**B8454 Real Estate Equity Securities Analysis**

**Fall 2023, A term
Tuesdays, 6:00 – 9:15pm (Geffen 420)**

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| **Adjunct Professor Ross Smotrich**Email: rls89@columbia.eduPhone: (914) 646-8398Office Hours: Please Contact Me Directly | **Course Assistants:****Sebastian Ore – TA**  sore24@gbs.columbia.eduPhone: (332) 242-0292 |
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Communications from professor and teaching assistants about the course will take place through Canvas.

Students should make sure they regularly check for announcements and messaging notifications.

**Course Schedule:**

Tuesdays A term: 6:00 pm – 9:15 pm

Dates: 9/5/23, 9/12/23, 9/19/23, 9/26/23, 10/3/23, 10/10/23

Classroom: Geffen 420

**Review Sessions / Field Trips**: There will be two optional review sessions – on Friday 9/15/23 and Friday 9/22/23; format and time TBD. We will cover a Net Asset Value Calculation and Building a Company Earnings Model. Additionally, we expect to arrange one or two optional field trips to visit company offices / REIT assets on dates TBD.

**Course Description / Student Learning Outcomes**

REITs have existed as a legal form for over 55 years, but the modern REIT era can be traced to the early 1990’s. Since that time, the sector has grown from approximately $5.0 billion in assets to over $1.0 trillion. More importantly, the migration of assets and talent into the public markets has helped make REITs one of the primary drivers of value creation in the real estate industry as well as a repository of operating expertise. By some estimates REITs today comprise 15.0 - 20.0% of the investible commercial real estate market; given significant competitive advantages, that share is growing. The net result has been irrevocable structural change and increased stability across the real estate industry. The REIT sector has evolved into a very viable and credible investment class; the group now comprises a significant weighting in the major stock indices with its own industry classification.

*Real Estate Equity Securities Analysis* will serve as a substantive introduction to the companies that comprise the REIT and real estate securities sectors, conceptually and as an investment. The course will provide the requisite analytical tools to value real estate stocks; we will utilize conventional securities analysis tools, on an applied basis. It will also look holistically at the REITs as operating entities, specifically how these companies work and what they are worth. We will incorporate qualitative, strategic and technical considerations into the quantitative valuation analyses – to reach more rigorous and successful investment conclusions. Rhetorically, the course will utilize a combination of lectures and case studies, interactive group exercises and discussion. Notably, guest speakers will include senior executives from issuing REITs as well as buy-side securities investors – both hedge fund and global portfolio managers. The final project will group students into teams to select a specific REIT security and prepare a stock recommendation for presentation to an investment committee. *Real Estate Equity Securities Analysis* will provide the actionable skills and broad analytical insight to participate successfully -– as an investor or as a partner – in a sector that has emerged as one of the most important drivers of the real estate industry globally.

***Student Profiles:*** *Real Estate Equity Securities* is designed to be a second year, upper-level finance course. The pre-requisites below highlight the need for a working knowledge of fundamental real estate concepts, corporate finance, and capital markets tools – including how to model and value a specific asset and underwrite a real estate market. Those tools and concepts will be applied at the entity and on a macro level in order to understand the value of a company in the securities markets.

Additionally, our guest speakers will be REIT CEOs and senior securities investment executives. As such, the course material will be extremely worthwhile for real estate concentrators; students with a general interest in real estate, corporate strategy or liquid securities / portfolio management will also find the content relevant.

**Course Pre-requisites**

Real Estate Finance (B8331), Corporate Finance (B6300) and Capital Markets (B8306) are pre-requisites.

It is important that students have a working understanding of real estate investment concepts and conventional corporate finance tools.

This half session “A” course is focused on the analysis of commercial real estate equity securities. It is complimented by the half session “B” course – Real Estate Debt Markets. Students may wish to take the two courses sequentially for a more complete understanding of the broader real estate capital markets.

**Course Materials / Communication / Administration**

Assigned course readings for each class will be posted on Canvas approximately one to two weeks prior to the relevant session. Power Point slides for each lecture will also be available on Canvas concurrent with the specific class.

Course communication from Professor Smotrich and the Course Assistants will take place through Canvas. Students should check Canvas regularly for course updates, announcements, and other notifications.

Assignments should be turned in at the beginning of class on the day it is due. Late assignments will not be accepted. Reading materials covered by guest speakers are required.

Class participation will comprise a significant portion of your course grade. Absences and late arrivals will be considered as a factor in class participation.

