B7493 EMBA Block Week Course: Real Estate as an Asset and a Business Professors Christopher Mayer and Ivo de Wit April 16-20, 2023

NOTE: YOU SHOULD NOT ENROLL IN THIS COURSE IF YOU HAVE TAKEN OR PLAN ON TAKING REAL ESTATE FINANCE (B7314 or B8314)

Preliminary; Specific topics and timing subject to change

Contact us:

Professor Mayer: cm310@gsb.columbia.edu
Professor de Wit: id2265@columbia.edu

TA: TBD

Office Hours:

TAs will be available Sunday to Wednesday evenings Instructors available at breaks, after class, and by appointment (and by email)

Course Objectives

The goal of this course is to make you knowledgeable and conversant about the principles of real estate, with many changes as the world has adjusted to the new circumstances of COVID-19. As both a physical asset and an investment asset with a defined location in space, real estate is strikingly different from other asset classes. Real estate forms part of the alternative investment asset class and institutional investors invest a substantial part of their portfolio in real estate. We will look at the investors in real estate and the investment management firms and how they are investing internationally. We will give an overview of investing in all major commercial property types: office, logistics, retail, hotels, and residential, niche sectors like senior housing and student housing, and the purchase of a home and consider how these are changing to a quickly evolving world. The goal is to give an overview of the international real estate market and provide you with the tool set to identify investment opportunities globally, certainly for investing but also to find a place to live and figure out how to work.

As an industry/business sector, real estate has grown in size and complexity over the past several decades. It has always been a capital-intensive business, so sources of capital and the structuring of transactions are essential components of operating in this field. The vast bulk of real estate assets represent almost everything around us—homes, apartments, retail, industrial, office, hotel, and recreational property, among other types—represent the existing stock. The business of real estate is the business of asset management, finance and investment, leasing, and acquisitions/dispositions of the existing stock, and these activities compromise the majority of real estate activity.

Real estate is also an industry that is facing disruptive changes due to advances in technology and the new ways people live and work. Ongoing changes were accelerated by COVID to a significant degree—maybe no industry has been impacted more by the global COVID crisis than real estate. Will people still go into the office and work as they did before? Online shopping has fundamentally changed how we interact with retailers, even moreso as people are shopping at home and not going to shopping malls. The use of logistics facilities are rapidly adjusting as retailers and online sellers solve for problems with the "last mile." In the future, the potential of driverless cars and trucks may fundamentally impact property values and how people value location. As millennials bring new patterns and desires, apartment and office owners try to quickly adjust how they can attract this rapidly growing demographic. And as sea levels rise and the climate changes, people will need to consider changes in where and how they live and work. How are these trends impacting real estate investment, valuation, and new development?

This block week course is designed to provide you with an intensive dive into the changing fundamentals of real estate. It will cover several broad topics:

- 1) Scope and Character of the Global Real Estate Industry
- 2) Real Estate Finance, Leasing, Lending, and Investment
- 3) Technological Disruption

Class Expectations and Operation

Attendance is required at all sessions and for the duration of the session. If for some reason, you are not able to attend or have to leave early, please notify the faculty. Missing excessive classes will result in a grade reduction.

Class starts at 9 am. Most students are able to be in their seats when class begins or logged in online. Arriving late disrupts the class and is disrespectful to everyone who has arrived on time. Class will end by 5:30 pm each day. Please be on-time for speakers. If you are on Zoom, it is important to keep your cameras on if at all possible (especially when we have speakers, but also for regular class).

No Cell Phones. The class will offer regular breaks for you to respond to things that come up during the work week.

Preparation. Please come to class having read required materials and being fully prepared to discuss.

TAs will be available each evening to discuss cases or material covered in class.

Assignments and Grading:

Grading will be based on Class Participation (10%), Individual Case Assignments (35%), Group Case Presentations (35%), and a Final Paper (20%).

Readings and Assignments for the course will be posted on Canvas prior to the start of class. Required work for each session is clearly identified on the syllabus.

