

University of Illinois at Chicago  
College of Business Administration  
**Economics 475: Real Estate Markets and Valuation**  
Fall 2006

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Office Hours: Wednesday afternoons,  
2-4, and by appointment  
Class: Thursday 6:00pm-8:30pm  
Location: BH 209

The course covers the basic features of real estate markets in the United States and the statistical tools used to analyze those markets. The purpose of the course is to provide a foundation for the valuation of real estate and an understanding of important housing policy and general real estate issues in the United States.

### **Prerequisites**

ECON 218 or ECON 220; and ECON 270 or IDS 270; or consent of the instructor. If you have very little background with statistics, please see the instructor.

### **Requirements**

Course requirements include regular attendance and participation in lectures, a mid-term examination, a comprehensive final examination, three problem sets, four discussion papers, and a research paper. Books and notes may not be consulted during examinations. Students are permitted and encouraged to work together on the problem sets, but to ensure that more than one student in the class benefits from working out the problems, groups of collaborators should be limited in size to four students. Problem solutions should be written independently and indicate the names of collaborating classmates. Late homework assignments will be penalized one point (out of ten possible points) for each day late. The most important dates to remember:

Midterm: (20% of the grade)	Thursday, October 26 <sup>th</sup> (in class)
Final: (20%)	Thursday, December 14 <sup>th</sup> , 6pm-8:30pm.
Paper: (20%)	Final version of paper is due Dec 12 <sup>th</sup> by 9am. Formal proposal due Thursday, Nov 9 <sup>th</sup>
Disc. Papers: (20%)	Paper #1 is due Thursday, September 7 <sup>th</sup> Paper #2 is due Thursday, September 28 <sup>th</sup> Paper #3 is due Thursday, October 19 <sup>th</sup> Paper #4 is due Thursday, November 30 <sup>th</sup>
Problem Sets: (20%)	Set #1 is due Thursday, September 21 <sup>st</sup> Set #2 is due Thursday, October 12 <sup>th</sup> Set #3 is due Thursday, November 9 <sup>th</sup>

The problem sets will use Excel data sets to illustrate statistical methods discussed in class. Assignments will be distributed at least one week prior to their due date. Problem

set grades will be based on the accuracy of the results, the quality of the analysis, and the quality of the presentation.

Discussion papers are short (1-2 pages) and are designed as an avenue through which you can express your (informed) opinion on various readings assigned in class. These are graded on the clarity with which you discuss your opinions and the thoughtfulness of those opinions. Late discussion papers will not be accepted.

For the research paper, you should choose a topic from those covered in class, find an appropriate data set, and carry out analysis using appropriate **regression** procedures. Students are, again, permitted and encouraged to work in groups, however, groups may not have more than four people. Each group should submit a short (1-2 pages) formal research proposal to the instructor on or before Nov 9<sup>th</sup>. Grades are based on the quality of the paper and the class presentation. Failure to attend the presentations of your colleagues will result in the reduction of your grade on the paper by as much as 50% (i.e., 10% of your total grade for the class). Late papers will not be accepted.

### **CBA Honor Code**

This course and its associated coursework are being administered under the policies of the University of Illinois at Chicago (UIC) College of Business Administration Honor Code. All students are expected to respect and uphold this code.

### **Note**

The course syllabus provides a general plan for the course; deviations may be necessary. It is your responsibility to stay apprised of changes in assignments, due dates, material to be covered, etc.

## Readings

There is no primary text for the course. The required book is *Don't Call It Sprawl: Metropolitan Structure in the 21<sup>st</sup> Century* by William T. Bogart. Readings from *Don't Call It Sprawl* will be assigned in class. Three texts have been placed on reserve in the Daley Library. These three texts are *Essentials of Econometrics* by Domodar N. Gujarati, *The Economics of Cities and Suburbs*, by William T. Bogart, and *Urban Economics and Real Estate Markets* by Denise DiPasquale and William C. Wheaton. All three of these texts provide a useful reference for materials discussed in lectures. An additional text, though not on reserve, that many students have found informative is *Primer on U.S. Housing Markets and Housing Policy*, by Richard K. Green and Stephen Malpezzi. Other assigned readings will be available through the course website on Blackboard. Required readings from these texts and articles will be covered on exams. Some of the articles and readings listed below will not be required and are simply suggestions for further reading should a topic interest you. Another useful text (but not required) is *Real Estate Perspectives*, by Corgel, Lingel, and Smith. Required readings are denoted with an \*.

To access Blackboard, visit the UIC website (<http://www.uic.edu>) and use the “quick links” menu.

