Class Schedule

Tuesday and Thursday 3:55PM - 5:15PM
Schoenbaum Hall 215

Professor

Itzhak Ben-David
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E-mail: bendavid@fisher.osu.edu
Web: http://fisher.osu.edu/fin/faculty/Ben-David/index.htm
Office Hours: by appointment

Teaching assistants:
Spencer Couts: couts.14@osu.edu

Course Description

This course provides a framework for analyzing individual real-estate transactions (both commercial and residential) and real-estate assets as an asset class. We will cover three topics in depth. First, we will examine several valuation techniques used in practice and their underlying assumptions. These practices include cash flow discounting, cap rates, and real-options. Second, we will discuss how real-estate assets are integrated in capital markets through Real-Estate Investment Trusts (REITs), private equity, and the securitization process. Third, we will discuss the role of the real-estate market in the financial crisis of 2008.

Prerequisites

The only prerequisite is BUSFIN 3400 (Intro to Real Estate) or an equivalent (upon the instructor’s approval). This is a quantitative class and you will need to have basic knowledge of microeconomics, statistics and math. You will need a calculator that has a \( x^2 \) function. A financial calculator is not required, but it can help you solve the problems we study faster. In addition, you need a good command of Microsoft Excel in order to write the case reports.
Course Materials

1. An online course packet, which contains reading material and cases. The packet is available on https://cb.hbsp.harvard.edu/cbmp/access/43202313.

2. I will post slides and additional class material on the course web page on Carmen https://carmen.osu.edu/

Evaluation

Grades in this course will be based on the following components:

1. 5 group case studies (5 x 8% = 40%)
2. 1 individual assignment (1 x 6.5%)
3. 9 individual pre-guest lecture (up to) one-page write-ups (9 x 0.5% = 4.5%)
4. Class Participation (9%)
5. Midterm exam (15%)
6. Final exam (25%)

The following are the primary principles for evaluation:

- Grading is relative to the performance of your peers.
- The grade distribution is not truncated. It is possible to earn any of the official OSU grades in this course.
- Please note that there will not be any make-up exams except as required by university policy. If illness or an emergency should force you to miss an exam, please contact me before the exam is given.

Group Cases

Group cases should be submitted by groups of up to 3 people (individual submissions are OK). The instructions for the case will include grade breakdown. Please submit hard copies only; email submissions are not acceptable. Note that we will discuss some of the case studies in class, while others will remain as homework assignments only.

Individual Assignment

There will be one individual assignment towards week 27 (see schedule below).

Individual pre-guest lecture one-page write-ups

Our class heavily relies on the experience and expertise of industry leaders. In preparation for each talk, all students must conduct a short research on the person coming to class and his/her institution. In addition, each student will prepare three questions for the speaker. The summary of the research and the three questions will be submitted on a (up to) one-page summary through Carmen. (Carmen will verify that there is no plagiarism). To remove any doubt, in your write-up you are not allowed to copy and paste parts of vita of people from the internet.
To submit these assignments through Carmen please follow the instructions on the below referenced website. Use Contents > Dropbox:
https://resourcecenter.odee.osu.edu/carmen/uploading-files-dropbox-students

Class Participation

Class participation is an important component of the grade. I will pass attendance sheets in the class. Attendance in each class accounts for 1% of the participation grade (i.e., up to 6 percentage points out of the 12 percentage points participation grade). The rest participation grade will be determined according to the quality of classroom discussion. Please remember to bring name plaques in order to receive participation credit.

Regrading Policy

All regrade requests must be made within one week of the day the exams or cases are returned. Any exam submitted for regrading of a question is subject to a complete regrade. As a result, the regraded score may increase, stay the same, or decrease. A regrade form will be available for download on the course website. Note that I will not consider any regrade request after the one week deadline has passed.
Academic Integrity

You have affirmed to adhere to the following honor statement:

As a member of the Fisher College of Business community, I am personally committed to the highest standards of ethical behavior. Honesty and integrity are the foundation from which I will measure my actions. I will hold myself accountable to adhere to these standards. As a leader in the community and business environment, I will pledge to live by these principles and celebrate those who share these ideals.

