



Center for
Real Estate
Finance Research

Syllabus

Real Estate Investment Strategies FINC-GB.2341.30 Spring 2021

CLASSROOM

Location: Zoom

INSTRUCTOR

Professor Vineet Bedi, CFA
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Office Hours Location: TBD

TEACHING ASSISTANT

Kevin Leung
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Office Hours: Thursday, 6:30-7:30 PM (via Zoom)

Kevin is here to help you with questions about the course and will hold office on Thursday evenings via Zoom. Do not hesitate to contact by email with questions about the class material.

CLASS TIME

The class meets once per week on Tuesday nights from 6-9 PM ET.

CONTENT

The course is designed for graduate students with a strong interest in real estate capital markets. Its target audience is students specializing in Real Estate, but the course is also open to finance-oriented students who wish to gain an in-depth understanding of real estate

investment analysis. More information on the Real Estate specialization for MBAs and the Real Estate track for undergraduates can be found at the end of this syllabus.

The course addresses public and private providers of real estate debt and equity capital and how this capital is channeled into commercial real estate. In recent decades, commercial real estate as an asset class had accessed the public markets for capital through the securitization of debt and equity. More recently, this connection to global capital was disrupted by the financial crisis and caused the public debt and equity markets to freeze, causing a severe liquidity crisis for commercial real estate.

We are now past the thaw and CRE public debt markets and equity markets are well into the cycle in terms of recovery and growth. How long it will last is anybody's guess, and we can talk about market cycles and warning signs in our online forums.

This course will touch on public/structured commercial real estate financing, REITs and discuss traditional balance sheet lenders: insurance companies and commercial banks. We will look at the evolution of securitized commercial real estate debt. We'll examine the roles of the major participants in these structures and the history and variations of mezzanine debt financing for CRE properties.

We will also address securitized equity: the history, growth, structure and measures of value and performance of real estate investment trusts (REITs). REITs, as an asset class, have been stellar performers from the trough of March 2009 -- stabilizing from 2010 to the present.

We will also pay attention to the deep involvement of private equity, specifically pension and Sovereign Wealth Funds (SWFs) -- large providers of equity for commercial real estate. We will also discuss the interaction of these funds with public and private real estate operating companies, primarily REITs, but other investment managers as well.

Topics covered will span the real estate equity and debt markets. The bulk of the course focuses on commercial real estate. There are three major sections in the course: Public equity markets (Equity and mortgage REITS); public and private debt markets; and Real Estate Private Equity with a lens from the investment/principal side.

The goal of the course is to give students in-depth exposure to current trading strategies in real estate capital markets and teach the tools to analyze their own trading ideas. The homework will help students explore trading themes. Finally, a main aspect of the course is a trading competition where student teams propose a trading strategy and present the results in the last week of class in front of a panel of professional judges.

PREREQUISITES

The only formal pre-requisite for this course is Foundations of Finance (MBA) or Foundations of Financial Markets (UG) **although it is recommended that students complete Real Estate Primary Markets or Real Estate Capital Markets before the class.** The course presumes basic knowledge of real estate finance at a level taught in Real Estate Primary Markets or Real Estate Capital Markets, even though those are not formal pre-requisites. **For those looking for an analytical and model driven course in real estate markets, the Real Estate Capital Markets course would be more appropriate. To the extent that knowledge from Real Estate Capital Markets is required, I will provide the materials as mandatory reading.**

A portion of the course will go in some depth into modeling and will use quantitative tools. Intimate knowledge of time value of money is required and prior coursework in fixed income securities and valuation would also be useful.

The appropriate tools necessary for solving these problems will be developed at each stage and practiced in the homework assignments. The models we will cover have immediate applications and implications for real-world financial decisions. Every effort will be made to relate the course material to current financial news.

READINGS

The readings will be a mix of textbook materials, industry primers, and academic papers, with the goal of marrying sound theory and empirical analysis with relevant current events and practices. Class sessions are organized with the same goal in mind. My lectures will focus on the concepts and practical applications while the guest lectures from industry professionals who will focus on the practical day to day use. The class will be less focused on theory and more attributable to those who want to pursue a career in real estate with real world knowledge.

The course will utilize weekly lectures for the bulk of the study materials. I will also post articles and primers that are succinct explanations of important concepts.

Highly recommended (but not required) books.

These books address the causes of the single-family bubble, the bursting of that bubble and the Aftermath. These are good reads and give insight into the people and institutions involved in the capital markets so are helpful preparation for career activity now and post-graduation. I indicate (by stars) the ones that are the easiest reads:

- Johan Norberg, *Financial Fiasco: How America's Infatuation with Homeownership and Easy Money Created the Economic Crisis*, © 2009 Cato Institute ★
- Michael Lewis, *The Big Short: Inside the Doomsday Machine*, © 2010 W.W. Norton & Company ★
- Michael Lewis, *Boomerang: Travels in the New Third World*, © 2011 W. W. Norton & Co. ★

- Andrew Ross Sorkin, *Too Big to Fail: The Inside Story of How Wall Street and Washington Fought to Save the Financial System---and Themselves*, © 2009 Viking
- Gretchen Morgenson (*New York Times* Columnist) and Joshua Rosner, *Reckless Endangerment, How Outsized Ambition, Greed, and Corruption Led to Economic Armageddon* © 2011 Times Books, Henry Holt
- Simon Lack, *The Hedge Fund Mirage: The Illusion of Big Money and Why It's Too Good to be True*, © 2012, Wiley
- Neil Barovsky (Former Special Inspector General in charge of Oversight of TARP), *Bailout, An Inside Account of How Washington Abandoned Main Street While Rescuing Wall Street*, © 2012, Free Press
- Charles Bagli, *Other People's Money*, © 2013, Dutton / Penguin Group ★
- Carmen M. Reinhart and Kenneth S. Rogoff, *This Time is Different: Eight Centuries of Financial Folly* ©2009, Princeton University Press ★

Finally, a most excellent source for all aspects of commercial real estate, both debt and equity, domestic and international, is the Prudential Real Estate Investors website www.prei.com

STAYING UP TO DATE

You are strongly encouraged to follow real estate finance news, broadly defined. If you encounter an interesting article that you would like to share with the class, please send me an email and I will post it on the class web site. A section of the NYU classes site will be devoted to interesting background articles, and this section will be regularly updated during the semester.

