REAL 2050/7050: Global Real Estate: Risk, Politics, and Culture

Professor Maisy Wong

Spring 2023 (1 cu)

TuTh 10:15am to 11:45am; 1:45pm to 3:15pm

Office hours: Tu 12:45pm to 1:30pm, or by appointment

Preliminary and Subject to Change

Last updated: Dec 15th 2022

Overview: This is an introductory course to global real estate markets, with a focus on income-producing real estate assets. Globally, the estimate of the value of income-producing real estate assets is around \$60 trillion.

The goal of the course is to help students develop a global mindset by introducing the basics of real estate valuation and risk management and applying the concepts to a wide range of global contexts. We will emphasize concepts that are salient to cross-border real estate strategies, including currency risk, political risk, rule of law, property rights, and culture. We will also use current events to help us characterize risks facing real estate investors. For example, how might inflation or U.S./China relations influence the cross-border investment strategies of real estate firms? What should investors consider in choosing a country and a local partner? The course will largely cover markets outside the United States, except for one or two special topics. We will focus more on the qualitative aspects of real estate investment analysis and less on the quantitative aspects.

This is a full-semester course, cross-listed for MBA's and undergraduates. REAL 2050 is part of the Wharton Undergraduate Global Flex Fundamentals bracket.

Pre-requisites: There is <u>no pre-requisite</u> for the course. No prior real estate experience and financial modeling experience are needed. The cases will require a basic understanding of cash flow modeling which will be taught in class (revenues and expenses only, with no leverage nor taxes). The lectures will require a basic understanding of demand and supply principles covered in EC0100 or equivalent introductory courses for economics. I have posted a sample midterm to help you gauge the types of quantitative and qualitative questions that will be fair game for exams.

Recitation on basics of cash flow modeling: There will be a recitation to prepare students for the concepts needed to complete the case and to cover the basic concepts underlying cash flow modeling and time value of money. This recitation is targeted towards students who have not taken FNCE 1000 or FNCE 6110.

Potential overlap with other courses: This is an introductory course designed to equip students with the basics of real estate investment analysis necessary to understand decision-making in global real estate contexts. For example, we will cover the *basics* of real estate cash flows, currency risk, political risk, and rule of law to help students understand how global real estate investors think about risk when investing in international commercial properties, international REITs, non-performing loans, and land markets.

We may touch upon concepts taught in other courses, including Real Estate Investments (REAL/FNCE 2090/7210), Capital Markets (FNCE 2380/7380), and International Financial Markets (FNCE 2190/7190). If you have taken *any* of these courses, you probably know more

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than you need for certain aspects of this course. If you have taken *all* of the courses above and have questions, please review the sample midterm and email me if you have concerns.

Course materials:

- There is no required textbook but here are three supplementary texts for students who want to further their real estate interests:
 - o Real Estate Finance and Investments, 3rd edition or newer, by Peter Linneman.
 - o Commercial Real Estate Analysis and Investments by David Geltner, Norman Miller, Jim Clayton, Piet Eicholtz
 - o *International Macroeconomics*, 4th edition or newer, by Robert C. Feenstra and Alan M. Taylor
- The class schedule below lists the relevant readings.
 - o Note, * indicates required articles (which will be fair game in exams) and ^ indicates highly relevant articles that provide useful background.
- On Canvas you will find:
 - Slides and class notes
 - o Readings
 - Canvas>Files>Readings
 - Canvas>Course Materials@Penn Libraries (for book chapters)
 - o Announcements, updates, and clarifications
 - O Answers to questions that are of general interest (e.g., about a case)

Guest speakers:

There will be at least five guest speakers for this class (potentially a sixth). All lectures are outside of regular class time to allow students from both sections to attend (6 regular lectures are cancelled in lieu of guest lectures). **Attendance is required and I will take attendance**. Please note that many of our guest speakers have global commitments and may need to re-schedule their visit. Our guest speakers have allocated time from a busy schedule to be with you. *I expect all students to attend synchronously*, unless you have a class conflict. If you cannot attend, please complete the Canvas survey (Quizzes>Guest Lecture Survey) and watch the recording (if available) so that we may account for participation accordingly.

