# Hong Kong University of Science and Technology Department of Economics

## ECON 6110I Housing Economics (3 units) 2020/21 Fall

<u>Instructor:</u> C.Y. (Eric) NG Lecture: Thu 9:00am – 11:50am

**Email:** <u>ecyng@ust.hk</u> Fri 3:00pm – 5:50pm

Zoom Personal Meeting ID: 630 678 8279

**Office hours:** Thu 2:30pm – 3:30pm **Zoom Meeting ID:** 943 3715 5422

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Email: ecdjpegler@ust.hk

Room:

Zoom Personal Meeting ID: 515-008-9299 Course website: <a href="https://canvas.ust.hk">https://canvas.ust.hk</a>

Office: LSK 6066

Office hours: Tue 4pm – 6pm

**Teaching Assistant: Dominic PEGLER** 

#### **Course Description**

Housing, unlike other goods, has its unique characteristics in terms of heterogeneity, durability, and spatial fixity. These suggest that conventional economic concepts need to be readdressed in order to analyze the microeconomic issues of housing. In addition, a significant number of households borrow mortgages to finance their home purchases. A substantial collapse in housing prices might lead to negative equity for leveraged households and reduce their consumption and investment thereafter. The macroeconomic implication of housing market dynamics can be significant to the aggregate economy. The first part of the course focuses on microeconomic issues covering housing demand and supply analysis, models of housing and rental markets, and rationales and effects of public housing policies. The second part emphasizes the macroeconomic issues including the stylized facts on housing market dynamics, causes and consequences of housing market fluctuations, and housing market spillovers. The objective of this course is to develop analytical framework by which students can address both the microeconomic and macroeconomic issues of housing.

#### **Prerequisites**

Basic microeconomics, macroeconomics, and introductory econometrics.

### **Course Intended Learning Outcomes (CILOs)**

Upon successful completion of this course, students will be able to:

- 1. Apply the microeconomic concepts and models to conduct supply and demand analysis of housing markets (PILO 4.2).
- 2. Understand the economic rationales and effects of public policies on housing (PILO 1).
- 3. Apply the macroeconomic concepts and models to analyze the dynamics and spillovers of the housing market (PILO 4.2, 6.2).

#### **Teaching Approach**

This course is primarily delivered through lectures, in-class discussion, and a group project.

Teaching & Learning Activities	Roles in the Course	Course Learning
		Outcomes Addressed
Lectures	Explain key concepts and models to students.	1, 2, 3
In-class discussion	Learn to develop critical thinking in analyzing	1, 2, 3
	economic questions.	
Group Project	Learn to write a literature review and present	1, 2 ,3
	research results.	

#### **Assessment Scheme**

Literature Review Project (Group): 45%
 In-class case study analysis (Group): 15%
 Online Quiz on 10 December (Individual): 40%

Please form a group of 4-5 members for doing the group work described above. The actual group size will depend on the actual enrollment. Please submit your group information (names and student numbers) to me by email no later than <u>2 Nov</u> (the last date of add/drop). To prevent free-rider problem, we may conduct peer evaluation to assess individual contribution to the group.

A case study with questions will be given to you in advance for preparing the answers. You will present your answers in the class. The assessment will be based on your performance in presentation.

#### **Course Outline**

- 1. Housing Demand, Supply, and Equilibrium Analysis (Week 8-9)
  - Housing as a standard commodity
  - Housing as a heterogeneous commodity
    - Application: Modeling Hong Kong residential property prices
  - Housing in a spatial context
- 2. Role of Government in the Housing Market (Weeks 9-10)
  - Rationales for housing policies
  - Policies for equity and efficiency
  - Effects of housing policies
- 3. Housing and the Macroeconomy (Weeks 10-11)
  - National models of housing and mortgage markets
  - Stylized facts on housing market dynamics
- 4. Housing Market Fluctuations and Spillovers (Weeks 12-13)
  - Determinants of housing market booms and busts
  - Sources and consequences of housing market fluctuations
  - Business cycle models with housing market
- 5. Subprime Mortgage Crisis and Financial Crisis of 2007-2009 (Week 13)
  - Causes and consequences, and policy implications

Note: This is a tentative course outline. I may fine tune the topics while ensuring the course objectives being achieved.

