in Appraisal Theory and Techniques

Present Value Theory Mortgage-Equity Analysis Quantitative Analysis in Real Estate
Appraising: *Tables and charts, Statistical inference, Ratio analysis, Index numbers,
Frequency distributions, Probability distributions, Simple and multiple correlation and
regression* Calculators and Computer Systems to Aid the Appraiser

Summary

Appraising is the art and the science of estimating the value of an asset at a given time. Appraising is a science in that a scientific approach is used in determining value. Even though the estimation of value is a science, it assumes the characteristics and manifestations of an art. The appraiser develops an intuitive sense through experience that leads to a high degree of accuracy in the estimation of value from the viewpoint of the typical investor in the real or personal property being evaluated. There is an art in viewing real or personal property value from the typical investor's view rather than from the appraiser's personal view.

THE NATURE OF APPRAISING

The estimation of value of real or personal property is established by the appraiser at a given time. Because asset values change with the change in time, the change in financial conditions, the change in environmental conditions, and the change in many other factors, the appraiser estimates the value as of a certain date. The appraisal reflects the conditions that affect the value of a property at a given date, not for a range of time or over a long period of time. For example, the value of a house estimated today might not hold tomorrow when the local school board announces the impending construction of a new elementary school three blocks from the house.

The assets that typically require appraisal encompass real and personal property. The real estate appraiser is most concerned with real property, or the interests, benefits, and rights inherent in the ownership of real estate. *Real estate* refers only to the physical land and the attachments to it. Personal property may be valued by the real estate appraiser because it is often an integral component of the value of the associated real property. *Personal property* refers to the items that are not permanently fixed to a part of the real estate. In fact, personal property may be removed from the premises without serious injury either to the real estate or to the items themselves. Many personal property appraisers value coins, antique furnishings and furniture, oil paintings, sculptured work, and automobiles, which are items of personal property.

PURPOSES OF REAL ESTATE APPRAISING

The principal purposes of real estate appraising are associated with the following:

- Estate settlement.
- Mortgage financing.
- Tax assessment.
- Condemnation awards.
- Insurance coverage and compensation.
- The offering price of the prospective buyer.

The estate of the deceased must often be appraised for tax purposes and for distribution of assets to the heirs and other parties to the will. The appraisal may lead to the sale of real property for eventual distribution of cash to the recipients under the will. The Internal Revenue Service and the state tax authorities must estimate the value of the property upon which estate, inheritance, and income taxes must be levied. Local property taxes may be due on the property of the deceased.

Before the lender negotiates the loan amount and the loan terms with the borrower, the borrower must have an appraisal made of the property. The lending institution operates within lending limits that are established by state and federal regulatory authorities and company policies. Part of the lending limits relate to loan-to-value ratios for various types of loans. There is often a range in the percentage of the appraised value that may be extended for an individual loan. The appraised value is a key element, therefore, in establishment of the loan amount.

The property tax system is based on the appropriate tax rate and a designated portion of the assessed valuation of the taxpayer's property. An appraisal of the property is made periodically so that the assessed valuation is kept relatively up to date. Many states require the appraisal of the fair market value of taxable real property. When a state taxes personal property such as household furnishings, the tax assessor appraises the personal property value as well as the real property value.

When the power of eminent domain is exercised to acquire private and public property for public purposes, a reasonable amount must be paid the affected property owners. The required "just compensation" to the property owners is determined by the appraisal of the fair market value as of the time of taking the property. The condemnation award is set by the courts in a due process proceeding. A final estimate of value may be established as the condemning authority has an appraisal made and the property owner also has an appraisal made. A compromise between the two values may occur.

Property insurance coverage depends on the appraised value of the property. The policy premiums are established after the insurance company determines the appraised value. If a disaster occurs that is covered by the hazard insurance policy, the insurance company must assess its payments to the insured parties through a valuation of the resulting damage. The insurance adjuster may assess the damage for the company.

When a prospective buyer is looking for a home or an investment property, he or she needs an estimate of value from which to make an offer. The negotiation of price between the property seller and the prospective buyer depends on their relative judgments as to the current and future value of the property. The buyer may open the negotiations with an offer less than his or her estimation of the current market value, and the seller may counter with a price more than his or her estimate of current value. The final sale price may approximate a compromise between the two estimates of value. These appraised valuations may be made by the prospective buyer, the prospective seller, by professional real estate brokers and salesmen, or by professional appraisers.

REASONS FOR STUDYING REAL ESTATE APPRAISING

The student of real estate appraising may have several motivations. He or she may learn the appraisal process and the commonly used methods and techniques. This may lead to employment in the numerous areas of real estate appraising. This knowledge may also lead to self-application of the appraisal methods and techniques so that the value of the individual's personal property holdings may be estimated. If students realize their lack of adequate appraising experience and contracts with a professional appraiser to value private property holdings, they will be more knowledgeable about the results of the appraiser's study. As students become prospective buyers they may better estimate the value of the property and negotiate a better selling price from the prospective seller. Students may become sellers at a later time and gain a better price from their property as a result of their appraisal background.

