

Humphrey School of Public Affairs University of Minnesota

PA 5221 - *Private Sector Development* – Syllabus - **DRAFT**

Course Information:

3 Credits

Monday Evenings, 6:00-8:30PM, Hubert Humphrey Center **XXX**

Spring 2018 (January 22 – April 30, 2018)

Instructor: Peter H. Brown, AIA, AICP, Ph.D.
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Office Hours: By appointment

Office hours: Eric and I will stay after class to answer questions most weeks. (Before class is not a good time to conduct business or ask me questions as I am usually preparing for class and writing my notes on the board.) We will also make ourselves available by appointment either in person or by phone and we are both happy to correspond by email.

Communications: In addition to Moodle I will send emails to the entire class from time to time so you are responsible for regularly checking your UMN email account. Let us know if you use a different email address.

Introduction

While policy-makers, public administrators, planners, and members of the community all play their parts, in the end, it is private sector developers who really build our cities. Developers use a wide variety of tools, skills, and resources to identify, analyze, and capitalize on opportunities that may not be apparent to their competitors or the public. Developers are also very entrepreneurial, as they play for high stakes and must possess an extraordinary tolerance for both ambiguity and risk if they are to realize their creative visions and their anticipated profits.

This course is for those students interested in gaining an understanding of how the real estate development process works from the viewpoint of the private developer. The course is designed to promote an understanding of the structure of urban real estate markets, the techniques of analysis and planning for real estate development, the leadership and management skills required to see a project through to completion, and the character of the entrepreneurial developer. It emphasizes quantitative methods including site and building analysis, market analysis, and economic analysis through the creation and manipulation of “pro-forma” financial statements. At the same time students will be required to consider qualitative issues such as a developer’s background, temperament, goals, and access to resources as well as the importance of “fit”

between a developer, a project, and other team members and actors including equity partners and lenders, architects and builders, government agencies and staff, elected officials, and other local interests. By applying these qualitative and quantitative methods of analysis to actual projects, students will gain insight into the developer's decision-making process. Through facilitated classroom discussions, students will come to understand how, in a process of creative synthesis, developers combine these tools with money, social and political connections, and personal skills to implement projects and bring their grand plans to fruition.

The focus of the course will be on the acquisition, development, ownership, operation, and disposition of rental real estate, with an emphasis on the four main product categories - commercial, retail, industrial, and multi-family residential. Attention will also be given to for-sale housing and condominiums, land development, non-profit development, and large-scale urban redevelopment. The course will consider the reconciliation of private interests with public goals however in doing so it will take a distinctly private market viewpoint – that of the developer.

Course Objectives

The course will provide students with a framework that integrates theory and practice into a developer's-eye-view of urban real estate development. Students will gain an understanding of the development process, real estate markets and products, the project cycle, and the developer's motivations and decision-making process. In completing this course, students will achieve the following three objectives:

- Overview of the Real Estate Development Business: Develop a general understanding of the real estate development business including products, markets, and actors, with an emphasis on developers and particularly their personalities, motivations, and interests.
- Tools and Skills: Develop an understanding of the quantitative and qualitative tools used to evaluate a real estate opportunity and the skills required to build and use those tools. Students will learn how to create and manipulate their own “pro forma” economic models and use them to evaluate the economics and finances of an investment or business.
- Generalization to Urban Development: With these new tools and skills, students will be able to generalize across a broad spectrum of urban development activities from the perspectives of a variety of actors ranging from developers, investors, and lenders to city planners, elected officials, and community members.

With this combination of knowledge, tools, and skills, students will also be prepared to work in the real estate development industry and will be able to confidently tell prospective employers, “I know how to create a proforma.”

Format

The first few class sessions will provide an overview of the industry and introduce the student to the basic concepts and the qualitative and quantitative analytical tools required to assess a development opportunity. The backbone of the course will be weekly case studies augmented by short lectures, class discussions, exercises, guest panels and a potential optional field trip.

Workload

There will be weekly assignments beginning in the second week, including seven or eight cases; three home-works; one or two quizzes; one book review (writing assignment), one market research project (including a brief presentation), and a final exam. The workload is heavier in the first half of the semester, lightening up in the second. Staying on top of the assignments in the first seven weeks is critical to success in the course.

Required Course Materials

Harvard Business School (HBS) Case Studies: Students will be required to purchase case studies directly from Harvard Business School's website. Case studies typically cost about \$3.95 each and we will be using approximately seven case studies plus several additional readings and technical notes. The link provided below will take you to the HBS website for this course, through which you may purchase the materials directly. Each student is required to buy his or her own set of materials. HBS Course Link: <http://cb.hbsp.harvard.edu/cbmp/access/58726939>

Required Reading:

Brown, Peter Hendee. *Development 101: Class Notes for Students of Private Sector Development*. This short manual is an outgrowth of the instructor's teaching notes and it is intended as a simple guide to the basic tools used in analyzing real estate. Chapters will be posted on the course website as pdf files. There is no charge for the text. NOTE: This book has not yet been published and cannot be shared beyond the class. ***Consider this to be your training wheels for the first seven weeks of class.***

Brown, Peter Hendee. *How Real Estate Developers Think: Design, Profits, and Community ("HREDT")*. Philadelphia: Penn Press, 2015. You will read 1-2 chapters per week and be prepared to discuss the chapters and answer questions listed in syllabus.