**Connection with the Core Curriculum**

Real Estate Equity Securities Analysis 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  | * Time value of money
* CAPM
* Opportunity cost of capital
* Risk
* Efficient Markets
* Return on Invested Capital
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| Strategy Formulation  | * Value Creation vs. Value Capture
* Trade-offs – Risk vs. Reward
* Balance Sheet Strategy
* Entity Level Operating Strategy
 |
| Leadership Development  | * Ethics
* Decision making
* Corporate Governance
 |
| Global Economic Environment  | * Inflation and the business cycle
* Fiscal policy
* Role of financial markets in the economy
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**CLASSROOM NORMS AND EXPECTATIONS**

**Students are expected to adhere to** [**CBS Core Culture**](https://www8.gsb.columbia.edu/samberg/cbs-core-culture) **in this class by being Present, Prepared, Participating.**

***Expectations:*** Students should bring an open minded, intellectual curiosity to the classroom. The best students will understand that while we use analytical tools, real estate securities analysis is as much art as it is science; there is not necessarily one correct answer. Designed for second year MBA’s, the course and its content seek to reflect the professional environment you will face once out of business school. The ability to think clearly, and grapple with uncertainty will be a valuable asset; do not expect spoon fed answers.

**ASSIGNMENTS**

All of your assignment submissions are subject to the [CBS Honor Code](http://www8.gsb.columbia.edu/honor/definitions). Violations of the CBS Honor Code may lead to failing the assignment, failing the course, suspension, and/or dismissal. In order to avoid ambiguity that may lead to unintentional violations of the Honor Code, assignment description types have been standardized and specified below.

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| **Type** | **Designation** | **Grade** | **Preparation ofsubmission** | **Discussion of Submission\*** | **Discussion ofConcepts\*\*** |
| A | Group Work | Same grade for all group members | By the group | Permitted to discuss (within group) | Permitted |
| B1 | Individual w/ Discussions of Concepts and Submission | Individual grade | Individual preparation | Permitted to discuss; sharing solutions or submission files is not allowed | Permitted |
| B2 | Individual w/ Discussions of  Concepts Only | Individual grade | Individual preparation | Not permitted to share/discuss solutions or submission  | Permitted |
| C | Individual | Individual grade | Individual preparation | Not permitted to share/discuss solutions or submission | Not permitted\*\*\* |

 The designated group can be either an assigned study group or a self-selected one.

**\*** Submission means any work and/or output pertaining to the specific assignment. If an assignment submission contains a calculation or decision related to a specific set of data and setting, discussing the details how to make this calculation or decision with regard the data/setting is to discuss the submission. Providing another student with a draft of the calculation or decision is sharing the submission.

\*\* Concepts mean any ideas, examples, readings, or other related materials from the class/course. Conceptual discussion should not be based on a specific set of data or setting related to a calculation or decision required in the assignment, but could be based on other related examples, preferably those from class/course materials.

\*\*\* As no conceptual discussion is permitted, Type C is akin to a take-home exam.

**ATTENDANCE POLICY**

Students are required to attend each class. Students should reach out to the instructor or CA regarding excused absences (for religious observances; personal, medical, and family emergencies; military service; court appearances such as jury duty). Unexcused absences will affect your course grade.

This course may use PollEverywhere as a tool to increase in-class student engagement. PollEverywhere may also be used to confirm student attendance and participation records. Students who have concerns regarding whether their responses have been recorded should contact the instructor.

Finally, if a student is not present in the classroom at the time of a poll (due to absences or any other reasons), the poll should not be answered. Responding to a poll when not present in the classroom is a violation of the Honor Code.

**INCLUSION, ACCOMMODATIONS, AND SUPPORT FOR STUDENTS**

At Columbia Business School we believe diversity strengthens any community or business model and brings it greater success. The School is committed to providing all students with equal opportunity to thrive in the classroom by providing a learning, living, and working environment free from discrimination, harassment, and bias on the basis of gender, sexual orientation, race, ethnicity, socioeconomic status, or ability.

Students with documented disabilities may receive reasonable accommodations. Students are encouraged to contact the Columbia University’s Office of Disability Services for [information about registration](https://www.health.columbia.edu/docs/services/ods/index.html?_ga=2.66448878.1740208239.1652708094-1115603203.1635953391).

Columbia Business School adheres to all community, state, and federal regulations as relate to Title IX and student safety. Read more about CBS’ policies to support [Inclusion, Accommodations and Support for Students here](https://www8.gsb.columbia.edu/samberg/node/686).

