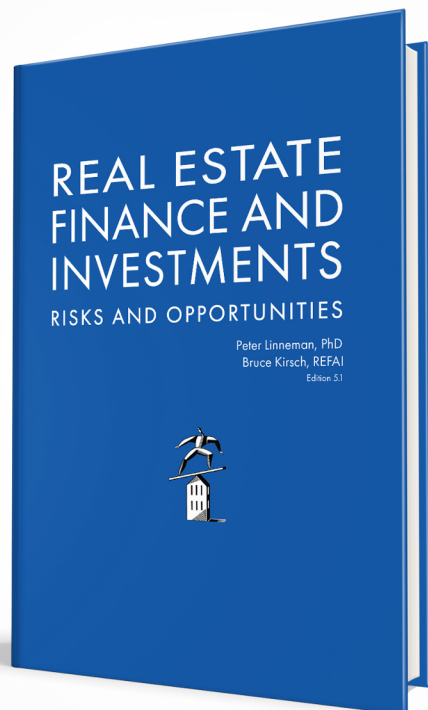


ABOUT THE TEXTBOOK



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REAL ESTATE FINANCE AND INVESTMENTS: RISKS AND OPPORTUNITIES



Current Edition: 5.1

Authors: Peter Linneman, PhD and Bruce Kirsch, REFAI

Length: 467 pages

Chapters: 26

Additional Sections: 9

First Published: 2003

University Adoptions: 125+

Unique Features:

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- Hands-on Excel modeling exercises integrated throughout
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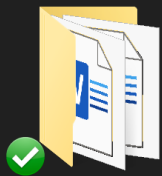


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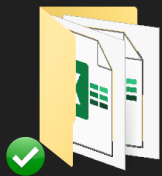
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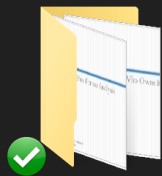
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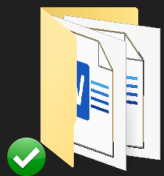
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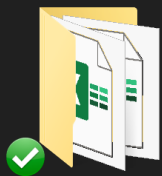
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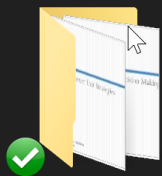
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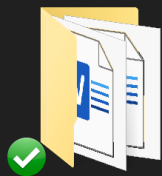
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Mathew Avrhami, Faculty Associate

**W.P. Carey School of Business
Arizona State University**

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CHAPTER 1 | INTRODUCTION: RISKS AND OPPORTUNITIES

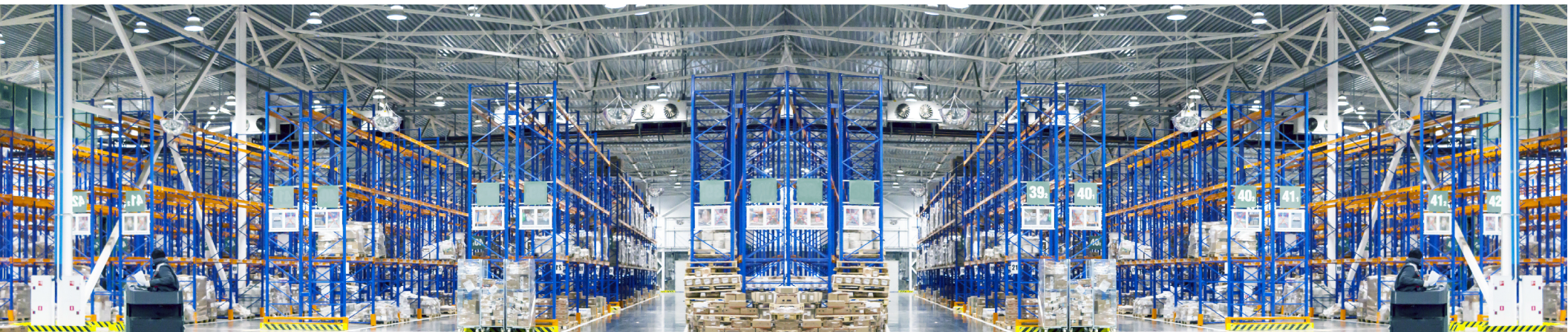
"Saying 'no' is as important as saying 'yes,' only tougher."

