



Center for
Real Estate
Finance Research

Syllabus

Real Estate Investment Strategies FINC-UB.35 Spring 2023

CLASSROOM

Location: KMEC Room: 3-80

INSTRUCTOR

Professor Vineet Bedi, CFA
Adjunct Associate Professor of Finance
Email: vbedi@stern.nyu.edu
Phone: (973) 946-1884
Office Hours: TBD
Office Hours Location: TBD

TEACHING ASSISTANT

TBD

The TA is here to help you with questions about the course and will hold office on TBD via Zoom or in person. Do not hesitate to contact by email with questions about the class material.

CLASS TIME AND FORMAT

The class meets twice per week on Monday and Wednesday from 3:30-4:45 from 1/23/2023 to 5/8/2023 in-person in KMEC 3-80.

There will be a dedicated Slack channel for our class where we will have robust conversations and share relevant industry information throughout the semester.

CONTENT

The course is designed for undergraduate 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 introductory course in real estate secondary 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 Morgensen (*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
(35%)

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 (35%)

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 (20%)

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

Our undergraduate [Academics Pillar](#) states that ***we take pride in our well-rounded education and approach our academics with honesty and integrity***. Indeed, integrity is critical to all that we do here at NYU Stern. As members of our community, all students agree to abide by the [NYU Academic Integrity Policies](#) as well as the NYU Stern Student Code of Conduct, which includes a commitment to:

- Exercise integrity in all aspects of one's academic work including, but not limited to, the preparation and completion of exams, papers and all other course requirements by not engaging in any method or means that provides an unfair advantage.
- Clearly acknowledge the work and efforts of others when submitting written work as one's own. Ideas, data, direct quotations (which should be designated with quotation marks), paraphrasing, creative expression, or any other incorporation of the work of others should be fully referenced.
- Refrain from behaving in ways that knowingly support, assist, or in any way attempt to enable another person to engage in any violation of the Code of Conduct. Our support also includes reporting any observed violations of this Code of Conduct or other School and University policies that are deemed to adversely affect the NYU Stern community.

The entire Stern Student Code of Conduct applies to all students enrolled in Stern courses and can be found here: <https://www.stern.nyu.edu/portal-partners/current-students/undergraduate/community/community-expectations>

To help ensure the integrity of our learning community, prose assignments you submit to NYU Brightspace 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.

GENERAL CONDUCT & BEHAVIOR

Students are also expected to maintain and abide by the highest standards of professional conduct and behavior.

Please familiarize yourself with Stern's Policy in Regard to In-Class Behavior & Expectations (<http://www.stern.nyu.edu/portal-partners/current-students/undergraduate/resources-policies/academic-policies/index.htm>) and the NYU Student Conduct Policy (<https://www.nyu.edu/about/policies-guidelines-compliance/policies-and-guidelines/university-student-conduct-policy.html>).

GRADING GUIDELINES

[Grading Information for Stern Core Courses](#)

At NYU Stern, we strive to create courses that challenge students intellectually and that meet the Stern standards of academic excellence. To ensure fairness and clarity of grading, the Stern faculty have adopted a grading guideline for core courses with enrollments of more than 25 students in which approximately 35% of students will receive an “A” or “A-” grade. In core classes of less than 25 students, the instructor is at liberty to give whatever grades they think the students deserve, while maintaining rigorous academic standards.

Grading Information for Stern Elective Courses

At NYU Stern, we strive to create courses that challenge students intellectually and that meet the Stern standards of academic excellence. To ensure fairness and clarity of grading, the Stern faculty have agreed that for elective courses the individual instructor or department is responsible for determining reasonable grading guidelines.

STUDENT ACCESSIBILITY

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](tel: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

Our aim is for students to be as successful academically as they can, and to help them overcome any impediments to that. Bookmark the NYU Stern Well-being Resource Hub (<https://www.stern.nyu.edu/wellbeing>) for existing services at NYU and Stern covering a wide variety of topics including financial well-being, relationship well-being, mental well-being, and more. Any student who may be struggling and believes this may affect their performance in this course is urged to contact the Moses Center for Student Accessibility (see also the Student Accessibility section of this syllabus) at 212-998-4980 to discuss academic accommodations. If mental health assistance is needed, call the NYU’s 24/7 Wellness Exchange hotline 212-443-9999. Furthermore, please approach me if you feel comfortable doing so. This will enable me to provide relevant resources or referrals. There are also drop in hours and appointments. Find out more at <http://www.nyu.edu/students/health-and-wellness/counseling-services.html>

NAME PRONUNCIATION AND PRONOUNS

NYU Stern students now have the ability to include their pronouns and name pronunciation in Albert. I encourage you to share your name pronunciation and preferred pronouns this way. Please utilize this link for additional information: [Pronouns & Name Pronunciation](#)

RELIGIOUS OBSERVANCES AND OTHER ABSENCES (OPTION 1)

NYU's [Calendar Policy on Religious Holidays](#) states that members of any religious group may, without penalty, absent themselves from classes when required in compliance with their religious obligations. You must notify me in advance of religious holidays or observances that might coincide with exams, assignments, or class times to schedule mutually acceptable alternatives. Students may also contact religiousaccommodations@nyu.edu for assistance.

NYU Stern is committed to ensuring an equitable educational experience for all students regardless of identity or circumstances and strives to recognize the obligations its students have outside of Stern. Please review all class dates at the start of the semester and review all course requirements to identify any foreseeable conflicts with exams, course assignments, projects, or other items required for participation and attendance. If you are aware of a potential conflict, please contact me as soon as possible to discuss any potential conflicts to determine whether/how they can be accommodated.

INCLUSION STATEMENT

This course strives to support and cultivate diversity of thought, perspectives, and experiences. The intent is to present materials and activities that will challenge your current perspectives with a goal of understanding how others might see situations differently. By participating in this course, it is the expectation that everyone commits to making this an inclusive learning environment for all.

CLASS SCHEDULE

Below is a detailed schedule of the date and topic of each class. Readings are indicated in the last column (to be completed). Required readings are denoted as RR while suggested readings are denoted as SR. There is no required textbook for the course. Most of the readings will be distributed in pdf format via NYU classes. Note Session = Week

Week 1	Introduction: REITs and Role of REITs in a Long Only Portfolio
Week 2	Role of REITs in a Long Only Portfolio and CRE Sectors
Week 3 - 4	REIT Valuation and Quantative Strategies
Week 5	NAV and REIT Financial Statements
Week 6	Focus on Mortgage REITs
Week 7	Single Family REITs (mid term after week 6)
Week 8-9	Subordinate and Mezzanine Debt
Week 9-10	CMBS: Structuring and Valuation Strategies
Week 11	New Topics in Real Estate (ESG/ Proptech)
Week 12	Private Equity: Direct and Indirect Investment, Case Studies
Week 13	Final Presentations
Week 14	Final Exam