Other required readings are specifically identified in this syllabus and will be posted on the course Moodle site in weekly folders. The instructor will also regularly post current, industry-related news articles that will be required reading and will be discussed in class.

Excel Proficiency

The course stresses the understanding of basic concepts and the analytic power of "back-of-the-envelope" (BOE) calculations. Most real estate financial analyses require nothing more than high school algebra and arithmetic. Computer-based spreadsheets are widely used in the real estate industry and it is assumed that all students know how to create and manipulate Excel spreadsheets. Students are expected to create their own spreadsheets in preparing for the case studies and must learn to use several financial formulas within the Excel program.

Course Copyright

The instructor has the copyright on this syllabus and all lectures, lecture notes, and slide show presentations. Students are prohibited from selling, or being paid by any person or commercial firm for taking notes or recording class lectures without the advance express written permission of the instructor. Exceptions are permitted for students with a disability who receive the instructor's approval in advance for note taking or tape recording as an academic accommodation. Some

images from this syllabus were found on-line or taken from resources that are not accredited to the instructor.

Evaluation

You will be required to complete weekly assignments including three home works, one or two quizzes, seven or eight case studies, one book review (a short paper), one market research assignment (a short analysis graded like a case study), and the final exam. The assignments build upon one another and you should endeavor to stay on top of the workload particularly in the first seven weeks of the class.

Evaluation will be based upon four key areas: weekly case studies, homework assignments and in-class quizzes, the book review, and a final take-home exam that will be a case study. Because the course is built around case studies, a student's evaluation will also be based on his or her willingness and ability to understand, embrace, and master the case study method of learning.

Through this method, you will learn not only from individual or team case preparation but also from actively participating in class discussions and from listening to and learning from fellow students. Therefore, you will be evaluated on the quality of your preparation and on your contribution to class discussion. Perhaps most important, you will come to understand that there is no one right answer to a case study and that the best answer is one that has been thoroughly reasoned through and well-presented.

Finally, to be clear, for each assignment you will be required to step into the shoes of the developer, make a recommendation as to how *you* would proceed, and then support your recommendation with a clear and concise argument that addresses all issues relevant to your decision. Identifying a handful of options and sitting on the fence will not be adequate – you must commit to answering the question, “what would YOU do and why?”

Case Studies 30%

Throughout the majority of this course we will use the case study method of learning. The analysis and implementation of real estate projects will be explored with seven or eight case studies based upon actual projects. Students may prepare cases individually or in groups of two, but all students are strongly encouraged to complete several cases individually over the course of the semester (the final exam will be done alone so you must know how to “do the math” yourself). The requirements for submission of the case write-ups are as follows:

- **Submit a complete case write-up.** Submit a brief summary (maximum 2-3 pages) that answers the questions asked in this syllabus for the specific case. Use excel spreadsheet tables and word documents to illustrate your economic, financial, and other analyses. For a more detailed explanation of the instructor's expectations for case write-ups, see “Case Write-Up Expectations,” which follows on page 8.
- **Submit your cases electronically via email to Eric.** In order to receive full credit your submission must arrive in Eric's in-box prior to 6PM on the night of class. Submit excel tables and word documents. We will only accept late submissions in the case of planned absence from class or illness. Remember to bring a copy for in-class discussion.

- **Print your name clearly on your write-up and on all work that you submit for the class.** If working in groups, make sure that both/all of your names are listed.

The class will discuss each case for 45-60 minutes, during which time students will be required to assume the perspective of the developer and consider what should be done about the project. Evaluation will be based upon the quality of class participation and the completeness of the case write-up. The instructor and teaching specialist will review hand-ins for completion and for quality of analysis generally, but will not provide detailed feedback on individual assignments. Rather, students should understand that all detailed feedback and learning flows from the facilitated in-class discussion. Complete write-ups submitted on time will receive a score of 10 and a complete Excel spread sheet of set-up, proforma, or other financial analysis will receive a full score even if there are minor math errors. Incomplete submissions will be marked down accordingly. Late submissions that are complete will be marked down 2 points for each day they are late until the Saturday after class, when they reach zero. We will typically grade and return all case write-ups at the beginning of class the following week.

Homework Exercises and Quizzes: 20%

Students will be asked to complete three homework exercises in the first few weeks of class. These exercises are designed to build your skills and understanding of economic analysis. Most homework questions can and should be figured out in pencil with the help of a hand-held calculator. Other assignments will require you to create and manipulate excel spreadsheets. Show all of your work. Students will also be asked to complete several short (5-10 questions) quizzes during class time throughout the semester. Each will count for 10 points.