- Risks and Opportunities: That's What It's All About
- The Risks
- Operating Expenses
- Vacancy
- Natural Disaster
- Leasing
- Liquidity
- The Opportunities
- Operating Expenses
- Terminal Value
- Rental Growth
- Where You Should Focus Your Analysis
- Market Research
- Personal Decision
- Risk Parameterization

CHAPTER 2 | WHAT IS REAL ESTATE AND WHO OWNS IT?

"Overnight success almost always took 10-25 years."

- Real Estate is About Space
- Land
- Retail Properties
- Warehouse and Industrial Properties
- Office Properties
- Multifamily
- Hotels
- Self-Storage
- Real Estate is Many Different Industries
- Gross Versus Net Leasable Square Footage
- Occupancy and Vacancy
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- Who Owns U.S. Commercial Real Estate?



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CHAPTER 3 | INTERNATIONAL REAL ESTATE INVESTING

"You don't have to go far from home to lose a lot of money."

- Great Potential is Only That
- The Capital Shortage Myth
- The Land of the Rising Sun
- A Risky World
- The Old Soviet Empire
- South of the Border
- The United States of Europe
- India
- China
- Brazil

CHAPTER 4 | THE FUNDAMENTALS OF COMMERCIAL LEASES

"Analyze first; then leap."

- Economic Terms
- Rent
- Marketing Budget
- Utilities, Insurance, and Property Taxes
- HVAC – Heating, Ventilation, and Air Conditioning
- Security and Property Maintenance
- Tenant Improvements
- Free Rent
- Capital Costs
- Net Rent
- Non-Economic Terms
- Signage
- Going Dark
- Hours and Days of Operation
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- Usage Restrictions
- Sublet Rights
- Location Assignment
- Detailed Description of the Space
- Tenant Mix
- Parking
- Recourse and Security Deposit



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CHAPTER 5 | PROPERTY-LEVEL PRO FORMA ANALYSIS

"Run the numbers carefully but understand why these numbers will not occur."

- Lease-by-lease analysis
- Line Item Analysis
- Operating Income
- Gross Potential Rental Revenue
- Vacancy
- Percentage Rent/Overage
- Expense Reimbursements
- Ancillary Income
- Credit Loss/Bad Debt
- Operating Expenses
- Common Area Maintenance
- Property Taxes
- Insurance
- Utilities
- Property Management
- Net Operating Income
- Capital and Leasing Costs
- Tenant Improvements
- Leasing Commissions
- Capital Expenditures
- Unlevered Cash Flow
- Cap Ex Versus Depreciation
- Purchase Depreciation
- Depreciation of TIs and Cap Ex, Part 1
- Levered Cash Flow
- Loan Points
- Debt Service Expense
- Taxable Income
- Depreciation of TIs and Cap Ex, Part 2
- Amortization of Loan Points
- After-Tax Cash Flow to Equity
- Losses
- The Crazy 1980s



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CHAPTER 6 | FINANCIAL MODELING

"Believing a forecasted 26.24% IRR is silly; no one is 200 basis points accurate, much less 24 basis points accurate."

- What is Financial Modeling?
- Things Change for a Reason
- Leslie Court Apartments
- Base Rental Revenue
- Vacancy
- Ancillary Income
- Operating Expenses, Replacement Reserves and Cap Ex
- TIs and Leasing Commissions
- Sale Value
- Gross Sale Price, Sale Income Tax and Net Sales Proceeds

CHAPTER 7 | REAL ESTATE DUE DILIGENCE

"It's often a foregone conclusion left unchecked that comes back to bite you."

- What is Due Diligence?
- Wrong but Useful
- Little Mistakes + Big Numbers = Big Problems
- Title, Survey, Environmental, and Legal
- Revenue, Operating Expenses, and Capital Expenditures
- Capital Expenditure Needs
- Loan Documents
- Neighborhood and Market

CHAPTER 8 | ANALYZING METROPOLITAN LONG-TERM GROWTH PATTERNS

"Get a good pair of sunglasses and some sunblock if you want to build for the Boomers."

- A Nation of Constant Positive Population Growth
- Metropolitan County Population Growth
- 2030 Forecast
- Local Population Growth Insights
- Past Growth
- Economic Diversity
- Immigrant Presence
- Biology and Age Distribution
- Weather
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- Coastal Adjacency and Zoning
- Educational Achievement
- Local Income and Sales Tax Rates
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- Population Density
- Regional Growth Variability
- Methodology



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RISKS AND OPPORTUNITIES

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CHAPTER 9 | THE USE AND SELECTION OF CAP RATES

"What is the bet?" is the critical question."