**Honor Code and Academic Integrity**

The [Columbia Business School Honor Code](https://www8.gsb.columbia.edu/honor/) calls on all members of the School community to adhere to and uphold the notions of truth, integrity, and respect both during their time in school, and throughout their careers as productive, moral, and caring participants in their companies and communities around the world. All students are subject to the Honor Code for all of their academic work. Failure to comply with the Honor Code may result in [Dean’s Discipline](https://www8.gsb.columbia.edu/mba-students/Dean%27s%20Disciplinary%20Process). Here you can review [examples of Academic Misconduct](https://www8.gsb.columbia.edu/mba-students/academic-essentials/policies/honor-code) which may result in discipline.

Course materials (videos, assignments, problem sets, etc) are for your use in this course only. You may not upload them to external sites, share them with students outside of this course, or post them for public commentary without the instructor’s permission.

**COURSE ROADMAP/SCHEDULE**

**Session One: Introduction to REITs / Real Estate Securities – 9/5/23**

An overview of the publicly traded real estate sector from the perspective of the relevant constituencies – Issuers, Investors, and Intermediaries.

Our guest speaker, a former sell-side analyst, buy-side portfolio manager and now a senior executive of a retail REIT will discuss the analytical approach / career considerations of her prior roles, as well as thoughts around valuation and stock picking, fundamental and company analysis across different property subsectors.

Discussion topics will include:

* An Introduction to REITs – The Basic Premise
* Emergence of Publicly Traded Real Estate – Industry Implications
* REITs Today – Investment Characteristics, Definitions and Issues
* Why REITs are Important – And Why You Should Care (Guest Speaker)
* Investment Decisions: Conceptual Framework – A Total Return Asset Class (Growth and Income)
* Introduction to Stock Analysis / Valuation
* Fundamental / Technical Analysis – Investor Constituencies and Sentiment
* Net Asset Value (NAV) Conceptually

**Pre-Work:** Submit Resume or Short Bio (Assignment Type C)
 Form Project Teams (On Canvas - To be discussed / finalized in class)

**Pre-Readings:** REITs 101: An Introduction, Barclays

**Guest Speaker**: **TBC**

**Homework:** Review Sample Company 2Q 2023 Earnings Release / Supplemental

**Session Two: Valuation: Quantitative Methods and Analysis – 9/12/23**

The theory and practice of securities valuation applied to commercial real estate. This session will focus on the requisite analytical tools to accurately perform entity level stock valuation, how to approach to fundamental market research and a more detailed treatment of NAV – all critical considerations in company analysis and stock picking.

Our guest speaker, a former sell-side analyst, buy-side portfolio manager and now the head of research for a significant institutional REIT will provide a differentiated perspective on fundamental analysis, and the application of data analytics to real estate investing / company management.

Discussion topics will include:

* Calculating Net Asset Value
* How to Use NAV – Stock Picking and Pitfalls
* Introduction to the Buyside and Differentiated Market Research (Guest Speaker)
* Conventional Securities Analysis Applied to Real Estate – Is GAAP Relevant
* Applied Quantitative Methods – NAV, Multiple Analysis, DCF and Intrinsic Value
* Underwriting the Main Food Groups / Different Property Sectors and Markets
* Valuation – A Forward Perspective

**Pre-Readings**: REIT Valuation: A New Paradigm, Barclays

 Review Sample Company 2Q23 Earnings Release / Supplemental (Again)

**Subject Quiz:** 10 Questions (REIT Terminology / Intro to ESS) Due 9.12.23

**Guest Speaker**: **TBC**

**Homework**: Begin Sample Company NAV Calculation (5% weighting) (Assignment Type B1)

**Optional Review**: Optional Session to Review NAV Calculation – 9.15.23

**Session Three: Investing in Equity Securities / Predicting the Future – 9/19/23**

The practical application of analytics to the real estate investment process. We will focus on building a predictive public company earnings model – the basis of stock valuation, while incorporating fundamental market analysis and capital sources / balance sheet considerations.

Our guest speaker, formerly a global real estate portfolio manager and now a member of several Boards of Directors, will provide broad perspective on different investment strategies and color around career paths for investment professionals.

Discussion topics will include:

* NAV Recap
* Buy-side Ecosystem
* Portfolio Management: Stock Picking (Guest Speaker)
* Investment Strategy: Balancing Risk and Return (Guest Speaker)
* Perspectives: Specialists’ vs Generalists
* Predictive Earnings Model – The Basis for Successful Investing
* Earnings Model – The Connection between Fundamentals and Valuation
* Balance Sheet – Managing the Capital Stack of an Infinite Life Vehicle
* Valuation Review – Practical Applications

**Pre-Readings**: Sample Company 2Q23 Earnings Transcript

Emerging Trends in Real Estate 2023, PWC / ULI – Brief Review

**Subject Quiz:** 5 Questions (Valuation / Fundamental Analysis) Due 9.19.23

**Guest Speaker**: **TBC**

**Homework Due**: Submit Sample Company NAV Calculation (5% weighting) (Assignment Type B1)

 Begin Building Sample Company Earnings Model (10% weighting) (Assignment Type B1)

**Optional Review**: Optional Session to Review Earnings Model Construction – 9.22.23

**Session Four: Growth in a Mature Environment / Qualitative Considerations – 9/26/23**

The qualitative factors that differentiate companies and how they are applied to securities analysis. Competitive advantage, operating expertise, balance sheet strength – are characteristics that inform and impact the quantitative analysis, and lead to an entity level investment conclusion. An in-class relative valuation exercise will graphically illustrate those distinctions.