#### **Learning Resources**

There is no required textbook for this course. Instead, we rely on lecture notes (downloadable from the course website) for teaching. The original references of the lecture notes and other supplementary readings are also available from the course website.

The content of the course draws on various sources, including books, academic articles, and policy papers. Please refer to the following list for your reference. Those references marked with an asterisk are used heavily in preparing the lecture notes.

#### References:

- \*Agnello, L., Schuknecht, L., 2009. Booms and Busts in Housing Markets: Determinants and Implications. *ECB Working Paper Series* 1071, European Central Bank.
- Ahearne, A., Ammer, J., Doyle, B., Kole, L., Martin, R., 2005. House Prices and Monetary Policy: A Cross-Country Study. *International Finance Discussion Paper* 841, Washington: Board of Governors of the Federal Reserve System.
- Case, K.E., Shiller, R.J., 2003. Is There a Bubble in the Housing Market? *Brookings Papers on Economic Activity* 2, 299–361.

- Dokko, J., Doyle, B., Kiley, M.T., Kim, J., Sherlund, S., Sim, J., Van den Heuvel, S., 2009. Monetary Policy and the Housing Bubble. *Finance and Economics Discussion Series*, Divisions of Research & Statistics and Monetary Affairs Federal Reserve Board, Washington, D.C. 2009-49.
- \*Fallis, G., 1984. *Housing Economics*. Butterworth-Heinemann Ltd, Toronto.
- Funke, M., Paetz, M., 2013. Housing Prices and the Business Cycle: An Empirical Application to Hong Kong. *Journal of Housing Economics* 22, 62–76.
- Iacoviello, M., 2005. House Prices, Borrowing Constraints, and Monetary Policy in the Business Cycle. *American Economic Review* 95 (3), 739–64.
- \*lacoviello, M., Neri, S., 2010. Housing Market Spillovers: Evidence from an Estimated DSGE Model. American Economic Journal: Macroeconomics 2 (2), 125–164.
- \*Choy, L., Mak, S., Ho, W., 2007. Modeling Hong Kong Real Estate Prices. *Journal of Housing and the Built Environment* 22, 359–368.
- Glaeser, E., Huang, W., Ma, Y., Shleifer, A., 2017. A Real Estate Boom with Chinese Characteristics. *Journal of Economic Perspectives* 31 (1), 93–116.
- Koss, R., Shi, X., 2018. Stabilizing China's Housing Market. IMF Working Paper WP/18/89.
- \*Liu, Z., Wang, P., Zha, T., 2013. Land Price Dynamics and Macroeconomic Fluctuations. *Econometrica* 81 (3), 1147–1184.
- Oxley, M., 2004. Economics, Planning and Housing. Palgrave MacMillan, New York.
- MacKenzie, D.J., Betts, R.M., Jensen C.A., 2011. Essentials of Real Estate Economics. Cengage Learning.
- Muth, R., Goodman, A., 2002. The Economics of Housing Markets. Routledge.
- Ng, E.C.Y., 2015. Housing Market Dynamics in China: Findings from an Estimated DSGE Model. *Journal of Housing Economics* 29, 26–40.
- Ng, E.C.Y., Feng, N., 2016. Housing Market Dynamics in a Small Open Economy: Do External and News Shocks Matter? *Journal of International Money and Finance* 63, 64–88.
- Shiller, R.J., 2009. *The Subprime Solution: How Today's Global Financial Crisis Happened and What to Do About It.* Princeton University Press, Princeton.

#### **Academic Policy**

Dishonesty or plagiarism will not be tolerated. Any student violating HKUST Academic Integrity and Honor Code (<a href="http://www.ust.hk/vpaao/integrity">http://www.ust.hk/vpaao/integrity</a>) will be subjected to disciplinary procedure. Any student observed cheating on exams, or plagiarizing material, will receive an "X" for the course, to show that the grade resulted from cheating. This X grade stays with your record until graduation. If you cheat again and "earn" another X grade, you will be dismissed from the University.