Reference book: Real Estate Finance and Investments: Risks and Opportunities by Peter Linneman (5th Edition). The textbook is not required reading, but it can help enhance material covered in class.

Form a group: You can form groups prior to the start of class or on the first day of class. Groups should have exactly 3-4 members (groups greater than 4 will not be allowed) and group members should join together on Canvas. Groups may be randomly asked to present assignments in class throughout the week.

Cases: There are four required Case write-ups for the class. Two cases are to be prepared individually and two cases are to be prepared with your group. Cases must be submitted in Canvas by the due date/time. Page limits will be provided with each assignment. Students should be prepared to discuss all cases in class.

Final paper: Students will be expected to complete a final paper summarizing material learned in this class. The assignment will be to select a project among those presented in class as a preferred investment. You will be expected to support this recommendation using a template we provide you.

Class Participation: Questions are encouraged to clarify what we are discussing. In addition, you and your fellow students bring valuable perspectives to the class that can benefit everyone. Please remember that this is a large class and it is important that everyone has an opportunity to participate, so no one should dominate the conversation. Constructive comments in class will increase your participation grade, while consistently bad or irrelevant participation will decrease your grade. Late arrivals will negatively impact your participation grade.

Individual and Case Work: Students may discuss assignments with other classmates, the TAs, or the Professors. However, the sharing of written or computer work product among other students for individual assignments or other groups for group assignments is explicitly prohibited.

Honor Code: Students are expected to follow the honor code at all times, including rules for individual and group work. Violations of the honor code will result in referral to the Student Leadership and Ethics Board. See: http://www8.gsb.columbia.edu/honor/resources.

Core Courses: The course content will utilize, build on, and extend concepts covered in the following core courses:

Core Course	Connection with the Core
Corporate Finance	1. Time value of money
	2. Risk
	3. CAPM
	4. Modigliani & Miller Theorem
	5. Arbitrage pricing and the law of one price
	6. Efficient Markets
	7. Financial frictions
Managerial Economics	Maximization and marginal analysis
	2. Complex decision-making under uncertainty
	Market competition and equilibrium
Managerial Statistics	Statistics and data analysis
	2. Conditional probability
	3. Modeling uncertainty
Global Economic	Inflation and monetary policy
Environment I	2. The business cycle
	3. The role of financial markets in the economy

Students will be expected to have mastered these concepts and be able to apply them in the course.

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Sunday April 16	Commercial Real Estate Fundamentals and Valuation
9 – 10:30 am	Session #1: Overview of the Course / Investable Real Estate Break
10:45 – 12:30 pm	Session #2: Investable Real Estate, ctd / Property Cash Flow Lunch
1:30 – 3:15 pm	Session #3: Valuation and Leverage / Real Estate Pro Forma Break
3:30 – 5:00 pm	 Session #4: Global Real Estate Investment I Investment firms and investors Indices and information sources
	- Guest speaker: Peter Hobbs, BFinance
5:00 – 5:30 pm	Summarize and preview Case #1; Q&A
Overnight Work:	Case 1 (Individual): "Arrow Office"
Monday April 17	Global Real Estate Investment Strategy
9 – 10:00 am	Global Real Estate Investment Strategy Session #5: Discuss Case 1: "Arrow Office" Break
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9 – 10:00 am 10:00 – 10:15 am	Session #5: Discuss Case 1: "Arrow Office" Break
9 – 10:00 am 10:00 – 10:15 am 10:15 – 11:15 pm	Session #5: Discuss Case 1: "Arrow Office" Break Session #6: Inflation, Capital Expenditures, Growth, and Expected Returns Session #7: COVID and Real Estate
9 – 10:00 am 10:00 – 10:15 am 10:15 – 11:15 pm 11:15 – 12:15 pm	Session #5: Discuss Case 1: "Arrow Office" Break Session #6: Inflation, Capital Expenditures, Growth, and Expected Returns Session #7: COVID and Real Estate Lunch Session #8: Global Real Estate Investment II - Market trends
9 – 10:00 am 10:00 – 10:15 am 10:15 – 11:15 pm 11:15 – 12:15 pm 1:15 – 2:30 pm	Session #5: Discuss Case 1: "Arrow Office" Break Session #6: Inflation, Capital Expenditures, Growth, and Expected Returns Session #7: COVID and Real Estate Lunch Session #8: Global Real Estate Investment II - Market trends - Investment strategy - Investment sourcing and execution Break
9 – 10:00 am 10:00 – 10:15 am 10:15 – 11:15 pm 11:15 – 12:15 pm 1:15 – 2:30 pm	Session #5: Discuss Case 1: "Arrow Office" Break Session #6: Inflation, Capital Expenditures, Growth, and Expected Returns Session #7: COVID and Real Estate Lunch Session #8: Global Real Estate Investment II - Market trends - Investment strategy - Investment sourcing and execution Break Session #9: Risk Profile of Investments
9 – 10:00 am 10:00 – 10:15 am 10:15 – 11:15 pm 11:15 – 12:15 pm 1:15 – 2:30 pm	Session #5: Discuss Case 1: "Arrow Office" Break Session #6: Inflation, Capital Expenditures, Growth, and Expected Returns Session #7: COVID and Real Estate Lunch Session #8: Global Real Estate Investment II - Market trends - Investment strategy - Investment sourcing and execution Break