Book Review: 15%

Choose one of the following two books. They are both on reserve and cheap used copies can be found on Amazon.com. (Note: the sooner you buy the cheaper it will be since you will be bidding against your classmates). Write a book review of a maximum of 500 words that outlines the story, addresses five or six issues discussed in class (such as risk, ambiguity, entrepreneurship, product type, design, market timing, financing, etc.), and that offers an opinion on the book itself. Examples of book reviews from *Planning, Urban Land*, and *Journal of the American Planning Association (JAPA)* are available on the course website for reference. The Book Review will be due after spring break and we will discuss them in class. You will receive a numerical score between zero and 100, based on four criteria (understanding of the book, structure of the paper, quality of writing, and originality of your analysis and review), each weighted evenly at 25% of the total score. Papers that do not conform to the word limit (noticeably short or long) will be marked down, as will papers that are submitted late. Pick one book AND BUY IT NOW:

Adler, Jerry. *High Rise: How 1,000 Men and Women Worked Around the Clock for Five Years and Lost \$200 Million Building a Skyscraper*. New York: Harper Perennial (Harper & Collins): 1994. (Used copies starting at \$1.23 on Amazon as of 1/13/17.)

Frantz, Douglas. *From the Ground Up: The Business of Building in the Age of Money*. University of California Press, 1993. (Used copies starting at \$3.48 on Amazon as of 1/13/17.)

Market Research Project: 15%

Students will work in teams to complete a market research project that will involve visiting multiple real estate projects/products – apartments – and compare and contrast those projects on qualitative and quantitative dimensions from the perspective of both a potential renter and a potential investor. Each team will submit a final report and make a brief (5-10 minute) presentation with 5-10 slides in class.

Final Exam: 20%

The final exam will be a take-home exam. The exam will be a case study, similar to those discussed in class. You will provide a three to four-page response to the general question asked in the case (your recommendation as to how to proceed) and provide answers to the individual questions asked. In addition to the write up, you will create and incorporate back-up in the form of excel spreadsheets and/or back-of-the-envelope (BOE) calculations to demonstrate the quantitative/financial reasoning behind your answers as well as the qualitative reasoning. You will work alone and you can use as much time as you like but as a guideline 6-12 hours should be adequate. The exam will be assigned at the end of class on April 25th and will be due at the beginning of class the following week, the last week of class, on May 2nd.

Grading

Case Study write-ups:	30%
Homework Exercises and Quizzes:	20%
Book Review:	15%
Market Research Project:	15%
Final Exam:	20%
Total:	100%

Final grades will be assigned based on percentage (90% and above = A range, 80% and above = B range, etc.), followed by subjective analysis of other factors such as notable improvement over the semester and class participation, which will be favorably rewarded. Please review the University Senate Uniform Grading and Transcript Policy if you are unsure about the standards associated with each letter grade: www1.umn.edu/usenate/policies/gradingpolicy.html

Show all of your work

For all assignments you should *show all of your work*. If you make a small math error but have the principles correct, we will be generous in grading, but if you do not show your work we will not be able to tell where you made your error.

Adherence to Relevant University Policies

In all of your work, students in this course are expected to adhere to the following the following university policies:

1. Grade definitions from the Administrative Policy
2. Scholastic Dishonesty
3. Makeup Work for Legitimate Absences
4. Use of Personal Electronic Devices in the Classroom
5. Appropriate Student Use of Class Notes and Course Materials

6. Student Conduct Code
7. Sexual Harassment
8. Equity, Diversity, Equal Employment Opportunity, and Affirmative Action
9. Academic Freedom and Responsibility: For courses that do not involve students in research

The full text of these policies can be found at the following link:

http://www.policy.umn.edu/Policies/Education/Education/SYLLABUSREQUIREMENTS_APPA.html.

Mental Health and Stress Management:

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. University of Minnesota services are available to assist you with addressing these and other concerns you may be experiencing. You can learn more about the broad range of confidential mental health services available on campus via the Student Mental Health Website at <http://www.mentalhealth.umn.edu>.

Remember that there are advisors in the Humphrey Student Services office who are trained and experienced counselors. They are available at very short notice to address any concerns you have and provide further resources within the University. **Humphrey Student Services, HHH 280, 612-624-3800**

Disability Accommodations:

The University of Minnesota is committed to providing equitable access to learning opportunities for all students. Disability Services (DS) is the campus office that collaborates with students who have disabilities to provide and/or arrange reasonable accommodations.

If you have, or think you may have, a disability (e.g., mental health, attentional, learning, chronic health, sensory, or physical), please contact DS at (612) 626-1333 to arrange a confidential discussion regarding equitable access and reasonable accommodations.

Expectations for Case Write-ups:

Beginning in the third week of class, there will be a case study assigned for most weeks throughout the remainder of the semester. The specific case and the questions that must be answered are identified in the syllabus. Case write-ups are due at the beginning of class on the day they appear in the class schedule. For most cases you will be required to develop qualitative and quantitative analytical approaches and to synthesize your results to fully answer the questions. More specifically, for each case you are required to answer this question: What would YOU do and why?

Quantitative Analysis:

Typically, for most case write-ups you should expect to create a spreadsheet of some kind. This may be a “set-up,” a “pro forma,” or some other table that helps to analyze a financial or economic question or questions. The cases usually contain economic or financial information, laid out in tables that you can use as templates to create and modify your own spreadsheets. Most cases will require you to use information presented in the case and modify it based upon different assumptions.

In some cases facts and information distributed throughout the narrative can be gathered and analyzed in a more structured way. It may not be clear initially how to go about it, but with thoughtful design you should be able to develop simple tables and spread sheets that help to answer other questions. For example, a case may have a question that involves multiple alternatives for interest rates, so you might develop a table that helps to assess alternatives based on cost and expected risk.