In addition, the University's Code of Academic Integrity is designed to ensure that the principles of academic honesty and integrity are upheld. All students are expected to adhere to this Code. Please visit the following website for more information on the University's Code of Academic Integrity and possible sanctions: http://oaa.osu.edu/procedures. In accordance with University Faculty Rule 3333-5-487, all instances of academic misconduct will be reported to the Committee on Academic Misconduct which recommends appropriate sanctions to the Office of Academic Affairs. There will be no exception to this rule.
<table>
<thead>
<tr>
<th>Class Number</th>
<th>Date</th>
<th>Topic &amp; Readings</th>
<th>Assignment Due</th>
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<tr>
<td>1</td>
<td>1/12</td>
<td>Classroom Discussion:</td>
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<td>• Lecture: Valuation techniques in real estate: replacement cost, sales comparables, income (cap rate, DCF – pro forma analysis)</td>
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<td>Pre-class Preparation:</td>
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<td>• READ: Financial analysis of real-estate property investments (Packet)</td>
<td>Bring Laptops</td>
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<td>• READ: DCF analysis (Carmen)</td>
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<td>• WATCH: <a href="https://www.youtube.com/watch?v=UwnVWZJp0B0">https://www.youtube.com/watch?v=UwnVWZJp0B0</a></td>
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<td>2</td>
<td>1/14</td>
<td>Classroom Discussion:</td>
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<td>• In-class case: Residences at Scarlet &amp; Gray</td>
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<td>• READ: Residences at Scarlet &amp; Gray (Carmen)</td>
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<td>3</td>
<td>1/19</td>
<td>Classroom Discussion:</td>
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<td>• Excel modeling (TA Session)</td>
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<td>4</td>
<td>1/21</td>
<td>Guest Lecturer:</td>
<td>Guest Write-up (Don Castro)</td>
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<td>• Don Casto (Partner at Casto Inc.): “Deal structuring”</td>
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<td>5</td>
<td>1/26</td>
<td>Classroom Discussion:</td>
<td>Case Write-up (Angus Cartwright IV)</td>
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<td>• Case discussion: Angus Cartwright IV</td>
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<td>6</td>
<td>1/28</td>
<td>Classroom Discussion:</td>
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<td>• Lecture: Leasing vs. owning: residential and commercial</td>
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<td>Pre-class Preparation:</td>
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<td>• READ: Buy or lease: Commercial property decisions (Carmen)</td>
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<td>• READ: Lease vs buy: The corporate perspective (Carmen)</td>
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<td>• WATCH: <a href="https://www.youtube.com/watch?v=kwlWeijKUNo">https://www.youtube.com/watch?v=kwlWeijKUNo</a></td>
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<td>7</td>
<td>2/2</td>
<td>Guest Lecturer:</td>
<td>Guest Write-up (Mark Wagenbrenner)</td>
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<td>• Mark Wagenbrenner (CEO, Wagenbrenner Development): “The business and finance aspects of real estate developments”</td>
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<td>Classroom Discussion:</td>
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<td>• Behavioral Finance in real estate</td>
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<td>2/9</td>
<td>Guest Lecturer:</td>
<td>Guest Write-up (Michael Levin)</td>
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<td>• Michael Levin (Partner - CORE Real Estate Capital): “Private equity”</td>
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<td>10</td>
<td>2/11</td>
<td>Classroom Discussion:</td>
<td>Case Write-up (Wildcat Capital Investors)</td>
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<td>• Case discussion: Wildcat Capital Investors</td>
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<td>11</td>
<td>2/16</td>
<td>Guest Lecturer:</td>
<td>Guest Write-up (Brett Kaufman)</td>