Case 2 (Group): "Global Real Estate Investment Opportunity"

Overnight Work:

Tuesday April 18	Real Estate Transactions and Investment
9 – 10:30 am	Session #11: Discuss Case 2
10.45 12	Break
10:45 – 12 pm	Session #12: Real Estate Entrepreneurship: Building a Fund Management Business
	Guest Speakers: Amy Miller and Brian Reiver, Savanna
	Break
12:30 – 1:30 pm	Lunch and Speaker: Kathleen McCarthy, Co-Head of Real Estate, Blackstone Break
1:40 – 2:45 pm	<u>Session #13</u> : Real Estate Investment Alternatives: Public vs Private Investing Break
3:45 – 5:15 pm	Session #14: Investment in Niche Residential and Alternative Sectors
	Guest Speaker: Elizabeth Wohlleb, Harrison Street
5:15 – 5:30 pm	Summarize and preview Case #3; Q&A

Wednesday April 19 Disruption and Real Estate Investing

Case 3 (Group): FlexSpace

9 – 11:00 am	Session #15: Case 3 Discussion Flexspace; Guest Speaker: Lisa Cations '17, Industious Break
11:15 – 12:15 pm	Session #16: Value-add Real Estate Development: Minicase discussion of "Redevelopment of the Old Fire Station in Birmingham to Student Housing" Lunch
1:15 – 3:15 pm	<u>Session #17</u> : Debt Structures with Applications to Distressed Real Estate Investing Break
3:30 – 5 pm	Session #18: Environmental, Social, and Governance (ESG) goals and Institutional Real Estate Investing Guest Speaker: Mona Benisi, Morgan Stanley
5:00 – 5:30 pm	Summarize and preview Case #4; Q&A
Overnight Work:	Case 4 (Individual): "Home Purchase"

Overnight Work:

Thursday April 20	Housing Markets; Course Summary
9 – 10:45 am	Session #19: Discuss Case 4: "Home Purchase" Break
11 – 12:45 pm	Session #20: Housing Markets Lunch
1:45 – 2:30 pm	Session #21: Valuation and Big Data in Residential Real Estate Guest Speaker: Nils Kok, Geophy (TBC)
2:45 – 4:15 pm	Session #22: Investment in Residential Real Estate Guest Speaker: Michael O'Connor, Clarion Partners
4:15 – 5:30 pm	Session #23: Summing Up / Preview Final Case / Open Topic Discussion

Distribution of Take-Home Final Paper (Individual)