Housing Markets (REAL/BEPP 208/708) JMHH F60, TT 10:15-11:45am; 12N-1:30pm Tentative as of December 20, 2021

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This course is designed for students interested in the economics and operations of housing markets. It is primarily a U.S.-focused course, but does include material devoted to Chinese housing markets for comparative purposes. The class is divided into five sections: (1) economic analysis of housing market fundamentals (supply and demand); (2) a policy analysis section on housing affordability issues in the U.S.; (3) operations of homebuilders and rental landlords, as well as the single family rental sector; this section includes a series of guest lecturers from industry executives; (4) the nature of housing cycles; and (5) a comparative analysis of Chinese housing markets.

This course presumes knowledge of intermediate microeconomics. For Wharton students, this means you must have passed BEPP 250 (undergrads) or MGEC 611 (MBAs). Non-Wharton students should have taken the equivalent course in the College. The class is primarily lecture based, although we will experiment with flipped classrooms a couple of times, as well as have guest lecturers. There are two in-class midterms and two cases. The course grade will be determined as follows:

Midterm #1: 35% Midterm #2: 35%

Cases: 30% (Case 1-15%; Case 2-15%)

All assignments are due on the day listed in the syllabus, and exams must be taken at the assigned time and date. Late assignments will not be accepted. The readings come from a series of articles and book chapters available in a bulk pack for purchase. A handful of the readings are technical in nature, and these are explicitly noted in the syllabus. You should read these articles for general understanding, and not get bogged down in modeling details or complex estimation strategies. We will go over this material in more detail in class.

Because of the change in semester length for MBAs this year, undergraduates will have additional coursework. Part of this will occur the week of February 28-March 4, 2021. Undergraduates will meet that week. Another session will involve material from firms in the housing industry. That will be announced later in the term.

Overhead sets will be posted on our class web site. I encourage you to download them and bring them to class, as they will save you much note taking. Electronic devices other than flat IPad-type devices are not permitted in class (i.e., no phones and no laptops).

I. Understanding Homeownership: The Rent-Own Decision, Demand and Supply

Class #1: Tuesday, January 18

Course Overview

Housing Market Data: Price, Quantities, Cycles and COVID

Readings: none, but bring Overhead Set #1 from your bulk pack to class

Class #2: Thursday, January 20

The Rent-Own Decision: The Costs and Benefits of Homeownership Versus Renting

Readings: Himmelberg, Mayer & Sinai (2005); Poterba (1984)-technical

Class #3: Tuesday, January 25

The 2017 Tax Act and User Cost; Subsidy and Distributional Issues

Readings: Sinai & Gyourko (2003)

Class #4: Thursday, January 27

Financing Homeownership: Mortgage Products—The Basics

Readings: Brueggeman & Fisher (2014, Chapters 3,4,5)

Note: Flipped Class; View Video and Prepare Question Answers from Slide Deck for Regular Class

Class #5: Tuesday, February 1

The Demand Side of Housing Markets: Interest Rates and the Tax Code

Readings: Glaeser, Gottlieb & Gyourko (2013; Sections 7.1, 7.2.1, 7.2.3, 7.3); Gruber, et. al. (2017); Glaeser & Shapiro (2003)

Class #6: Thursday, February 3

The Demand Side of Housing Markets: Income, Student Debt and Demographics

Readings: Bleemer, et. al. (2017); State of the Nation's Housing (2021)

Class #7: Tuesday, February 8

Just How Risky Is Owning?

Readings: Sinai and Souleles (2005)-technical; Sinai (2011)

Note: Flipped Class; View Video and Prepare Answers to Questions from Slide Deck for Regular Class

Case #1 handed out (Is Housing Really Undersupplied?); due at the beginning of class on Tuesday, February 17.

Class #8: Thursday, February 10

The Supply Side of Housing Markets: What Does It Cost to Build Housing?

