B8333: Real Estate Capital Markets (“RECM”)

**Fall 2016 – Preliminary Syllabus**

Professor Bradford Wildauer
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# Prerequisites

Real Estate Finance (B8331) or by permission of the professor.

# Course Sessions

**Time: Full Term, Tuesday 4:00:00 PM** to **7:15:00 PM**

**Location: Uris 326**

# Course Description

Commercial real estate (“CRE”) attracts capital from a broad range of domestic and foreign sources and the capital flows change in response to evolving market conditions. The flow of capital and overall market liquidity can often have a greater impact on property values than the trends in the underlying property market fundamentals. Given the interdependence of the global debt and equity capital markets, an understanding of the interrelationships across markets and among asset sectors is necessary to evaluate emerging trends in CRE capital flows.

This course is designed to provide an overview of CRE capital markets, a practical knowledge of CRE debt and equity capital sources, and a general understanding of the links between CRE capital flows and trends in the broader capital markets. In the debt markets, the course will cover balance sheet first mortgage lending, first mortgage lending for securitization and commercial mortgage backed securities (“CMBS”), subordinate debt structures, including B-notes, mezzanine debt and preferred equity, and inter-creditor dynamics between senior and subordinate structured investments. The course will briefly cover alternative financing structures such as Federal agency (Fannie Mae, Freddie Mac) financing. We will discuss financing structures for cash flowing and transitional properties and development projects. In the equity markets, we will cover the private markets including pension funds, sovereign wealth, high net worth and private equity investment strategies and public market vehicles including real estate investment trusts (“REITs”), both public traded and non-traded structures, and real estate operating companies (“REOCs”).

In addressing each topic, we will review the structural, risk and return dynamics of each capital instrument from the perspectives of both capital providers and property investors. For each topic, we will review the relevant descriptive, structural, credit, pricing and tax considerations and develop familiarity with the necessary analytical tools for structuring and evaluating the investments. My goal is for you to develop critical thinking in assessing the utilization of, or an investment in, the different capital structures. To emphasize the dynamic nature of the capital markets, each week we will review current trends in pricing and structuring in the context of deals in the news including the weekly real estate sections of the Wall Street Journal and New York Times.

Among the themes that will recur throughout the course are the following:

* Impact of broader capital market events on CRE capital flows, pricing and liquidity;
* Evaluating risk and return drivers for capital sources and investment structures;
* Impact of capital market perceptions regarding sponsorship, property types and geography;
* Capital tradeoffs and tailoring capital structure to project development, operating and ownership objectives;
* Structures and practical realities when deals go wrong; and
* Property fundamentals versus capital flows.

At the end of the term, students can expect to have developed a working familiarity with the following:

* The key drivers of real estate capital flows and capital pricing;
* All of the major public and private sources of debt and equity capital for CRE;
* The key structural elements and credit considerations for each form of financing;
* How to structure the capitalization for a given project type; and
* How to analyze and make a secondary investment in a given financial structure.

# Method of Instruction

The instruction will utilize a combination of lecture, case study, group discussion and guest speakers; the focus will be on current market transactions. As the CRE capital markets are ever changing, each class session will commence with a discussion of current market pricing trends and the factors driving them. The class will be divided into groups in the first class and each week at the beginning of class a group will make a 15 minute presentation on current events in the global capital markets, real estate capital markets and notable events in the real estate sector. All students are expected to participate in these discussions.

# Readings

There is no required textbook for the class. The readings for each class that will be posted to Canvas. Some of these readings will be required, others will be optional or background reading for interested students. Students are expected to complete all reading prior to the class session and to be prepared to participate in the class discussion and to respond to cold calling. The slide deck prepared for each class session will be posted to Canvas the day after the session. Other class materials such as assignments, and course announcements will also be posted on Canvas.