These sessions are **required** material and fair game for the exams. If possible, I will post the recording but in some instances, the guest speakers may request that I do not record the lectures so the guests feel comfortable speaking freely. The guest speakers for this semester include:

- 1) Catherine Hong: Managing Director for the Portfolio Solutions Group at MSIM, Co-Head of Fundamental Investment Research, *Morgan Stanley*
 - Jan 31st (Tue), 4:30pm EST, SHDH 351 or on Zoom
- 2) Saul Goldstein: Founder, ActivumSG
 - Feb 7th (Tue), 5:30pm EST, SHDH 351
- 3) Adam Gallistel: Head of Americas, Real Estate, GIC,
 - Mar 14th (Tue), 5:30pm EST, SHDH 351
- 4) Tina Gaw: Managing Principal, Global Head of Capital Markets & Co-chair of Alternative Investments, Member of Investment Committee, *Gaw Capital*
 - Mar 21st (Tue), 8:30pm EST on Zoom

- 5) Joseph Smith: CIO, CBRE Investment Management
 - April 11st (Tue), 5:30pm EST
- 6) Guest lecture (To be added)

Midterms:

Two midterm exams will be held in-person during regular class time on:

- Tuesday, 2/21
- Thursday, 4/20

Both exams must be passed in order to receive a passing grade for the course. Exam 2 is not cumulative in content, but assumes proficiency in basic skills taught in the first portion of the class. Exams will cover the material examined in class and during guest lectures, the class notes, the cases, and the required readings. You are expected to be proficient enough with the material to complete the exam within the allocated time.

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Make-ups are given only for medical or exceptional personal situations. To be eligible for a makeup, you need to notify me in advance of an exam if there is a chance you might miss it, unless in the case of a truly unforeseeable emergency. If you cannot take the exam on these dates, please drop the class now.

Wembley Case (groups): There will be one case handed out in class. You will choose your own group of 4 to 5 members within your own section. You and your teammates should sign up under the "Wembley team sign-up" section on Canvas. I will also create a discussion thread on Canvas for you to find team members. If you cannot find a group, you must complete a Canvas survey by 1/22 (Sun), 11:59pm EST. I will either form a group for you or assign you a team. Late cases will not be accepted nor will extensions be given.

<u>NPL Memo (individual, 1 page, 10 points):</u> There will be a one-page memo on the non-performing loan (NPL) to be completed individually.

<u>Final Memo (paired, 10 pages, 20 points):</u> There will be a final memo to be completed in pairs. You and your partner should sign up under the "Final Memo partner sign-up" section on Canvas. You can pair up with anyone within your section (it does not have to be from your Wembley team). The goal of the assignment is to describe an investment strategy, focusing on one property sector (office, residential, hotels, logistics, etc.) and two countries (each country should be in a different region: North America, Latin America, Europe, Asia, Africa).

There will be two parts, an intermediate outline (to be completed individually) and a final memo (completed in pairs):

• <u>Individual outline:</u> 1-page with bullet points outlining the key points for the sector you chose as a pair, and at least one country. That is, your 1-pager should be completed individually and should cover either one sector and one country, or one sector and two countries. It should be completed independently (each partner in the pair should submit two different outlines). The individual outline is due on Sunday (4/9). You should email

- it to your partner once it is done and bring this to class on Tuesday (4/11). You will discuss in pairs how you can improve the memo.
- <u>Final memo:</u> 10-page memo comparing the real estate strategy in the given property sector in the two countries (7 pages of text, 3 pages of exhibits)

Grading:

The course grade will be based on the following components:

	Percent of Total	Due Date
Midterm 1	22.5	Feb 21 (Tue), in-class
Wembley Case (Group)	15	Feb 8 (Wed), 11:59pm EST
NPL Memo (Individual)	10	Mar 29 (Wed), 11:59pm EST
Final Memo – 1-page outline (Individual)	3	Apr 9 (Sun), 11:59pm EST
- 10-page memo (Paired)	17	Apr 23 (Sun), 11:59pm EST
Midterm 2	22.5	Apr 20 (Th), in-class
Participation	10	Attendance + participation
Total:	100	

Passing the class: All five deliverables (2 midterms, 1 Wembley case, 1 individual memo, 1 paired final memo) must be submitted and achieve a basic proficiency level to pass the course. My process for determining basic proficiency relies on a mix of qualitative and quantitative assessments. At the end of the semester, I flag all students who are three standard deviations below the mean of the overall score. I then go through the individual assignments and participation notes to assess whether the student has put in the effort and achieved the basic proficiency level required to pass this class. My intent is not to fail students but I am also committed to be fair to the rest of the class.

Over the course of the semester, I will also flag all deliverables that are two standard deviations below the mean. Depending on my assessment, I may reach out to discuss how we can make adjustments to set you up to succeed in the course.

The dates and times for all assignments are final and must be strictly adhered to. Failure to complete any exam or hand in assignments on time will result in zero points for that exercise.

<u>Honor code</u>: Each assignment must be prepared separately using your own materials and write-ups without reference to anyone else's materials or write-ups. It is your responsibility to make sure all individual and group assignments are prepared independently. For group assignments, violations by anyone will result in the entire pair or group getting a zero on the assignment. You may verbally discuss assignments, including ideas, approaches, and solution methods, with other students who are *currently* enrolled in REAL 2050/7050. You may not obtain assistance, or solicit advice, from former students, current or past employees of firms involved with the cases, or anyone else involved in the real estate investment.