## Course Outline and Readings

### 1. The Price of Housing

\*Himmelberg, Mayer, and Sinai (2005). Assessing High House Prices: Bubbles, Fundamentals and Misperceptions. *Journal of Economic Perspectives*, 19, 67-92. [Available online]

\*Shiller (1990). Speculative Prices and Popular Models. *Journal of Economic Perspectives*, 4, 55-65. [Available online]

\*Baker (2006): The Menace of an Unchecked Housing Bubble. *Economists' Voice*, March, pages 1-5. [Available online]

Baker (2002): The Run-up in Home Prices: A Bubble. *Challenge*, November-December, pages 93-119. [Available online]

DiPasquale and Wheaton, pages 1-34

Green and Malpezzi, pages 1-31

### 2. Real Estate and Taxation in the United States

\*Bourassa and Grigsby (2000). Income Tax Concessions for Owner-Occupied Housing. *Housing Policy Debate*, 11, 521-546. [Available online]

\*Anderson and McGuire (2006): The Illinois Property Tax: History and Structure, *Lincoln Institute of Land Policy Working Paper*. [Available online]

\*Anderson (forthcoming): Property Tax Limitations: An Interpretative Review. *National Tax Journal*. [Available online]

\*Fischel, William (2001). "Capitalization, Zoning, and the Tiebout Hypothesis" in *The Homevoter Hypothesis: How Home Values Influence Local Government Taxation, School Finance, and Land-Use Policies*. Harvard University Press: Cambridge, MA. Read pages 39-52.

DiPasquale and Wheaton, Chapter 13, pages 319-345

### 3. Property Assessment and Appraisal (and all-purpose statistics review)

\*International Association of Assessing Officers. (1999): Standard on Ratio Studies. *Assessment Journal*, 6, 23-65. [Available online]

\*Gujarati, Chapters 2-5

\*Traditional Appraisal Methods (handout) [Available online]

Ihlandfeldt, Keith. (2004): The Use of an Econometric Model for Estimating Aggregate Levels of Property Tax Assessment Within Local Jurisdictions. *National Tax Journal*, 57(1), 7-23. [Available online]

### 4. Economic Models of Cities: Value and Location

\*Bogart, William T. (1998): *The Economics of Cities and Suburbs*. Prentice Hall, New Jersey, Chapter 9.

\*Clark, Colin (1951): Urban Population Densities. *Journal of the Royal Statistical Society, Series A*, 114, 490-496. [Available online]

\*Anderson and Bogart (2001). The Structure of Sprawl: Identifying and Characterizing Employment Centers in Polycentric Metropolitan Areas. *The American Journal of Economics and Sociology*, 60, pages 147-169. [Available online]

McMillen, Daniel P. (forthcoming): Testing for Monocentricity in *A Companion to Urban Economics*, edited by Richard Arnott and Daniel P. McMillen, Blackwell. [Available online]

DiPasquale and Wheaton, Chapter 3, pages 35-59

DiPasquale and Wheaton, Chapter 4, pages 60-65.

Atack, Jeremy (1998): 'Location, Location, Location!': The Price Gradient for Vacant Urban Land: New York, 1835 to 1900. *Journal of Real Estate Finance and Economics*, 16, 151-172. [Available online]

## 5. Regression Review

\*Gujarati, Chapters 6-8

## 6. Estimating Value: Hedonic Price Functions

\*Bogart. Chapter 13, pages 275-284.

\*DiPasquale and Wheaton, Chapter 4, pages 65-81 and Chapter 8, pages 189-190.

Green and Malpezzi, pages 31-49

## 7. Hedonic Price Functions: Applications

\*Malpezzi, Chun, and Green (1998): New Place-to-Place Housing Price Indexes for U.S. Metropolitan Areas, and Their Determinants. *Real Estate Economics*, 26, 235-174. (read 235-245) [Available online]

\*McMillen, Daniel P. (2004): Airport Expansion and Property Values: The Case of Chicago O'Hare Airport. *Journal of Urban Economics*, 55, 627-640. [Available online]

Linden and Rockoff (2006): There Goes the Neighborhood? Estimates of the Impact of Crime Risk on Property Values from Megan's Laws. *NBER Working Paper # 12253*. [Available online]

## 8. Repeat Sales Price Indices

\*DiPasquale and Wheaton, Chapter 8, pages 191-193.