Qualitative Analysis:

Some questions require a more qualitative form of reasoning - your best judgment based on a thorough analysis of all the information presented. But even with qualitative information, some cases offer facts that can be arrayed in table form (even if it is not quantitative) as a way to more easily visualize and evaluate the information before making a judgment.

Synthesis:

Your case write-up should be clearly presented and should synthesize the results of your quantitative and qualitative analyses. Begin with a short paragraph that sums up the situation and your general approach. Then answer each question with a brief paragraph or a couple of sentences, augmented by bullets and/or quantitative analysis as appropriate. Your answers should be complete, concise, well written, and reflect a thorough analysis and understanding of the case. Cryptic and one-word answers to questions will not be acceptable.

Final Note:

While many of the questions may appear to be answerable in qualitative terms, in most cases some mathematical analysis is required to fully inform your answers. So if you think that a simple page with written answers to four or five questions constitutes a complete submission, then you probably have not looked hard enough at how to analyze the data and the situation and you may want to consider “running some numbers.”

Class Schedule

Week 1 (1/22): Introductions, logistics, developers, & development

Subjects

- Introductions; review of the course, class logistics

Reading: PA 5221 – Private Sector Development – *This Syllabus* – *Read it before class*

Discussion: *Developers as Entrepreneurs* and “how entrepreneurial are you?”

Week 2 (1/29): Valuing Real Estate Part I: The Back of the Envelope

Subjects

- Back of the Envelope (BOE) Analysis and the basic “set-up”
- Sources & Uses of Funds; Income & Expense Budget; Mortgages and Interest Costs
- Measures of return: Return on Assets (ROA); Return on Equity (ROE)

Readings

PA 5221 – Private Sector Development – *This Syllabus* – *Read it before class*

Brown, Peter Hendee. *Development 101: Class Notes for Students of Private Sector Development*, Introduction.

Brown, Peter Hendee. *How Real Estate Developers Think*, Prologue, Chapter 1.

Questions: Have you been to a neighborhood meeting where a development project was being discussed? What was it like? Think about places you have lived, worked, and played - which ones were created by developers?

Homework #1 (At end of Chapter 1) is assigned; due week 3 at beginning of class

Discussion: *Lucrative opportunities and “doing deals;” Math Part I; The Case Study Method; HREDT*

Week 3 (2/5): Valuing Real Estate Part II: Using Spreadsheets

Subjects

- Projects, players, and processes
- Present Value, Future Value, Discounted Cash Flow Analysis
- Multi-year income statements, cap rates, and future sales value
- Measures of Return: Net Present Value (NPV) and Internal Rate of Return (IRR)

Readings:

Brown, *Development 101*, Chapter 1 (Chapter 4 for reference).

Brown, Peter Hendee. *How Real Estate Developers Think*, Chapter 2.

Questions: How entrepreneurial are you? Do you know any entrepreneurs or do you have any in your family? What are they like and are you different?

Hammond, J. *Learning by the Case Method*. HBS case note 9-376-241, rev. April 16, 2002, 5 pp.

Homework #1 is due

Homework #2 (At end of Chapter 2) is assigned; due week 4 at beginning of class

Discussion: *Product Innovation over time; Math Part II; HREDT*

Case Study: Segel, Arthur and William Poorvu. *Revere Street*. HBS case 9-800-147, rev. April 2008, 14 pp.

Although inexperienced in real estate, Edward Alexander hopes in June 1999 that youthful enthusiasm and an \$80,000 inheritance will help him enter the real estate business. Alexander decides to buy a small multiple-unit building in Boston as a residence and an investment. He learns about finding and valuing properties, property management, construction, and mortgages. After some difficulty he finds a building in an

area that is increasing in value. The previous owner has run out of funds to complete renovations.

Questions for Class Discussion:

1. How did Alexander search for his property?
 2. Evaluate the property on Revere Street. What issues are important to you? What are the risks and rewards?
 3. Which people helped Alexander in the process and what functions did they perform?
 4. What are the problems relating to the rehabilitation work proposed?
 5. Run the numbers for the two different mortgage alternatives and compare ROA and ROE. Should Alexander invest in the deal and if so, which alternative?
- * Note: For this case write-up you must create a one-year budget or “set-up” based on the scenarios in the case (review Chapter 1 and HW#1), then modify it to reflect the alternative mortgage, and then compare the two scenarios.

Week 4 (2/12): Financing Real Estate Development

Subjects

- The developer: goals, personality, temperament, fit, and opportunity
- Private equity vs. public debt – risks and rewards
- Mortgages, interest costs, impact on returns

Readings:

Brown, *Development 101*, Chapter 2, (Chapter 4 for reference).

Brown, Peter Hendee. *How Real Estate Developers Think*, Chapter 3.

Questions: How do you think about innovation in product design over time?
Can you give examples of innovation in real estate and other products?

Homework #2 is due.

Homework #3 (At end of Chapter 3) is assigned and due week 5 at beginning of class.

Discussion: Case, Good Design Sells; Depreciation, Taxes, Leverage; HREDT

Case Study: Poorvu, William and Arthur Segel. Ft. Myers Eldercare. HBS case 9-898-041, rev. March 2004, 23 pp.