You also may not provide such assistance or advice once you are no longer enrolled in this class. You may not share your written materials or Excel with anyone at any point. Violations of these rules will be treated as violations of Penn's Code of Academic Integrity. I do not distinguish between the plagiarizer – the team using other's materials – and the provider of the materials. <u>Do not circulate your solutions to the assignments.</u> If I find your assignment to be the source of

plagiarized material, I will report the violation and do my best to retroactively change your grade.

Technology and student engagement:

- <u>Canvas announcements:</u> Please check Canvas announcements regularly.
- <u>Changes:</u> I reserve the right to change the policy to improve the learning environment. I will use Canvas announcements to communicate all changes. If there is a significant change to the curriculum (midterms, assignments) or guest speaker schedule, I will post these on Canvas and also email all students directly.
 - In needed, some of the policies for in-person instruction will be subject to change as we adjust to the health and safety guidelines of the university.

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Getting help:

- My email is maisy@wharton.upenn.edu. I reply to all emails regarding class matters within 24 hours. If I do not, please re-send the email in case I missed the first one.
- Office hours will be held in my office (434 Vance Hall) or over zoom (if you email me). I hold regular office hours, take appointments, and answer questions by email. I also hold extra office hours before a case is due and before each midterm.

Regrade Policy:

I strive for accuracy and equity in the grading for this class. However, despite our best efforts, grading is sometimes imperfect and the onus for bringing any errors to my attention falls upon you. Please review the solutions on Canvas before submitting the regrade request. It is not necessary to meet with me to go over a regrade. Under no circumstances will I go over the grading of your assignment in "real time," with no forewarning.

Steps to submit a regrade request:

- 1) You must upload your regrade request on Canvas (there will be instructions).
- 2) The regrade requests should include a cover sheet indicating:
- a. The question that needs to be regraded
- b. An explanation of the error and justification for why points should be rewarded
- c. The number of points associated with the request

Course Schedule for MBA's in REAL 7050

Note: * = Required; ^ = UG only, MBA's welcome

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This is a cross-listed class. The overall lesson plan is largely the same for MBA's taking REAL 7050 and for undergraduates taking REAL 2050. There are a few small differences. To avoid confusion, I have posted two different schedules for MBA's (REAL 7050) and for undergraduates (REAL 2050). Note that I have also posted additional news articles and podcasts on Canvas to provide more background on global events. For the exam, you are only responsible for **Required** (*) readings.

Date	Day	Topic
12-Jan	Th	Intro [UG only^]
		Readings:
		• *Geltner et al., Chapter 24.2 (p. 611 – p. 618, p. 624 –p. 627)
		Financial Times: Bruce Flatt of Brookfield on owning the backbone of the global
		economy
17-Jan	Tue	Cash flow 1
		Readings:
		• *Linneman, Ch. 4 (up to Unlevered Net Cash Flows, ignore taxes and leverage)
		• *Linneman, Ch. 7 (The Use and Selection Of Cap Rates, first 11 pages of the chapter)
19-Jan	Th	Cash flow 2
24-Jan	Tue	Currency risk 1
		Readings:
		*PREA, The increasing importance of currency risk in real estate
		• *Feenstra and Taylor, Chapter 2 (Introduction to Exchange Rates and the Foreign
		Exchange Market)
		• * "How the Gherkin was pickled: a tale of debt, risk and ambition", Financial Times,
26.1	TI.	2014
26-Jan	Th	Currency risk 2
31-Jan	Tue	- Regular lecture cancelled in lieu of guest lecture [1 of 6]
2 Fab	Th	- Guest lecture 1 (Catherine Hong)
2-Feb	Th	Inflation and global financial markets 1
7-Feb	Tue	- Inflation and global financial markets 2 - Guest lecture 2 (Saul Goldstein)
9-Feb	Th	Case 1 discussion
14-Feb	Tue	Diversification (+ cycles, time permitting)
14-160	Tue	Readings:
		Feenstra and Taylor, Gains from Diversification of Risk (p.236 – p.244)
		• Geltner et al., Chapter 24.2.2 (p. 618 - 623)
		Geltner et al., Chapter 21 (Real Estate Portfolio Theory)
		MSCI, Erosion of the Real Estate Home Bias, 2014
16-Feb	Th	- Regular lecture cancelled for MBA's [2 of 6]
		Midterm 1 review [UG only^]
21-Feb	Tue	Midterm 1 in class
23-Feb	Th	Direct/indirect 1
		Readings:
		•Sam Zell's 1993 speech in NAREIT on the potential for the REIT sector.
		•Stevenson, 2003
28-Feb	Tue	No class (MBA Opportunity week)
2-Mar	Th	No class (MBA Opportunity week)
		Spring Break!