- Basic Cap Rate Valuation
- Not Everyone Agrees
- Replacement Cost
- Gordon Model: Simple Cap Rate Estimation
- Let Your Common Sense Prevail
- Market Change
- Responding to the Market
- A Look at the Past
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CHAPTER 10 | DEVELOPMENT PRO FORMA ANALYSIS

"Be prepared to adjust if you want to succeed."

- Development
- The Two Business Phases of Development
- Phase I: The Negative Cash Flow Business
- Phase II: The Positive Cash Flow Business
- Certainty of Cash Flows
- Revenue Risk Mitigation
- Pre-Leasing
- Pre-Sales
- Delay Risk
- Opportunity
- Options and Development
- The Develop Versus Buy Analysis Framework



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CHAPTER 11 | DEVELOPMENT FEASIBILITY ANALYSIS

"In the battle between fear and greed, greed wins about 80% of the time."

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- Simple Calculations
- Solve Backwards for Replacement Rent
- A Common Mistake
- Land Cost
- An Example: Anoop Court
- Hard Costs
- Forecasting Hard Costs
- Soft Costs
- Timing
- Design

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- Fees from Noncombined Affiliates
- EBITDA
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- Minority Interest
- Value of a Company
- Funds from Operations
- Adjusted Funds from Operations
- DCF Valuation
- Cap Rate Valuation
- Net Asset Value



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"Have both a professional and private life to balance the ups and downs of each."

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- Loan Restructuring
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- Borrowers' Rights
- Bank of America Versus La Salle Street Partners
- Section 11.11B

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- Sources of Debt Capital
- The Four Reasons to Use Debt in a Transaction
- Do Not Have Enough Money
- Diversification
- Interest Tax Shield
- Enhanced Equity Returns
- Capital Appreciation
- Cash Flow Return
- Positive Leverage
- Negative Leverage
- Japan and Positive Leverage
- How Much Should You Borrow?
- Mezzanine Finance



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"Stick to what you know but keep learning in order to expand what you know."

- Interest Types and Short-Term Versus Long-Term Debt
- Interest Calculation Bases
- Key Loan Sizing Ratios
- Loan-to-Value and Loan-to-Cost
- Debt Yield
- Interest Coverage Ratio
- Debt Service Coverage Ratio
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- Other Key Loan Terms
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- Prepayment Penalty
- Distributions
- Operating Restrictions
- Additional Debt
- Common Positive Covenants
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- EBIT, Cash Flow, or NOI
- Leases
- Loan Terms
- Secured
- Recourse
- Guarantees
- Receivables
- Draws
- Amortization
- Insurance
- Sweep
- Loan Points
- The Refi Decision
- Repayment Penalties
- Refinancing in a Down Market



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CHAPTER 16 | SOURCES OF LONG- AND SHORT-TERM DEBT

"The machine is rarely the problem; the people operating the machine are usually the problem."

- Capital Evolution
- Follow the Money
- How is a CMBS Issuance Created?
- How Do You Sell?
- Profit from the CMBS Packaging
- It's about Specialization
- Creating Tranches
- Default Dynamics
- The Evolution of the U.S. CMBS Market

CHAPTER 17 | GROUND LEASES AS A SOURCE OF FINANCE

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- Method #2: Ground Lease Payment Capitalization
- Method #3: Building Net Operating Income DCF
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- Who Are They?
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- Dedicated Real Estate Players
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"It is easy to raise money if you're not the one doing it."

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- REIT Income Tax Advantages and Operating Restrictions
- REIT Versus Publicly Traded Real Estate Company
- Public Versus Private and Large Versus Small
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- UPREIT Structure
- Return on Capital Versus Return of Capital

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"Those who know how and when to adapt have the best chance of thriving."

- Real Estate is a Capital-Intensive Business
- The "Forces" Which Changed Real Estate
- Force #1: Shifting of Control of Capital
- Force #2: Consolidation of Capital
- Force #3: Prevailing of Basic Economics
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- Managerial Vision and Ability to Sell It
- Low Capital Costs Relative to Competitors
- Lower Operating Costs Relative to Competitors
- Lower Overhead Costs Than Competitors
- Enhanced Revenues Relative to Competitors
- Successful Risk Management
- Operating Efficiency
- Proof of the "Forces" at Work
- Growth in Company Size, Liquidity, and Prominence
- No Reversion to Excessive Leverage
- Growth in Transparency
- Is Bigger Better?