Benjamin Dana is an experienced multifamily developer in fast growing Ft. Myers, Florida with a buildable, well-located 2.8-acre site he has held for several years. Dana needs to decide if he should sell or develop the land. He has heard that eldercare facilities are quite profitable. Given that his two parents are in need of an assisted living facility coupled with his own interest in getting into a new profitable business, he explores congregate care and assisted living development options. Dana has to decide whether or not to proceed and if so, whether to operate it himself and how to finance it.

Questions for Class Discussion:

1. Has Dana done a good job researching his options? Discuss.
 2. What are the advantages and disadvantages of each of Dana’s options: selling the land, congregate housing or assisted living?
 3. Prepare a development budget and set-up for each of the two assisted living financing options. What are the initial returns on cost (ROA) and equity (ROE) for each option? How does the use of conventional debt compare with tax-exempt debt in terms of returns?
 4. Which option would you choose and why? If you chose an equity partner, who would you choose and why?
- * NOTE: You DO NOT have to do a multi-year income statement for this case, just the original set-up and the alternate set-up, similar to Revere Street.

Week 5 (2/19): Measures of Return

Subjects

- New markets, new products
- The Lender's perspective, debt coverage ratio (DCR)
- Comparing Measures of Return – BOE/One-year set-up vs. Multi-year income statement

Readings

Brown, *Development 101*, Chapters 3, 4.

Brown, Peter Hendee. *How Real Estate Developers Think*, Chapter 4.

Questions: What is the architect's role in design for real estate? What is the developers? Who else plays a role in the design process?

Homework #3 is due

Discussion: Case; Risks, rewards, leverage; Measures of Return; Building design as a risk-management tool, Depreciation, Taxes; HREDT; Q&A/How are we doing?

Case Study: Poorvu, William and Katherine Sweetman. Prospect Hill. Harvard Business School case 9-390-011, 1992, 20 pp.

Bill Hassett, a partner in the Nelson Companies, has to make some important decisions regarding the expansion of Prospect Hill Executive Office Park in Waltham, Massachusetts. The pre-development issues concerning him about the Hillside Building include how to position Hillside in a softening market, how to handle certain parking issues, and whether expanded day care facilities would enhance lease-up or increase expenses. He is also considering arranging an interest rate hedge on the adjustable rate interest. This case deals with suburban development issues, and focuses on adapting to possible structural changes in the real estate industry.

Questions for Class Discussion:

1. Describe Arthur Nelson? What has he succeeded at doing in his career – what is his “brand?” What do you think of his strategy for Prospect Hill? What do you think of the decisions he has made to date?
 2. Should The Nelson companies go forward with the Hillside building, given the market conditions? What would your decisions be concerning the amenities, the parking alternatives and the interest rate hedge?
 3. What are the differences between developing a quality office building in a suburban location in Waltham vs. a downtown site?
 - a. You can't figure ROE because Hassett is valuing the contributed equity – the land - at zero. Instead consider the effects of the different scenarios on CFAF.
 - b. Start with Hassett's setup on page 5. If you use a cap rate of 9%, what is his CFAF worth? That is the profit. Expand his setup to include sources and uses, mortgage amount, and annual debt service.
 - c. Now try a few different scenarios based on that setup. Figure out how the capital costs, operating costs, and debt service change with the other two parking alternatives and how this affects CFAF and profit. Do the same for the daycare center and for the different interest rate hedge options. Create a table analyzing each of these three variables. Based on your analyses, what combination of parking, daycare, and interest rate hedge would you pick?
- * NOTE: You DO NOT have to do a multi-year income statement for this case, just the set-up through CFAF and ROA/ROE. You must also do some economic analysis to address each of the questions Hassett is confronting – parking, amenities, and interest rate hedge. You can assume a 9% cap rate for the purposes of determining total value and profit for different scenarios.

Week 6 (2/26): Analyzing a Real Estate Opportunity

Subjects

- Quantitative Analysis - Measures of return; Cash flow, tax benefits, and future sale
- Qualitative Analysis: Location, design, construction, age, quality, features
- Combining Quantitative and Qualitative analyses

Readings:

Poorvu, William J. *Financial Analysis of Real Property Investments*. HBS case note 9-379-193, August 8, 2013, 25 pp.

Brown, Peter Hendee. *How Real Estate Developers Think*, Chapter 5.

Questions: What does good design mean to you? How is your definition of good design different from an architect, developer, your partner, others you know?

Discussion and Guest Speaker: Murray Kornberg - *Shady Trail* and *Capital Markets Update*

Case Study: Segel, Arthur. *Shady Trail*. Harvard Business School case 9-899-143, Rev 7/2003, 12 pp.

Holt Lunsford was intrigued by the packet of papers that lay in front of him. The papers comprised a brochure that Lonestar Bank had put together in an effort to sell the Shady Trail Distribution Center in Dallas, Texas. Shady Trail was a five-year-old, 120,000-square-foot distribution warehouse facility located on the west side of Dallas. Lonestar was asking \$4 million for the property. It was September 2003 and the Dallas real estate market was plateauing and the capital markets were in disarray. Lunsford had convinced 11 friends to put up \$100,000 each in addition to his own \$100,000 to acquire one or two troubled properties. Lunsford decided to focus on warehouse properties due to their relatively small size, their strong historical performance, and his relevant experience. He wondered whether Shady Trail would make a good investment.

