

Table of Contents

	About the Author	ix
	Foreword	xi
	Preface	xiii
PART 1		
	Lesson 1	
	Rationale of the Income Capitalization Approach	3
	The Nature of Income-Producing Property and Lease Interests.....	3
	Concepts and Definitions of Value.....	4
	Review of Basic Principles	5
	The Income Capitalization Approach in the Valuation Process.....	6
	Relationship of Income and Value.....	7
	Exercises	8
	Lesson 2	
	Income Expectancy	9
	Gross Income Estimates	9
	Analysis of Expenses	10
	Case Studies	12
	Exercises	14
	Lesson 3	
	The Relationship of Income and Value.....	15
	Gross Rent Multipliers.....	15
	Overall Rates	16
	Interest Rates.....	16
	Capitalization Rates	17
	Return On and Return Of Capital.....	17
	Rate Selection Techniques	18
	Influence of Other Markets	18
	Built-Up and Blended Rates.....	19
	Residual Techniques.....	21
	Exercises	21

PART 2

Lesson 4	Analysis of Market Evidence	23
	Income Projections	23
	Derivation of Multipliers and Cap Rates	25
	Symbols.....	30
	Exercises.....	30
Lesson 5	Direct Capitalization	31
	Direct Capitalization.....	31
	Direct Capitalization with an Overall Rate.....	31
	Residual Techniques in Direct Capitalization.....	33
	Pitfalls	35
	Exercises.....	35
Lesson 6	Yield Capitalization: An Introduction to Discounting	39
	The Nature of Annuities	39
	Return On and Return Of Capital.....	39
	Discounting.....	40
	Simple Problems.....	41
	Complex Problems	42
	Discounted Cash Flow Analysis	42
	Selection of Discount Rate	43
	Exercises.....	44
Lesson 7	Tables, Calculators, and Computers	45
	Mathematics of Finance.....	45
	Compound Interest Tables.....	46
	Construction of Tables.....	46
	Other Tables.....	50
	Tabular Expansion	50
	Interpolation	51
	Accuracy of Tables.....	51
	Electronic Financial Calculators.....	51
	Personal Computers	53
	Annuities Payable in Advance	53
	Effective Rate versus Nominal Rate	54
	Conversion Tables	55
	Frequency of Payments.....	56
	Level Annuity Formulas	56
	Use of Tables, Calculators, and Computers	57
	Exercises.....	57
Lesson 8	Discounting Procedures and Income/Value Patterns	59
	Income Models.....	59
	Property Models	63
	Exercises.....	69

	Lesson 9	Lease Interests	71
		The Leased Fee Estate	71
		The Leasehold Estate	71
		The Fee Simple Estate	72
		The Consideration of Risk	73
		The Concept of the Sum of the Parts Equaling the Whole	73
		Prospective Yield and Change as Evidenced by Lease Data	74
		Computerized Lease-by-Lease Analysis	76
		Exercises	76
	Lesson 10	Applied Discounting	79
		Level Annuity–Building Residual Technique	79
		Straight-Line Changing Annuity–Building Residual Technique	80
		Straight-Line Changing Annuity–Land Residual Technique	80
		Level Annuity with Known Reversion	81
		Level Annuity–Sinking Fund Recapture Premise	81
		Other Sample Problems	82
		Exercises	86
PART 3	Lesson 11	The Mortgage Contribution and the Equity Contribution	91
		Mortgage Contribution	91
		Loan Ratio	92
		Debt Coverage Ratio	92
		Equity Contribution	95
		Cash Flow Rate	95
		Equity Yield Rate	96
		Exercises	101
	Lesson 12	An Introduction to Mortgage-Equity Capitalization	103
		Overall Rate	104
		Stabilization of Income	105
		Basic Capitalization Rate	105
		Compensating for Equity Buildup	106
		Variations in Income Projection Term	108
		Compensating for Depreciation or Appreciation	109
		Conclusion	110
		Exercises	110
	Lesson 13	Applied Mortgage-Equity Capitalization	113
		Ellwood Without Algebra	114
		Ellwood Tables	116
		The <i>J</i> Factor	117
		Ellwood Symbols and Formulas	122
		Modified Formulas	123
		Demonstration Problems Using Ellwood Tables	124

	Rate Analysis.....	125
	Computer Routines.....	126
	Exercises.....	128
Lesson 14	Discounted Cash Flow Analysis.....	129
	Present Value.....	129
	Internal Rate of Return.....	130
	Similarity to Interest Rate, Yield Rate, and Discount Rate.....	131
	Savings Bank Analogy.....	131
	The <i>IRR</i> as a Discount Rate.....	134
	The <i>IRR</i> Equation.....	135
	Finding the <i>IRR</i>	135
	Exercises.....	140
Lesson 15	A Critique of the <i>IRR</i>.....	141
	Limitations and Pitfalls.....	141
	More than One <i>IRR</i>	141
	The Consideration of Risk.....	146
	Reinvestment Concepts.....	146
	Other Measures of Performance.....	147
	<i>IRR</i> Before Income Taxes versus <i>IRR</i> After Income Taxes.....	149
	Summary.....	150
	Exercises.....	151
	Glossary.....	153
	Solutions to Mathematical Exercises.....	167
	Symbols and Formulas Used in Appraisal Institute Courses.....	169
	Variable, Exponent, and Subscript Names.....	169
	Direct Capitalization: Factors.....	171
	Direct Capitalization: Capitalization Rates.....	171
	Direct Capitalization: Relationship Formulas.....	171
	Mortgage Formulas.....	171
	Operating Expense Formulas.....	171
	Vacancy Formulas.....	172
	Property Tax Formulas.....	172
	Band of Investment and Residual Formulas.....	172
	Discounted Cash Flow Formulas.....	172
	Net Present Value Formulas.....	173
	Property Model Formulas.....	173
	Cap and Yield Rates: Sometimes Equal, Never the Same.....	174
	Six Functions of One Summary.....	174
	Financial Tables.....	T-1