# Electronics

A financial calculator will be required for the course and for exams. Any financial calculator is acceptable (i.e. HP-12C, TI-BA II) but it should have the ability to perform discounted cash flow and mortgage calculations and you are expected to understand how to use it. You will not be permitted to use a phone calculator during exams. The use of laptops or tablets during class or exams is strictly prohibited.

# Grading

Grading will be based on the following: 20% written assignments, 25% class participation, 25% mid-term exam and 30% on final exam. Written assignments will include homework and cases. Some assignments will be done individually while others will be done in groups. Class participation grading will be based on the frequency and relevance of contributions to class discussions, including Markets Review, case discussion and Investment Committee.

# Connection with the core and other prerequisites

Real Estate Capital Markets builds on a variety of topics taught in the core courses particularly Corporate Finance, Global Economics, Managerial Economics and Strategy.

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| **Core Course** | **Connection with Core** |
| Corporate Finance | 1. Time value of money
2. Opportunity cost of capital
3. Risk
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| Strategy Formulation | 1. Creation of value vs. value capture
2. Trade-offs
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| Leadership  Development | 1. Ethics
2. Decision making
3. Influence & Persuasion
4. Negotiations
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| Global Economic Environment | 1. Inflation and the business cycle
2. Fiscal policy
3. Role of financial markets in the economy
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Corporate Finance (B6300) and Real Estate Finance (B8331) are prerequisites for B8333 as it is important that students have a working understanding of finance and real estate investment concepts.

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# Classroom Protocol

All students are expect to demonstrate the CBS Core Culture classroom protocol:

## Present

* On time and present for every session
* Attendance will be tracked

## Prepared

* Complete assigned pre-work, expect cold calling
* Bring nameplates

## Participating

* Constructive participation expected and part of grade
* No electronic devices unless for educational purposes, When allowed, should be directive, active, and specific with use.

Additionally, students are expected to demonstrate the following classroom courtesies:

* Please be prepared each week to discuss, in class, the case, current events in real estate or the capital markets.
* Please do not be late or leave early for a guest presentation.   Please be prepared to engage each week’s speaker with questions. Please refrain from bringing food to guest presentations
* Unless previously arranged with the professor or TA, attendance at guest presentations is limited to students enrolled in this course.

# Teaching Assistant

# TBD

# Professor Office Hours

By appointment – please email the professor to arrange.

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| **Week** | **Topic** | **Reading** |
| **1****Sep 6** | **Overview of CRE Capital Markets*** CRE capital in the context US and global markets
* Nature of money flows
* Credit market interdependence and relative value
* Macroeconomic concepts: money supply and liquidity, interest rates, regulatory pressures
 | *Policies for Macrofinancial Stability: Options to Deal with Real Estate Booms*, IMF, Crowe et al, 2011*International Investment Atlas, 2015*, Cushman and Wakefield*2015 Commercial Real Estate Outlook*, Deloitte |
| **2****Sep 13** | **Mortgages Loans*** Legal Construct
* Underwriting
* Credit Analysis
* Sizing
* Pricing
* Structuring
* Property specific underwriting issues
 | *Commercial Real Estate Lending in the US,* Montgomery, Kuntz – Shearman & Sterling 2002*CRE Finance Counsel* - *Principles Based Underwriting Framework*, CREFC 2010*CMBS Property Evaluation Criteria, 2015,* Kroll Bond Rating Agency*CRE Lending Handbook,* Office of the Controller of the Currency, 2013 |
| **3****Sep 20** | **Subordinate Debt*** Structuring alternatives
* Intercreditor agreements
* Pricing
* Operational and default dynamics for subordinate investors
* Appraisal reduction