Questions for Class Discussion:

1. Is this a good property for Lunsford to acquire? Why or why not? Discuss/explain.
 2. What assumptions has Lunsford made in creating his setup for Shady Trail? What changes, if any, would you make to his setup?
 3. Using the “back-of-the-envelope” approach, prepare a new setup for the property based on the information in the case and calculate the after-tax rate of return or Lunsford and his investors.
 4. What should he pay for the property, if he decides to buy it?
 5. How do the rates of return and the amount Holt should pay change if: a) the interest rate on the loan goes up by one percentage point? b) The exit cap rate goes up by one percentage point? c) The LTC changes from 70% to 80%? All three together?
- * NOTE: You must recreate each of the tables in the case and then modify the assumptions to answer the questions in this case.

Week 7 (3/5): Comparative Financial Analysis of Real Estate Investments

Subjects

- Comparing measures of return
- The story behind the numbers: blending qualitative and quantitative analyses
- Matching investor goals with investment opportunities

Reading: Brown, Peter Hendee. *How Real Estate Developers Think*, Chapter 6.

Questions: Have you ever had a sales job? Do you know any good sales people – what are they like? Have you ever been sold really well – what was that like? How do you think about selling yourself and your own ideas?

Discussion: *Where we have come from/where we are going next?; HREDT*

Case Study: Hatten, Kenneth J., William J. Poorvu, and Howard H. Stevenson. *Angus Cartwright III*. Harvard Business School case 9-375-376, Rev. September 2004. 20 pp.

Judy and John DeRight, looking to diversify their investment portfolios, have retained Angus Cartwright III to identify prospective real estate acquisitions. Mr. Cartwright has four potential properties that he feels merit an in-depth financial analysis. The case provides an opportunity to examine the various components of real estate return--cash flow, tax benefits, and futures--and measure the profitability of a proposed investment through the calculation of net present value, internal rate of return, and capitalization rate.

Questions for Class Discussion:

1. Using the method for financial analysis employed by Cartwright for the Alison Green property, what are the financial returns for the other three properties?
2. Fill out all the exhibits in the case and hand in one copy per group at the start of class. Students may work in groups of up to three people for this case.
3. Which potential investment(s), if any, would you suggest for each of the investors and why, based on their goals? Which Cousin should buy which project? How many should each cousin buy – one or two, and which ones?

Week 8 (3/12): SPRING BREAK – NO CLASS

Week 9 (3/20): Developer Roundtable

Reading: Prepare for the roundtable by reviewing the bios of the guest speakers posted on Moodle and think of a question or two for each developer.

Week 10 (3/26): Market Analysis and Product Differentiation

Reading: Brown, Peter Hendee. *How Real Estate Developers Think*, Chapter 7.

Questions: Where do you think the real estate market cycle for apartments is today? What do you think will happen next? Would you invest in an apartment project today?

Subjects

- Impact of demographic, economic, and technological trends on real estate markets
- Entrepreneurship, vision, and product differentiation
- Design and construction of commercial office buildings (and parking)

Discussion and Guest Speaker: Amanda Janzen: *Market Research/Market Studies; HREDT*

Assignment Due and in-class discussion: Book Review

Week 11 (4/2): Market Research – Apartment Hunting

Reading: Brown, Peter Hendee. *How Real Estate Developers Think*, Chapter 8.

Questions: How does reading about developers help you think about profits, values and sense of purpose in your own life and work?

Discussion: Apartment Comparisons

Panel Discussion: PA 5221 Alumni Panel (or previous week)

Assignment due (including brief slide presentation): Market Analysis: Comparison of Apartment Products

Week 12 (4/9): Getting Started in Development

Reading: Brown, Peter Hendee. *How Real Estate Developers Think*, Chapter 9.

Questions: Have you been to an inspirational place created by a developer? What was it like and why was it inspirational?

Subjects

- Student housing

- Transferring development strategies
- Getting started in development

Discussion: Case; Getting started in development - Eric's business; HREDT

Case Study (Maybe Optional or Extra Credit - TBD): Craig Furfine. Back to School: Real Estate Development of Off-Campus Student Housing. Kellogg School of Management case KEL855. REV: April 14, 2016

“Worth a closer look,” they said in unison. Kimberly Slater and her longtime friend, Christopher Lenard, had just agreed to explore the possibility of developing off-campus student housing in Madison, Wisconsin, home of the University of Wisconsin’s flagship campus. In the summer of 2012, the demographics and market conditions both looked good. However, a more careful analysis of the potential returns to the investment was warranted before the two friends would be willing to invest their money.