Most employment opportunities for real estate appraisers fall into two categories: independent fee appraisers and institutional appraisers. Independent fee appraisers may be totally unaffiliated with mortgage lenders, property insurance carriers, the courts making condemnation awards, and tax assessing agencies. In some cases, the independent fee appraisers may have some institutional affiliations but maintain primarily an independent fee appraisal business. Then the appraiser may have an obligation to serve his institutional client's needs first and then serve other clients in the time remaining. The independent fee appraiser derives most of his compensation from the fees assessed clients for each appraisal job. The institutional appraiser, on the other hand, works for an institution that compensates the employee on a salaried basis. There may be additional compensation related to the quantity or quality of appraisal work accomplished for the institution. The institutions that employ real estate appraisers on part-time or full-time bases include financial institutions in the primary and secondary mortgage markets, the United States Department of Housing and Urban Development, the Veterans Administration, and private mortgage insurance companies. Independent fee appraisers may be hired periodically to accomplish the work of these employers. Usually, commercial banks, savings and loan associations, mutual savings banks, life insurance companies, and real estate investment trusts employ persons qualified to perform professional appraisals of real property. In addition, they may hire independent fee appraisers as the workload requires it. These are a few of the employment opportunities open to qualified real estate appraisers.

RECENT CHANGES IN THE UNITED STATES THAT AFFECT REAL ESTATE APPRAISING

A number of recent changes in the American economy affect real estate appraising. Changes are occurring in homeowner preferences, for example. Smaller families and the increasingly older population of the United States create preferences now for smaller, single-family detached homes.

The prospective homeowner wants a fully equipped home even though prices have risen markedly and continue to rise with inflation and higher building costs. The experimentation in the early 1970s with shell houses that provide a minimum of home equipment and space did not adequately supply the demand for shelter. It was discovered that the family would refrain from buying a new home a little longer rather than buy a shell house or a house with less equipment and space than desired. Many families have realized rising family incomes that have paralleled or almost paralleled the increase in house prices and home maintenance costs. Most segments of the home market still prefer one-story homes over two-story homes. These home preferences influence value because the appraiser must determine value from the viewpoint of the typical home buyer in the appropriate strata of the market.

The continuation of the interstate and intrastate highway programs continually influences the value of land and the associated improvements. As road building continues, some land and improvements become more accessible and, therefore, gain value, whereas other land and improvements lose value as a result of a lack of direct accessibility to the new markets. New highways can add to the supply of land that tends to be in great demand. The revenue from income properties may increase with the completion of nearby highways, whereas costs remain relatively stabilized.

As mortgage financing changes, the use of mortgage-equity approaches to valuation of real property changes. It is difficult to work into present mortgage-equity formulas the terms of a nonstandard mortgage or the lender's participation in the equity of a real estate development. For example, it is difficult to evaluate the present worth of a variable-rate mortgage when the interest rate and, therefore, the debt service requirements in the future will vary with a money and capital market index. Another example involves the graduated payment mortgages under experimentation by the United States Department of Housing and Urban Development (HUD). There are five different amortization plans that are employed in the negotiation of graduated-payment mortgages (GPMs) by HUD. The initial payments start at a dollar amount less than usual mortgage payments that are figured on a level-payment, full amortization basis. Then the GPM mortgage payments step up so many percentage points each year or each few years until payments level off, either the sixth or the eleventh year to the maturity of the loan. The last payments are usually more than what the same mortgagor would be paying if he or she were financing under a level-payment, traditional mortgage. These stepped-up payments on the GPM are difficult to represent in the current Ellwood mortgage-equity formulas. Most mortgage tables do not include figures for graduated-payment or variable-rate mortgages.

The lender's participation in the gross receipts of a borrower may be predicted from past experience, but there remains a great deal of uncertainty about the actual revenue for the lender in the future. These uncertainties are generally not accounted for in the current formulation of mortgage-equity analysis.

Most of today's home and commercial properties are conventionally

financed. In earlier decades, homes were usually financed through Federal Housing Administration (FHA) mortgage insurance or Veterans Administration guarantees. Today's preponderance of conventional financing of real properties, with or without private mortgage insurance, means that the minimum property standards set by FHA in the 1930s are becoming less applicable to the appraiser's valuation of individual properties. Generally the private mortgage insurance company's property requirements are far less stringent than FHA's minimum property requirements.

The increase in environmental regulation has acted as a force for property value change. The federal, state, and local government approval and licensing systems require so much time and financial carrying costs that existing real estate developments tend to assume greater values and proposed projects assume less value until actually constructed and occupied. For example, existing apartment buildings with ocean views tend to assume higher values because environmental regulations now restrict the construction of multifamily buildings close to the oceanfront. The ocean frontage is being preserved for public recreational and scenic purposes rather than for commercial and residential purposes.

The energy crisis affects property values and consumer preferences for space. As the prices of natural gas and oil increase, homeowners are rethinking their use of gas and oil for private passenger car transportation and for home heating and the economical use of more building insulation. Gas and oil prices for car operation are forcing a re-evaluation of homes near public transportation routes and homes away from public transit routes but closer to places of employment. The preliminary step taken by many homeowners when the oil and gas prices started their precipitous rise was the purchase of small, economy-size cars with low gasoline consumption. Other conservation steps involved greater home insulation. The values of well-insulated homes may rise above the extra costs for home insulation.

Economic circumstances and tenant preferences have forced changes in new investment property characteristics. The general recession and increased financing and construction costs have brought about such income property changes as less large-scale development in the form of planned unit developments and new towns, smaller regional shopping centers, and tenant and developer preferences for office and industrial parks rather than free-standing office and industrial buildings. Most new retail store openings are located in shopping centers rather than in independent or isolated retail locations.

Inflated construction costs, mortgage interest rates, and utility expenses have led to unusually high operating and maintenance costs of income properties. At the same time, the relatively high vacancy rates for income properties in some areas have caused rent stabilization. The appraiser views the cost squeeze as he or she analyzes the cash flow forecast for income properties. Costs have continued to climb while rents in most areas have stabilized or only risen slightly. In areas where rents have increased markedly, local communities have reconsidered rent control to safeguard the interests of moderate- and middle-income tenants. Ap-