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"Why ever do less than the best you can?"

- What Type of Space Do I Need?
- Where Should I Locate?
- How Much Space Do I Need?
- Should I Own or Rent?
- Faulty Own Versus Rent Model
- What Is The Problem?
- Corrected Own Versus Rent Model
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- Propensity for Corporate Ownership of Real Estate
- Synthetic Leases
- For How Long Should I Lease?
- The Corporation of You

CHAPTER 24 | SOME OBSERVATIONS ON REAL ESTATE ENTREPRENEURSHIP

"When asked if real estate entrepreneurs are born or made, my answer is always Yes."

- Are There Entrepreneurial Traits?
- What Makes Sammy Run?
- Better, Faster, Cheaper
- What Are the Risks?
- Raising Capital



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CHAPTER 25 | REAL ESTATE CYCLES

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- What Are Cycles?
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- Structural Office Demand Headwinds?
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- What Led to the 2008-2009 Financial Crisis

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- Right and Wrong
- Bribes
- But Everybody is Doing It!
- Perverse Incentives
- Favoritism
- Do Not Expect Thanks
- Conflict of Interest



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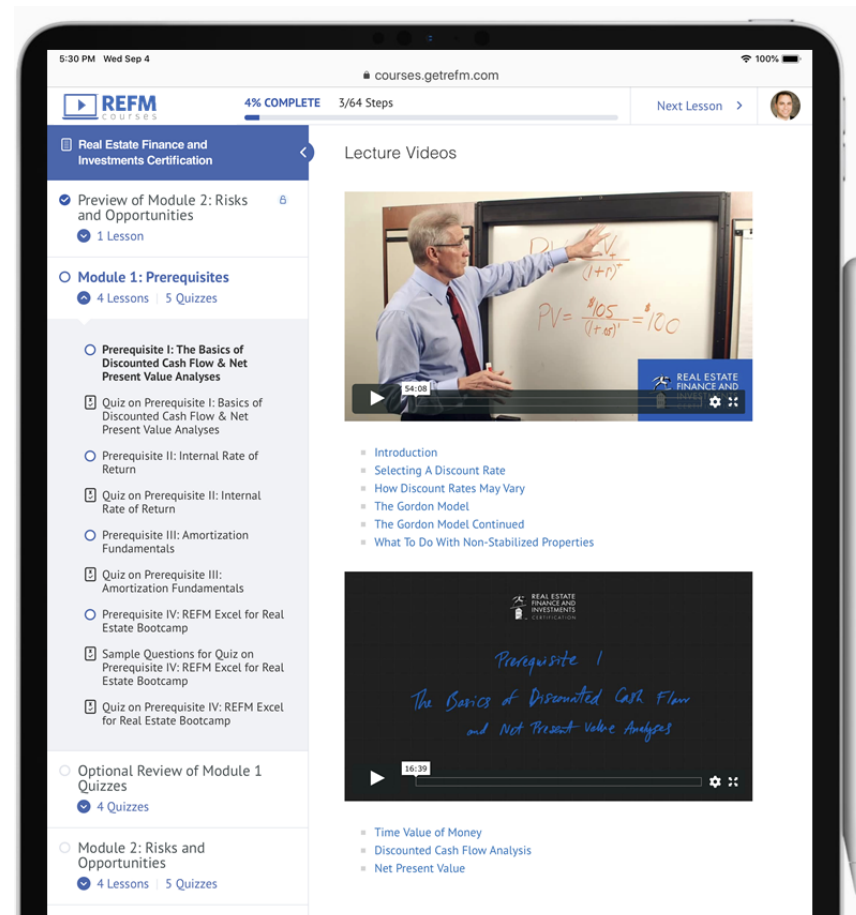


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Peter Linneman, PhD
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For over 40 years, Dr. Peter Linneman's unique blend of scholarly rigor and practical business insight has won him accolades from around the world, including PREA's prestigious Graaskamp Award for Real Estate Research, Wharton's Zell-Lurie Real Estate Center's Lifetime Achievement Award, Realty Stock Magazine's Special Achievement Award, being named "One of the 25 Most Influential People in Real Estate" by Realtor Magazine and inclusion in The New York Observer's "100 Most Powerful People in New York Real Estate".