Questions for Class Discussion:

1. Qualitatively discuss the benefits and costs of choosing Madison as the target market for the proposed luxury student-housing development.
2. Explain the feasibility analysis provided in the case and critique it as a basis for decision-making. Your critique should include both a discussion of what is wrong construction loan that charges 6% interest to be repaid upon project completion. The first draw on the construction loan is made to pay for the demolition, with twelve subsequent draws evenly spread to cover the remaining hard costs. You may assume with the technique as well as what may be wrong with the assumptions within the specific application of the technique.
3. Suppose instead you were considering developing to a yield on cost. In other words, you would be willing to make an investment into the development project as long as the annual cash flow of the property was at least 5.2% of the total development cost, where cash flow is measured at project completion and the timing of development costs is ignored (except for when calculating construction loan interest). Development costs include both hard and soft costs, as well as interest on any construction loan. Assume that Lenard can finance hard development with a that the property’s net operating income (NOI) is growing at 3% per year and that property CapEx is 20% of NOI. Discuss the merits and deficiencies of using this approach to determine the costs to determine the appropriateness of a real estate development project. Justify any additional assumptions you must make to complete your analysis.
4. Develop a pro forma for the completed apartment complex and estimate its value at completion. Justify any additional assumptions you must make to complete your analysis.
5. Estimate the net present value (NPV) of the development project as a function of the cost of land. Assume that you will always pay the soft costs and that you will definitely make the draws on the construction loan that you calculated in Question 3. Further assume that the construction loan itself was zero NPV to the lender and that the risk-free rate is 3%. How much can you pay for the land so that the development is zero NPV? What internal rate of return (IRR) will a developer achieve with a zero NPV investment into this development project? Justify any additional assumptions you must make to complete your analysis.
6. OPTIONAL. Now consider the problem as a real option. Assume that a plot of land in Madison gives you the right, but not the obligation, to build this particular luxury fifteen-unit apartment building at any time during the next ten years. The strike price is the present value of the construction cost, which you calculated in Question 5. You should further assume that these costs are growing at 3% per year. The underlying

asset value is currently the price of a similar property valued in Question 4 if it existed today. Using the binomial option pricing model, estimate the maximum price you should be willing to pay for the necessary land. At this price, is the NPV you calculated in Question 5 positive or negative? Qualitatively explain the relationship between the price of land that delivers a zero NPV in Question 5 and the price of land you calculate in Question 6. Assume that the risk-free rate is 3%.

7. In light of your previous calculations (and any additional qualitative reasoning), describe whether or not you believe that Slater and Lenard will be able to earn an appropriate rate of return (or more) by pursuing this project.

Week 13 (4/16): Design, Planning, Politics, and Partnerships

Readings:

Brown, Peter Hendee. *How Real Estate Developers Think*, Chapter 10.

Questions: Based on what you know now, what do you think developers could do better when working with the community and vice versa?

Brown, Peter Hendee. "Actor Perceptions of Good Design for Real Estate Development" A Chapter for *A Companion to Real Estate*, Graham Squires, Erwin Heurkens, and Richard Peiser, Editors. Routledge, forthcoming 2017.

Subjects

- Managing expectations of multiple constituents with different interests
- Evaluation of design alternatives
- Equity partners and deal structures

Discussion: Case; Marketing and Sales; HREDT; Actor Perceptions of Good Design

Case Study: Segel, Arthur I., Vincent Dessain, and Anais Loizillon. *Waltz on the Danube*. Harvard Business School case 9-804-021, Rev: March 10, 2004.

Walking out of a grueling three-hour project team meeting on March 21, 2003, 32-year-old Dr. Philipp von Wilmowsky took a deep breath and smiled to himself. "This project is like a giant jigsaw puzzle," he thought. "It was fun, time consuming, but would he be able to complete it with all the right pieces in place?" As director of Hungarian operations for ECE Projektmanagement, a German real estate development conglomerate, Philipp had worked for two years on a 30,000 square meter, 75 million Euros shopping center project located along the Danube River in the city of Győr. Lining up four credit anchor tenants had been easy; finalizing the site acquisition, the permits, the design, and the financing was going to be a lot tougher.

Questions for Class Discussion:

1. Is there an adequate market in Győr? How much of the area's market must the retail center attract? Will there be enough retail sales to support rents? Are rents adequate to support the development? How does the underground economy affect your analysis? Use the information and numbers presented in the case and organize into a table or spread sheet - consider population, income, unemployment, purchasing power, expected retail sales/sm.
 - a. Determine retail demand for the area (use population and purchasing power/person)
 - b. Determine projected retail sales for ECE total and per square meter (use square meters, projected sales)
 - c. Determine ECE's share of the market (retail sales as % of total retail demand for area)?
 - d. What are the occupancy costs as a % of sales – are the rents affordable (use rents, projected sales)

2. Summarize each of the three design options. What design option is the most attractive to each of the various constituents and why?
 3. If you were Philipp, how would you structure the deal with your development partner? If you were an investor, what would you want?
 4. What factors should one take into consideration to perform a sensitivity analysis? How should Philipp take these assumptions into consideration to evaluate the viability of this venture?
 5. What market opportunities and barriers exist in this particular deal?
 6. Should Alexander Otto proceed with the deal?
- * NOTE: To answer these questions you must recreate the ten-year cash flow spreadsheet in the case and then create more versions of it to study the various scenarios.

Week 14 (4/23): Downtown East and Large Scale Urban Redevelopment

Reading: Brown, “The Diversified Waterfront and the New Port Authority”

Discussion: Guest Panel Discussion

Assignment: Final Take-Home Exam. Instructions posted on the Moodle class website.