Our guest speaker, a REIT CEO, will provide his broad views on the evolution of his company and the REIT industry, stock valuation and corporate / strategic decision makingin the context of a mature real estate environment.

Discussion topics will include:

* Model Recap
* Success in a Mature Environment – Take Market Share (Guest Speaker)
* Differentiated Strategy – Infinite Life Corporate Vehicle / Sustainable Advantage
* REITs as Operating Entities
* Management – Measuring Quality
* Corporate Culture – Value Differentiator
* Discounted Cash Flow – Long Term Intrinsic Value
* An Introduction to Relative Valuation and Crafting an Argument

**Pre-Readings**: Company Investor Presentation

Evercore ISI REIT Valuation Handbook

**Subject Quiz:** 5 Questions (Sample Company Model / Balance Sheet) Due 9.26.23

**Guest Speaker**: **TBD**

**Homework Due**: Build / Submit Sample Company Model (10% weighting) (Assignment Type B1)

 Begin Valuation Analysis / Team Conclusion (10% weighting) (Assignment Type B1/A)

**Session Five: Strategic Decision Making / Putting it all Together – 10/3/23**

Combining quantitative analysis with qualitative considerations to reach rigorous investment conclusions – on the entity and portfolio levels. The goal is an investment strategy that is fundamentally sound, internally consistent, and ideally – profitable.

The guest speaker – a REIT CEO – will discuss how management worked through the pandemic and pivoted to offense; the strategic and tactical considerations necessary to take market share and build shareholder value.

Discussion topics will include:

* Managing Through Adversity and a Pivot to Offense (Guest Speaker)
* Changing Consumption Preferences – Impact on Space Utilization and Real Estate Fundamentals (Guest Speaker)
* Relative Value and Relative Performance
* Sample Company Investment Conclusions (Team Presentations)
* Valuation as an Art Form – And How Stocks Really Trade

**Pre-Readings**: Company Investor Presentation

**Subject Quiz:** 5 Questions (Buyside / Relative Value / Qualitative Considerations) Due 10.3.23

**Guest Speaker**: **TBC**

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**Homework Due**: Submit Sample Company Valuation Analysis / Team Conclusion (10% weighting) (Assignment Type B1/A)

**Session Six: Final Presentations - Investment Committee Stock Pitch - 10/10/23**

The final session will provide students with the opportunity to present their final investment recommendation to a committee comprised of senior money managers currently active in the market. The panel will provide a substantive critique of your team’s investment argument and recommendation including the quality of the analysis, thought process and actual presentation. Presentation experience – is applicable to real estate investment broadly; public and private, debt and equity. The session will include:

* Final Team Presentations – Buy, Sell or Hold
* Course Summary – Practical Applications

**Homework Due**: Submit Final Project – Written Stock Analysis / Recommendation (Assignment Type A / B1)

**Guest Speakers**: **Investment Committee - TBD**

**METHOD OF EVALUATION/GRADING**

The course grade will be based on three homework assignments, several subject quizzes, class participation and a final project (stock recommendation). The quizzes and homework assignments will be individual projects (Type B) while the final project (paper / presentation) will be a combination team / individual effort (Type A / Type B); each individual will be responsible for a specified section. Your course grade will be determined as follows:

* Homework Assignments 25% (5%, 10%, 10% Respectively)
* Quizzes 5%
* Final Group Paper 25% (combination individual / group grade)
* Final Group Presentation 25% (combination individual / group grade)
* Class Participation 20%

The specifics of the final project will be discussed in detail during the first class. We will form teams (four or five students) at the start of the semester and each team will use the analytical tools and qualitative / technical considerations discussed in class to prepare a stock analysis / recommendation for presentation to a senior investment committee. Preliminary team sign up will be available on Canvas prior to the first class, along with a choice of stocks / property sectors; we will finalize the teams / stocks subsequently. The length and format (required sections) of the written report will be determined by the specific analysis; for clarity, a sample report will be provided for your review. The oral presentation should be a concise summary of your conclusions and may include power point slides as appropriate.