I'd also encourage you to read Commercial Mortgage Alert after our first class. You can get a Trial / Student Subscription by contacting them on the web.

GRADING AND ASSIGNMENTS

Final exam
(45%)

The final exam tests your understanding of the key concepts in the class. They do not test your ability to memorize or to use your computer. To prepare for the exam, you should review the slides together with your own class notes, the readings, and the problem sets. The final exam covers the material of the entire semester. If you must miss an exam, you will be required to make it up after the semester is over.

Final Project
(20%)

The final project involves coming up with an investment hypothesis, selecting real estate securities to implement it, back testing the idea, and presenting the analysis in the last class of

the semester in front of a panel of judges. This is a group project in teams of 4-5 students. This problem set will require (at least) weekly meetings in the first half of the semester, as well as an intensive preparation before the final class.

Midterm (25%)

The midterm will be a take home exam that will be timed with approximately 24-72 hours to complete. It will occur after Week 6 and cover the first half of the class topics.

Problem Sets (5%)

There will be two problem sets over the course of the semester. Each problem set contains one excel question, emphasizing a practical implementation of a concept. The problem sets are graded on a five-point scale. Late problem sets will *not be accepted*. You will work in your pre-picked groups on these problem sets and hand in one copy as a group.

Professionalism (5%)

Each student is invited to treat the class as a business meeting. This includes creating an environment where all participants treat all others with respect (fellow students, guest lecturer, and professor). Professionalism also means exploring the course content –broadly defined- as a matter of professional interest, not just as a student completing a fixed set of requirements. The grade for professionalism will be based on three components:

- Your on-time completion of quizzes and homework
- My evaluation and that of the TA of your in-class participation
- Your classmates' peer evaluation of your professionalism in your teamwork and in class

STUDY GROUPS

It is highly recommended that you regularly review the class material in your study group. Don't wait until exam time to meet with your group. By then it's too late. You are encouraged to work on the problem sets with your study group, but you must hand in your own answers.

Please do not engage in any side conversations during the lecture. Repeated occurrence of such disruptions will be reflected in the final grade.

ACADEMIC INTEGRITY

Academic integrity and honesty is central to our mission as an educational institution. [The MBA Code of Conduct](#), which all students sign, therefore places particular emphasis on academic

integrity. Notably this includes refraining from any method or means that provides an unfair advantage in exams or papers, and clearly acknowledging the work of others in your own work. As a reminder, the [entire Code of Conduct is available here](#).

To help ensure the integrity of our learning community, prose assignments you submit to NYU Classes will be submitted to Turnitin. Turnitin will compare your submission to a database of prior submissions to Turnitin, current and archived Web pages, periodicals, journals, and publications. Additionally, your document will become part of the Turnitin database.

STUDENT ACCESSIBILITY

New York University is committed to providing equal educational opportunity and participation for students with disabilities. Students who are interested in applying for academic accommodations are advised to reach out to the Moses Center for Student Accessibility (CSA) as early as possible in the semester. If you already receive accommodations through CSA, you are encouraged to request your accommodation letters through the Moses portal as soon as possible.

Moses Center for Student Accessibility (CSA), 212-998-4980, mosescsa@nyu.edu, www.nyu.edu/csa

If you will require academic accommodation of any kind during this course, you must notify me at the beginning of the course and provide a letter from the Moses Center for Student Accessibility (212-998-4980, mosescsa@nyu.edu) verifying your registration and outlining the accommodations they recommend. If you will need to take an exam at the Moses Center for Student Accessibility, you must submit a completed Exam Accommodations Form to them at least one week prior to the scheduled exam time to be guaranteed accommodation. For more information, visit the CSA website: <https://www.nyu.edu/students/communities-and-groups/student-accessibility.html>

STUDENT WELLNESS

Classes can get stressful. I encourage you to reach out if you need help. The NYU Wellness Exchange offers mental health support. You can reach them 24/7 at 212 443 9999, or via the “NYU Wellness Exchange” app. There are also drop in hours and appointments. Find out more at <http://www.nyu.edu/students/health-and-wellness/counseling-services.html>

CLASS SCHEDULE

Below is a detailed schedule of the date and topic of each class. There is no required textbook for the course. Most of the readings will be distributed in pdf format via NYU classes.

Note Session = Week

Session	Topic
Session 1	Introduction: REITs and Role of REITs in a Long Only Portfolio
Session 2	Role of REITs in a Long Only Portfolio and CRE Sectors
Session 3	REIT Valuation and Quantative Strategies
Session 4	NAV and REIT Financial Statements
Session 5	Focus on Mortgage REITs
Session 6	Single Family REITs (mid term after week 6)
Session 7	Subordinate and Mezzanine Debt
Session 8	CMBS: Structuring and Valuation Strategies
Session 9	New Topics in Real Estate (ESG, Co-Living, Proptech)
Session 10	Private Equity: Direct and Indirect Investment, Case Studies
Session 11	Final Presentations
Session 12	Final Exam