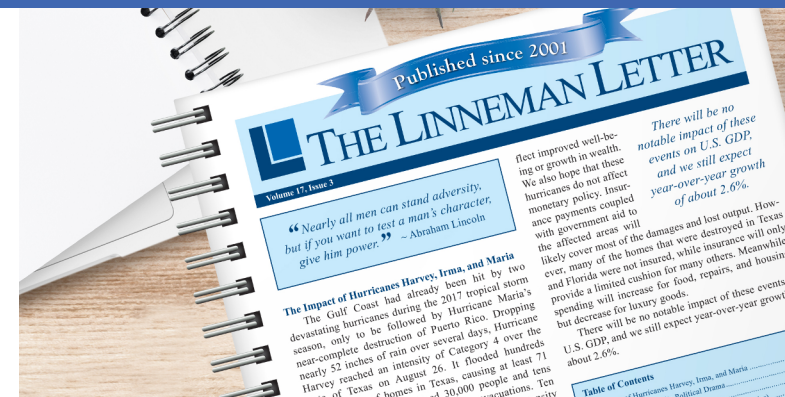
After receiving both his Masters and Doctorate in Economics under the tutelage of Nobel Prize winners Milton Friedman, Gary Becker, George Stigler, Ted Schultz and Jim Heckman, Peter had a distinguished academic career at both The University of Chicago and the Wharton School of Business at the University of Pennsylvania. For 35 years, he was a leading member of Wharton's faculty, serving as the Albert Sussman Professor of

Real Estate, Finance and Public Policy as well as the Founding Chairman of the Real Estate Department and Director of the prestigious Zell-Lurie Real Estate Center. During this time, he was co-editor of The Wharton Real Estate Review. In addition, he published over 100 scholarly articles, four editions of the acclaimed book Real Estate Finance and Investments: Risks and Opportunities, and the widely read Linneman Letter quarterly report.

Peter's long and ongoing business career is highlighted by his roles as Founding Principal of Linneman Associates, a leading real estate advisory firm; CEO of American Land Fund; and CEO of KL Realty. For more than 35 years, he has advised leading corporations and served on over 20 public and private boards, including serving as Chairman of Rockefeller Center Properties, where he led the successful restructuring and sale of Rockefeller Center in the mid-1990s.



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ASSOCIATES**



MEET THE AUTHOR: **BRUCE KIRSCH, REFAI**



Bruce Kirsch, REFAI
CEO of Real Estate
Financial Modeling

As the founder of Real Estate Financial Modeling (REFM), Bruce Kirsch has trained thousands of students and professionals around the world in Excel-based projection analysis. In addition, REFM's self-study products, Excel-based templates and its Valuate® property valuation and investment analysis software are used by more than 150,000 professionals. Mr. Kirsch's firm has assisted with modeling for the raising of billions of dollars of equity and debt for individual property acquisitions and developments, as well as for major mixed-use projects and private equity funds. Mr. Kirsch has also maintained a blog on real estate financial modeling, Model for Success, authoring more than 500 posts.

Mr. Kirsch began his real estate career at CB Richard Ellis, where he marketed highrise New York City office buildings for re-development in the Midtown Manhattan Investment Properties Institutional Group. After CBRE, Mr. Kirsch was recruited to lead acquisitions at Metropolis Development Company, and later joined The Clarett Group, a programmatic development partner of Prudential.

While at The Clarett Group, Mr. Kirsch was responsible for making development site recommendations for office, condominium and multi-family properties in the greater Washington, D.C. metropolitan area. In addition, Mr. Kirsch had significant day-to-day project management responsibilities for the entitlement, financing and marketing of the company's existing D.C.-area development portfolio.

Mr. Kirsch holds an MBA in Real Estate from The Wharton School of the University of Pennsylvania, where he was awarded the Benjamin Franklin Kahn/Washington Real Estate Investment Trust Award for academic excellence. Prior to Wharton, Mr. Kirsch performed quantitative equity research on the technology sector at The Capital Group Companies. Mr. Kirsch served as an Adjunct Faculty member in real estate finance at Georgetown University School of Continuing Studies. Mr. Kirsch graduated with a BA in Communication from Stanford University.



Past Adjunct Faculty
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The Wharton School



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