Week 15 (4/30): Ethics, Career Management, and Wrap-up

Reading: Macomber, John D. *You Can Manage Construction Risks*. Harvard Business Review, March-April 1989.

Assignment due: Final Take-Home Case Study Exam due at beginning of class.

Discussion: Final Exam Case; Ethics and Career Management

Recommended Reading:

The search for meaningful work, how to focus, selling yourself, and success in life and work

Newport, Cal. *So Good They Can't Ignore You: Why Skills Trump Passion in the Quest for Work You Love*. Grand Central Publishing, 2012.

Newport, Cal. *Deep Work: Rules for Focused Success in a Distracted World*. Grand Central Publishing, 2016.

G. Richard Shell and Mario Moussa. *The Art of Woo: Using Strategic Persuasion to Sell Your Ideas*. Penguin Books, 2008. A great book about **selling ideas** and persuasion.

G. Richard Shell. *Springboard: Launching Your Personal Search for Success, Revised Edition*. Portfolio Books, 2014. A great book about how to define **success in life and career**.

Negotiating

Fisher, Roger, William Ury and Bruce Patton. *Getting to Yes: Negotiating Agreement Without Giving In, Third Edition*. Penguin, 2011. Classic book about **negotiation**.

G. Richard Shell. *Bargaining for Advantage: Negotiation Strategies for Reasonable People, 2nd Edition*. Penguin Books, 2006. An even better book about **negotiation**.

Decision Making, How the Mind Works, Probability and Risk

Kahneman, Daniel. *Thinking Fast and Slow*. New York: Farrar, Strauss, and Giroux, 2011.

Taleb, Nassim Nicholas. *The Black Swan: Second Edition: The Impact of the Highly Improbable: With a new section: "On Robustness and Fragility."* New York: Random House, 2010.

Taleb, Nassim Nicholas. *Antifragile: Things That Gain from Disorder*. New York: Random House, 2012.

How To: Books by developers about how to do development

Gallinelli, Frank. *What Every Real Estate Investor Needs to Know About Cash Flow... And 36 Other Key Financial Measures, 2nd Ed*. New York: McGraw Hill, 2008. A simple, clear-cut cookbook about cash flows with great definitions, terms, and explanations.

Poorvu, William J. and Jeffrey L. Cruikshank. *The Real Estate Game: The Intelligent Guide to Decision Making and Investment*. New York: Free Press, 1999. Simply the best book of its type.

Perez, Jorge. *Powerhouse Principles: The Ultimate Blueprint for Real Estate Success in an Ever-Changing Market*. Celebra (Penguin): 2009. The "Trump of the Tropics," Miami's biggest condo developer, offers his philosophy on how to make big money in real estate (he was rumored to be worth \$3B before the crash).

Urban Redevelopment

Brown, Peter Hendee. *America's Waterfront Revival: Port Authorities and Urban Redevelopment*. Philadelphia: The University of Pennsylvania Press, 2009.

Caro, Robert A. *The Power Broker: Robert Moses and the Fall of New York*. New York: Vintage, 1975. Moses more than anyone shaped NYC for over a half-century.

Sorkin, Michael, editor. *Variations on a Theme Park*. New York: Hill and Wang, 1992. Classic collection of essays about the “Disneyfication” of the urban environment.

Real Estate Economics, Finance, Bubbles, Crises

Downs, Anthony. *Real Estate and the Financial Crisis: How Turmoil in the Capital Markets is Restructuring Real Estate Finance*. Chicago: ULI – The Urban Land Institute, 2009.

Lewis, Michael. *The Big Short: Inside the Doomsday Machine*. New York: W. W. Norton, 2010. Lewis uses his insider's perspective to explain the recent financial crisis and how a handful of people made gazillions shorting the housing market – a scream.

Lewis, Michael. *Liar's Poker*. Penguin: 1990. Awesome true story written by a young trader on Wall Street in the 1980s when the Mortgage Backed Security was created and took off – this book launched Lewis on his writing career.

Real Estate Development Stories – Journalistic/Non-fiction

Ward, Vicki. *The Liar's Ball: The Extraordinary Saga of How One Building Broke the World's Toughest Tycoons*. New York: Wiley, 2014.

Frantz, Douglas and Catherine Collins. *Celebration, U.S.A.: Living in Disney's Brave New Town*. New York: Henry Holt & Co., 1999. A journalist buys a plot at Celebration and moves there with his family so that he can write about it.

Rybczynski, Witold. *Last Harvest: How a Cornfield Became New Daleville: Real Estate Development in America from George Washington to the Builders of the Twenty-first Century, and Why We Live in Houses Anyway*. New York: Scribner, 2007. Story of the development of a “new urbanist” housing development in a far exurb of Philadelphia.

Real Estate Development Stories - Fiction

Wolfe, Tom. *A Man in Full*. New York: Farrar Straus and Giroux, 1998. Wolfe captures the developer's personality and the flavor of the business like few other books in print, fiction or non-fiction.

Foster, Sam. *Alpha Male: A Tale of the Battle of Commerce*. McKinleyville, CA: Fithian Press, 2002. A morality tale about a very aggressive and ethically challenged real estate broker. Captures the character of people who work in the brokerage business and reads like a thriller. Beware: Contains gratuitous, very graphic, badly written sex scenes.