14-Mar	Tue	- Regular lecture cancelled for MBA's [3 of 6]
		- Final memo session 1 [UG only^]
		- Guest lecture 3 (Adam Gallistel)
16-Mar	Th	Direct/indirect 2
21-Mar	Tue	- Regular lecture cancelled [4 of 6]
		- Guest lecture 4 (Tina Gaw)
23-Mar	Th	Direct/indirect 3
28-Mar	Tue	Politics and rule of law 1
		Readings:
		• Calomiris and Haber, Fragile by Design (2014), Ch. 2 (Game of Bank Bargains)
30-Mar	Th	NPL discussion
4-Apr	Tue	Politics and rule of law 2
6-Apr	Th	Politics and rule of law 3
11-Apr	Tue	- Regular lecture cancelled for MBA's [5 of 6]
		- Final memo session 2 [UG only^]
		- Guest lecture 5 (Joseph Smith)
13-Apr	Th	Property rights and land markets
		Readings:
		Glaeser, Triumph of Cities (2011), Ch. 3 (What's good about slums?)
		Rithmire, "Land Institutions and Chinese Political Economy", 2017
18-Apr	Tue	- Regular lecture cancelled [6 of 6]
		- Office hours or midterm review (not required)
20-Apr	Th	Midterm 2 in class

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Course Schedule for REAL 2050

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17-Jan	Tue	Cash flow 1 Readings: **Linneman, Ch. 4 (up to Unlevered Net Cash Flows, ignore taxes and leverage) **Linneman, Ch. 7 (The Use and Selection Of Cap Rates, first 11 pages of the chapter)
19-Jan	Th	Cash flow 2
24-Jan	Tue	Currency risk 1 Readings: • *PREA, The increasing importance of currency risk in real estate • *Feenstra and Taylor, Chapter 2 (Introduction to Exchange Rates and the Foreign Exchange Market) • * "How the Gherkin was pickled: a tale of debt, risk and ambition", Financial Times, 2014
26-Jan	Th	Currency risk 2
31-Jan	Tue	- Regular lecture cancelled in lieu of guest lecture [1 of 6] - Guest lecture 1 (Catherine Hong)
2-Feb	Th	Inflation and global financial markets 1
7-Feb	Tue	- Inflation and global financial markets 2 - Guest lecture 2 (Saul Goldstein)
9-Feb	Th	Case 1 discussion
14-Feb	Tue	Diversification (+ cycles, time permitting) Readings: • Feenstra and Taylor, Gains from Diversification of Risk (p.236 – p.244) • Geltner et al., Chapter 24.2.2 (p. 618 - 623) • Geltner et al., Chapter 21 (Real Estate Portfolio Theory) • MSCI, Erosion of the Real Estate Home Bias, 2014
16-Feb	Th	Midterm 1 review [UG only^]
21-Feb	Tue	Midterm 1 in class

23-Feb	Th	Direct/indirect 1 Readings: •Sam Zell's 1993 speech in NAREIT on the potential for the REIT sector.
		•Stevenson, 2003
28-Feb	Tue	Regular lecture cancelled [2 of 6]
2-Mar	Th	Regular lecture cancelled [3 of 6]
		Spring Break!
14-Mar	Tue	- Final memo prep, session 1 [UG only^] - Guest lecture 3 (Adam Gallistel)
16-Mar	Th	Direct/indirect 2
21-Mar	Tue	- Regular lecture cancelled [4 of 6]
		- Guest lecture 4 (Tina Gaw)
23-Mar	Th	Direct/indirect 3
28-Mar	Tue	Politics and rule of law 1 Readings: • Calomiris and Haber, Fragile by Design (2014), Ch. 2 (Game of Bank Bargains)
30-Mar	Th	NPL discussion
4-Apr	Tue	Politics and rule of law 2
6-Apr	Th	Politics and rule of law 3
11-Apr	Tue	- Final memo prep, session 2 [UG only^]. One-page outline due Guest lecture 5 (Joseph Smith)
13-Apr	Th	Property rights and land markets Readings: • Glaeser, Triumph of Cities (2011), Ch. 3 (What's good about slums?) • Rithmire, "Land Institutions and Chinese Political Economy", 2017
18-Apr	Tue	Regular lecture cancelled [5 of 6]Office hours or midterm review (not required)
20-Apr	Th	Midterm 2
25-Apr	Tue	Regular lecture cancelled [6 of 6]

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