Readings: Saiz and Gyourko (2006)

Class #9: Tuesday, February 15

The Supply Side of Housing Markets: The Role of Regulation

Readings: Glaeser & Gyourko (2018); Glaeser, Gyourko and Saks (2005); Quigley & Raphael (2005); Gyourko, Hartley and Krimmel (2019); Katz & Rosen (1987)

Class #10: Thursday, February 17

Case #1 due at the beginning of class

The Supply Side of Housing Markets: The Role of Regulation (cont'd.)

Readings: Same as for February 15

Class #11: Tuesday, February 22

Housing Affordability for the Poor and Public Policy

Readings: Glaeser & Gyourko (2008, Ch. 1, 2, 4, 5); Sinai & Waldfogel (2005); Ambrose & Warga (2002); Cummings & DiPasquale (1999); Baum-Snow and Marion (2008); Diamond & McQuade (2019); Chetty, Hendren & Katz (2016); Housing New York—undated summary of Mandatory Inclusionary Zoning Program; NYC Planning (September 2015); Furman Center (March 2015-Research Brief); Furman Center (March 26, 2015—White Paper); Collinson & Ganong (2017)

Class #12: Thursday, February 24

Midterm #1—in class

- →No class for MBA's the weeks of March 1-5 (MBA Core Exams & Opportunity Week) and March 7-12 (Spring Break)
- → Undergraduates will meet on Tuesday, March 1, and Thursday, March 3; material for those sessions will be handed out separately

II. The Location of Housing and Its Price Across Markets: Where Do We Live and Why?

Class #13: Tuesday, March 15

Return Midterm #1 and Discuss Answers

Why Don't We All Live in San Francisco? Spatial Arbitrage

Readings: Roback (1982)—background; technical; Gyourko & Tracy (1991)--technical

Class #14: Thursday, March 17

Why Does Anyone Still Live in Detroit? What Happens to Declining Markets?

Readings: Glaeser & Gyourko (2005)-technical

Class #15: Tuesday, March 22

The Growing Price Dispersion Across Markets: The Rise of 'Superstar' Cities

Readings: Gyourko, Mayer and Sinai (2013)—technical

III. Operating Businesses in Residential: Single Family, Multifamily and Single-Family Rental: Risks and Opportunities

Class #16: Thursday, March 24

Case #2 handed out: Is Affordability for the Lower Middle Class Possible?; answers due at the beginning of class on Tuesday, April 5

Guest Speaker #1: Martin Connor, CFO, Toll Brothers, "Homebuilders Across the Business Cycle and During the Time of Covid" Evening Class, 6-7pm; in-person or virtual status to be determined

Class #17: Tuesday, March 29

Guest Speaker #2: Mark Parrell, CEO, Equity Residential Properties, "Multifamily Landlords: Operations and Investment Strategies"

Evening Class, 6-7pm; in person or virtual status to be determined

Class #18: Thursday, March 31

Guest Speaker #3: Andrew Jonas, Managing Director and Co-Head of Real Estate, Goldman Sachs & Company, "The Economics of the Single-Family Rental Business: Covid and the Longer-Term"

Evening Class, 6-7pm; in person or virtual status to be determined

Class #19: Tuesday, April 5

Case #2 due at the beginning of class

Guest Speaker #4: Neil Rubler, President and CEO, Vessel Technologies, "Making Affordable Housing Work for the Middle and Lower-Middle Classes" Evening Class, 6-7pm; in person or virtual status to be determined

IV. Housing Cycles: Why Are Prices So Volatile

Class #20: Thursday, April 7

Housing Market Cycles: Data and History

Case & Shiller (1994); Glaeser (2014)

Class #21: Tuesday, April 12

Why Was the Last Cycle So Hard to Anticipate?

Readings: Himmelberg, Mayer & Sinai (2005), Case & Shiller (2003); Shiller (2005, Chapter 2, 2nd Edition); Griffin (2021)

V. A Brief International Comparison: China's Housing Markets

Class #22: Thursday, April 14

Overview of the Chinese Housing Market:

Readings: Deng, Gyourko and Wu (2011, 2016)

Class #23: Tuesday, April 19

Evaluating the Risk of China's Housing Markets

Readings: same as for April 20

Class #24: Thursday, April 21

Midterm #2--in class