

Required Reading

SESSION #1

January 30

Introduction to the Capital Markets

Why is it important for the real estate or design professional to understand the real estate capital markets? The business of real estate investment and development is by its nature extremely capital intensive and therefore highly leveraged. Without a working knowledge of how real estate is financed and by whom, it is impossible to determine an operating project's value or the feasibility of a development project. As you go forward in your careers, an understanding of what kinds of questions you should be asking and how financial decisions are made will be invaluable.

The real estate capital markets are a subset of the broader capital markets and individual and institutional investors are constantly making decisions regarding their allocation of capital to real estate debt or equity. These investments can be in either the public or private markets. Real estate values are affected by competition and the flow of capital into various investment types, and within the real estate sector, the allocation of capital between the various property types. Moreover, real estate firms tend to structure their transactions to accommodate trends in the capital markets, which, as you will see, are never static.

This course is for students who have taken a basic real estate finance course or have some experience in the field. This first session will give you an overview of the full complexity of the capital markets and as the module continues, we will return to these concepts and break them out and study them in more detail.

The course will draw upon a rich combination of Harvard Business School cases, background reading and presentations by professionals in the field and expose you to how the capital markets really work.

*Guest: Kevin Midwinter, Director of Real Estate Research
Morgan Stanley*

SESSION #2
February 6

Real Estate as an Investment

In this class you will be introduced to the variety of possible forms of real estate ownership. You will see how value can be enhanced through the segmentation of the cash flows among various investors with varying risk profiles, investment requirements and tax preferences. While it will be important to understand the underlying real estate, you must also “*follow the cash*” to understand the true economics of the various interests in the property.

Guest: William J. Poorvu, Professor Emeritus, HBS

Case: Graybar Syndications

Note: Note on forms of Real Estate Ownership

Case Summary: In March 1958, the Graybar Building, a one million square foot office structure in midtown Manhattan, is facing competition from a new generation of buildings. Its proposed acquisition by a syndicate is predicated on a tiered structure of financing and returns to a complex array of participants. The challenge for the student is to wade through the legal documentation and decipher the priority and breakdown of the cash flow of the property and who gets what return and when. The case deals with many of the issues relating to financial deal structuring.

Study Questions :

1. What are the key factors to consider when analyzing the rental income from this property? How would you evaluate the operating issues of running this building?
2. What is the role of each of the players/ Why would they want to be in this transaction in the first place? What are the risks and returns?
3. Looking at the transaction in hindsight over forty years later, who were the likely big winners? Any sense of the value for each of the players' position today?

Supplemental Readings:

David Geltner and Norman G. Miller, Commercial Real Estate Analysis and Investments, 2000, Ch.7, Real Estate as an Investment: Some Background Information, p127-152

William J. Poorvu, The Real Estate Game, 1999, Ch. 5, Syndications and REITs, p 108-119, A Back of the Envelope Glossary p 299-317.

SESSION #3
February 13

Pooled and Comingled Funds and REITs

In this class, we will explore the advantages and disadvantages of the two most common vehicles for institutional ownership in real estate, private funds and public REITs. After we study the AMB Case, Doug Linde will give us insight into the issues he faces and strategies he employs as CFO of a major public REIT.

*Guests: Arthur Segel, HBS
Doug Linde, CFO, Boston Properties*

Case: The AMB Consolidation

Case Summary: Anne Shea, assistant vice president at the Curators' Fund (The Fund), is responsible for investing roughly \$80 million in real estate assets. Less than three years ago, Shea invested \$40 million into a commingled fund run by AMB Institutional Realty Advisors, Inc. a leading pension fund advisor and asset manager. She had been pleased with The Fund's relationship with AMB; investing with AMB provided a cost-effective, value-added means for The Fund to directly own property. Recently, AMB proposed to consolidate all the properties under its management into a REIT, and to take the new REIT public. Shea faces a decision: consent to the roll-up by exchanging her shares in the commingled fund for shares in the REIT, or sever ties with AMB by liquidating her position in the commingled fund at a price equal to the fair market value of the assets before the roll-up and public offering.

Study Questions:

1. How should Anne Shea vote for the roll up? Why?
2. What are the specific quantitative and qualitative advantages and disadvantages from her point of view?
3. Why is AMB's management proposing the roll-up? What are their risks? What

are the different skills required to run a public versus a private company in real estate?