\*McMillen, Daniel P. (2002): The Center Restored: Chicago's Residential Price Gradient Reemerges. *Economic Perspectives*, 26, 2-11. [Available online]

Green and Malpezzi, pages 50-54

Case, Karl E. and Robert J. Shiller (1989): The Efficiency of the Market for Single Family Homes. *American Economic Review*, 79, 125-137. [Available online]

Meese, Richard A. and Nancy E. Wallace (1997): The Construction of Residential Housing Price Indices: A Comparison of Repeat-Sales, Hedonic Regression, and Hybrid Approaches. *Journal of Real Estate Finance and Economics*, 14, 51-73. [Available online]

## 9. More Regression Techniques

\*Gujarati, Chapters 9-10.

## 10. Empirical Applications: Housing Values

\*Gyourko, Mayer, and Sinai (2006). Superstar Cities. *NBER Working Paper #12355*. [Available online]

\*Sinai and Souleles (2005). Owner-Occupied Housing as a Hedge Against Rent Risk. *Quarterly Journal of Economics*, 120, 763-789. [Available online]

\*Black, Sandra E. (1999): Do Better Schools Matter? Parental Valuation of Elementary Education. *Quarterly Journal of Economics*, 114(2), 577-599. [Available online]

\*Bogart, William T. and Brian A. Cromwell (1997): How Much More is a Good School Worth? *National Tax Journal*, 50(2), 215-232. [Available online]

Figlio, David N. and Maurice E. Lucas (2000): What's In A Grade: School Report Cards and House Prices. *NBER Working Paper Series*, WP # 8019. [Available online]

Levitt, Steven D. and Chad Syverson (2005): Market Distortions when Agents are Better Informed: The Value of Information in Real Estate Transactions. *NBER Working Paper Series*, WP # 11053. [Available online]

## 11. Discrimination in Real Estate Markets

\*Yinger, John. (1986): Measuring Racial Discrimination with Fair Housing Audits: Caught in the Act. *American Economic Review*, 76(5), 881-893. [Available online]

\*Heckman, James (1998): Detecting Discrimination. *Journal of Economic Perspectives*, 12(2), 101-116. [Available online]

\*Turner et. al. (2002): Discrimination in Metropolitan Housing Markets National Results from Phase 1 of the Housing Discrimination Study [Executive Summary]. *Housing and Urban Development Research Paper*. [Available online]

Ladd, Helen F. (1998): Evidence on Discrimination in Mortgage Lending. *Journal of Economic Perspectives*, 12(2), 41-62. [Available online]

Yinger, John (1998): Housing Discrimination Is Still Worth Worrying About. *Housing Policy Debate*, 9(4), 893-927. [Available online]

Bogart, William T. (1998): *The Economics of Cities and Suburbs*. Prentice Hall, New Jersey, Chapter 14, 306-316.

Ondrich, J., Stephen Ross, and John Yinger. (2003): Now You See It, Now You Don't: Why Do Real Estate Agents Withhold Available Houses From Black Customers. *Review of Economics and Statistics*, 85(4), 854-873. [Available online]

## 12. Land-Use Controls

\*Fischel, William A. (2004): An Economic History of Zoning and a Cure for Its Exclusionary Effects. *Urban Studies*, 41, 317-340. [Available online]

Bogart, William T. (1998): *The Economics of Cities and Suburbs*. Prentice Hall, New Jersey, Chapter 10.

## 13. Affordable Housing

\*Quigley, John M. and Steven Raphael (2004): Is Housing Affordable? Why Isn't It More Affordable? *Journal of Economic Perspectives*, 18, 191-214. [Available online]

## 14. Housing Policies and Programs

\*Quigley, John M. (2000): A Decent Home: Housing Policy In Perspective. *Brookings-Wharton Papers on Urban Affairs*, 53-99. [Available online]

Bogart, William T. (1998). *The Economics of Cities and Suburbs*. Prentice Hall, New Jersey, Chapter 14.

Green and Malpezzi, chapter 3

**Schedule**

Class Number	Date	Topic	Assignments		
			Issued	Collected	Returned
1	31-Aug	The Price of Housing	D1		
2	7-Sep	Real Estate and Taxation		D1	
3	14-Sep	Property Assessment and Appraisal	P1		D1
4	21-Sep	Economic Models of Cities	D2	P1	
5	28-Sep	Regression Review	P2	D2	P1
6	5-Oct	Hedonic Price Functions/Applications			D2
7	12-Oct	Review and Catch Up	D3	P2	
8	19-Oct	Repeat Sales		D3	P2
9	26-Oct	Midterm Exam / Discussion			D3
10	2-Nov	Additional Regression Techniques	P3		
11	9-Nov	Empirical Applications/ Formal Proposal Due		P3	
12	16-Nov	Empirical Applications	D4		P3
	23-Nov	Thanksgiving Holiday (No Class)			
13	30-Nov	Presentations		D4	
14	7-Dec	Presentations			D4
	14-Dec	Final Exam			