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<td>• Brett Kaufman (CEO, Kaufman Development): “Development and Syndication in real estate transactions”</td>
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| 12/2/18 | Classroom Discussion:  
• Lecture: Using Monte Carlo simulation for credit risk modeling |
|       | Pre-class Preparation:  
• WATCH: [https://www.youtube.com/watch?v=Q3rv3yF0bPA](https://www.youtube.com/watch?v=Q3rv3yF0bPA)  
• WATCH: [https://www.youtube.com/watch?v=YaGCTQ0cvI0](https://www.youtube.com/watch?v=YaGCTQ0cvI0)  
• WATCH: [https://www.youtube.com/watch?v=UcGnSFfjUM](https://www.youtube.com/watch?v=UcGnSFfjUM)  
• WATCH: [https://www.youtube.com/watch?v=XOA0_X5yJHQ](https://www.youtube.com/watch?v=XOA0_X5yJHQ)  
• WATCH: [https://www.youtube.com/user/ExcelIsFun](https://www.youtube.com/user/ExcelIsFun) |
| 13/2/23 | Classroom Discussion:  
• Lecture: Excel modeling (TA session) |
| 14/2/25 | Classroom Discussion:  
• Case discussion: Unlikely Outcome  
• Review class |
| 15/3/1 | Midterm |
| 16/3/3 | Classroom Discussion:  
• Lecture: Financial options |
|       | Pre-class Preparation:  
• WATCH: Khan Academy – Options Video Playlist  
  [https://www.youtube.com/playlist?list=PL55F11C99198EAE65](https://www.youtube.com/playlist?list=PL55F11C99198EAE65)  
• WATCH: American Call Options  
  [https://www.youtube.com/watch?v=nln3xIwo25g](https://www.youtube.com/watch?v=nln3xIwo25g)  
• WATCH: Basic Shorting  
  [https://www.youtube.com/watch?v=jAOtWm_WziE](https://www.youtube.com/watch?v=jAOtWm_WziE)  
• WATCH: American Put Option  
  [https://www.youtube.com/watch?v=6CUCgUeQ5-w](https://www.youtube.com/watch?v=6CUCgUeQ5-w)  
• WATCH: Call Option as Leverage  
  [https://www.youtube.com/watch?v=N8h45mDI80s](https://www.youtube.com/watch?v=N8h45mDI80s)  
• WATCH: Put vs. Short and Leverage  
  [https://www.youtube.com/watch?v=q2Shz5xLdk](https://www.youtube.com/watch?v=q2Shz5xLdk)  
• WATCH: Call Payoff Diagram  
  [https://www.youtube.com/watch?v=MZQxeQYQCUG](https://www.youtube.com/watch?v=MZQxeQYQCUG)  
• WATCH: Put Payoff Diagram  
  [https://www.youtube.com/watch?v=VST_U297pH0](https://www.youtube.com/watch?v=VST_U297pH0)  
• WATCH: Black-Scholes  
  [https://www.youtube.com/watch?v=pr-u4LCFYEY](https://www.youtube.com/watch?v=pr-u4LCFYEY) |
| 17/3/8 | Classroom Discussion:  
• Lecture: Financial options + Real options |
|       | Pre-class Preparation:  
• READ: Introduction to Real Options (Packet)  
• READ: Ott: Real Options and Real Estate (Carmen)  
• WATCH: Real Options  
  [https://www.youtube.com/watch?v=yegyVwgCE0M](https://www.youtube.com/watch?v=yegyVwgCE0M)  
  [https://www.youtube.com/watch?v=TIJKwZJ-KMc](https://www.youtube.com/watch?v=TIJKwZJ-KMc)  
  [https://www.youtube.com/watch?v=IwoCGAqv5RU](https://www.youtube.com/watch?v=IwoCGAqv5RU) |
| 18/3/10 | Guest Lecturer:  
• John Harper (President of Real Estate, Construction and Store Operations, Macy's Inc.)  
  Guest Write-up (John Harper) |
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| 3/22 | Classroom Discussion:  
- In class case: CITIC Tower II: The Real Option (Packet)  
Pre-class Preparation:  
- READ: CITIC Tower II: The Real Option (Packet) |
| 3/24 | Guest Lecturer:  
- Jordan Miller (CEO, Fifth Third Bank): “Commercial real estate lending”  
Guest Write-up (Jordan Miller) |
| 3/29 | Guest Lecturer:  
- Jay Long (Principal at The Townsend Group) “Anatomy of the financial crisis”  
Guest Write-up (Jay Long) |
| 3/31 | Classroom Discussion:  
- Case discussion: The Right of Acquisition  
Case Write-up (The Right of Acquisition) |
| 4/5  | Guest Lecturer:  
- Joe Weisenburger (VP Senior Housing at Health Care REIT): “Real Estate Investment Trusts (REITs)”  
Pre-class Preparation:  
- READ: BofAML-REIT-Primer (Packet)  
- READ: FAQs about REITs (Packet)  
- WATCH: https://www.youtube.com/watch?v=yDl1_uLR5Os  
Guest Write-up (Joe Weisenburger) |
| 4/7  | Classroom Discussion:  
- REITs |
| 4/12 | Classroom Discussion:  
- Case discussion: H&R REIT  
- Lecture: Securitization / Real estate cycles / Financial crisis  
Case Write-up (H&R REIT) |
| 4/14 | Guest Lecturer:  
- Russ Nicholson (Director, Midwest Region, at STRS): “Institutional investment in real estate”  
Guest Write-up (Russ Nicholson) |
| 4/19 | Classroom Discussion:  
- Lecture: Financial crisis  
- Lecture: Incentives in the real estate industry  
- WATCH: https://www.youtube.com/watch?v=mzJmTCYmo9g  
- WATCH: https://www.youtube.com/watch?v=EsA9I2XB3A  
Individual Assignment |
| 4/21 | Classroom Discussion:  
- Review class |
| 5/2  | Final Exam (Monday, May 2, 6:00pm-8:00pm)  
SB Hall 215 |