**Note: T**he followingpaper is very informative on subordinated debt: *Mezzanine Debt and Preferred Equity in Real Estate,* Andrew R. Berman, 2012. It can be found at this link:<http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2425911> | *Commercial Real Estate Mezzanine Lending: Current Structural Features, Loan Document* Rozes, Ginsburg - Dechert 2013*Intercreditor Agreements 2.0: Lessons Learned in the ‘Tranches’,* Fawer and Austin, New York Law journal, 2011*Comparison of Subordinate Debt Structures,* Wildauer and Temple, 2012 |
| **4****Sep 27** | **CMBS Origination*** Credit construct
* Types of CMBS issuance
* Rating agency criteria
* Loan Pool Rollup
* Tranching of bonds
* Pricing
 | *CRE Finance Counsel- CMBS E-Primer,* CREFC 2013*CMBS 101,* Berenbaum,Wheeler CREFC Annual Conference, 2015*BACM 2006-6 Offering Memorandum* |
| **5****Oct 4** | **CMBS Secondary Investing and Analytics*** Loan pool underwriting
* Bond structure
* Defaults, Loss given default, Prepayments
* Yield analysis
* B-pieces
 | *Ratings Action–BACM 2006-6*Moody’s Investors Service*Servicer Report–BACM 2006-6,* Sep. 2015*Trustee Report–BACM 2006-6,* Sep. 2015*CMBS loans in the news* – Credit Suisse, Feb. 2012 |
| **6****Oct 11** | **Transitional Lending; Alternative Financing*** Development Financing
* Bridge Financing
* HVCRE

**CRE Debt Review** | *Construction Loan Industry Standard Practices*, Coker, 2015*HVCRE – US Federal Banking Agencies Release Answers to FAQ*, Gibson Dunn, 2015*AIA Pay Application Form**Standard Terms and Conditions – Construction Loan**MFDraw Workbook -*Texas |
| **Friday, October 21** | **9:00 am B8333 Mid Term Exam –**  |  |

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| **7****Nov 1** | **Equity Markets;** * Market participants
* Public sources
* Private sources
 | *2014 Institutional Real Estate Allocations Monitor,* Cornell University, Hodes Weill & Assoc.*Global Investment Managers* *2014*, Institutional Real Estate, Inc. |
| **8****Nov 15** | **REIT Overview, Structuring and Capitalization*** Tax construct
* Structural requirements
* Business strategies
* Internal vs external management
* Public market criteria
* Balance sheet management
* Structure variations
 | *REIT Primer, 4th Ed.* BofAML *REITs 101: An Introduction*, Barclays*REIT IPOs*, Morrison & Foerster*A Primer on US Equity REITs and Their Role in an Institutional Investment Portfolio*, NEPC, Ruhman, Bruce et. al. |
| **9** **Nov 22** | **Joint Venture Structuring*** JV Structures and promoted interests
 | *Understanding and Teaching Private Equity Structures*, Hutchison, 2012*Key Considerations in Joint Venture Projects*, Schneiderman, Altshuler,*Structuring Real Estate JVs,* Boliek, Pickett, Temple, 2014*Real Estate JV Promote Calculations*, REFJ- Carey, 2013*A Primer on Real Estate Joint Venture Agreements*, Gosfield, Stern, 2008 |
| **10****Nov 29** | **REIT Investment Presentations** | *REIT Valuation: The NAV-based Pricing Model*, Green Street Advisors |

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| **11****Dec 6** | **Equity Fund Structures*** Fund Strategies
* Open end funds
* Closed end funds
* Private equity funds
* Structures and economics
* Fund raising
 | *The Advantages of the Private Equity Real Estate Fund Model*, Morgan Stanley Europe, 2013*Private Real Estate Funds, What They Are, How They Work,*  Westgroup*US Core Real Estate: Past, Present and Future View*, MetLife*Trends in Real Estate Compensation,* Schneiderman ,Wells*Prequin Special Report: US PERE Fund Management Industry*, Prequin, 2013*A Primer on Real Estate Private Equity Fund Formation*, Fisher et. al., 2010 |
| **12****Dec 13** | **Course Review** |  |
| **Monday****Dec 19** | **2:00 pm B8333 Final Exam** |  |