4. If you were Anne Shea, what questions would you have for AMB at their investment meeting? If you were AMB, how would you answer Anne's concerns? Who has the bargaining power? How should she vote?
5. How do REITs fit in an institutional investment portfolio.

Supplemental Reading:

David Geltner and Norman G. Miller, Commercial Real Estate Analysis and Investments, 2000, The Question of Segmented Capital Markets: REIT's versus Private Property, p. 583, Are REIT's Growth Stocks or Income Stocks? P.631-632, REIT Analysis, Terminology and Issues p 635-645.

Goldman Sachs, "REIT's 101, An Introduction to Real Estate Investment Trusts"

William J. Poorvu, The Real Estate Game, 1999, Ch. 5, Syndications and REIT's, p 119-144

2002 Annual Report at www.bostonproperties.com

"Think Cash Flow", Barrons, July 17,2000.

SESSION #4 February 20

Portfolio Diversification and Real Estate Valuation

This will be an opportunity to sit in the shoes of a portfolio manager and decide what the preferred characteristics of an institutional portfolio should be. You will need to consider property type, risk, market, size, value and diversification.

Case: The IBET Pension Fund

Note: A Technical Note and Discussion on Real Estate Valuation

Case Summary: In February 1999, Sarah Griffin, manager for real estate of the \$2.3 billion IBET Pension Fund, must assess the individual values for the 8 individual properties held by the fund and propose an overall portfolio strategy. After several years of a holding pattern of activity, the Trustees had indicated a willingness to increase the fund's

investments in real estate from slightly over 5% to 10% of the total portfolio.

Supplemental Readings:

David F. Swensen, *Pioneering Portfolio Management*, 2000. Ch 8, Alternative Asset Classes, Role of Real Estate p. 216-224. and p.122-123

David Geltner and Norman G. Miller, Commercial Real Estate Analysis and Investments, 2000, Ch. 21, Real Estate and Portfolio Theory: Strategic Investment Considerations p. 513

WRITTEN ASSIGNMENT: Fill out the Portfolio Summary Sheet in Exhibit 1 valuing the individual properties. In addition, please show your valuation analysis and make a recommendation to hold or sell each property along with your rationale. Write a 2-4 page memorandum recommending a portfolio and implementation strategy. Work in Groups of up to 4 people.

SESSION #5
February 27

Private and Public Debt

Case: Canary Wharf

Canary Wharf is an office and retail complex located in the Docklands area of East London consisting of 11.5 million square feet of completed buildings and with 8 million square feet of remaining development rights. Following a turbulent beginning and bankruptcy in 1992, it has arguably become the most significant real estate development of the 20th century. In 1997 Canary Wharf was facing huge capital needs, and began to tap into the Commercial Mortgage Backed Securities (CMBS) market for its debt financing. We will discuss the advantages and disadvantages of this program, the uses of the funds and some of the unique features of the Canary Wharf issues. We will also explore the effect of success of the securitizations on the company in terms of its leverage and its flexibility going forward.

David Geltner and Norman G. Miller, Commercial Real Estate Analysis and Investments, 2000, Chapter 13, Use of Debt in Real Estate Investment: The Effect of Leverage, p 305-326 and Ch 20 Introduction to Commercial Mortgage-Backed Securities p. 492-510.

SESSION #6
March 6

Capitalization and the Capital Markets

Case: Canary Wharf (continued)

CWG became a public company in 1999 and despite the construction and leasing of 3.8 million square feet since that time, its stock is now trading near its initial offering price. The Net Asset Value is arguably much higher than is reflected in the stock price. What is going on? Is the company being fairly valued? Should Canary Wharf be a public company? Is the public market able to value development opportunity and risk? Should management take any actions to enhance the value for the shareholders? What is the debt capital market saying about value? What is the impact of the company's return of capital program?

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Supplemental reading:

Canary Wharf Analyst Reports

Other Canary Wharf Documents

Scott R. Muldavin and John J. D'Andrea, "Capital Markets Stabilize Real Estate Economy", PREA Quarterly, Summer 2002.

WRITTEN ASSIGNMENT: Write a 2 page memorandum and a 5 minute power point presentation to the Board of Directors summarizing your strategy for how the company can monetize the value of the underlying real estate and how your understanding of the capital markets has affected your decision. You will present your recommendation in class. (This exercise may be done in groups depending on the size of the class)

