

## Department of Economics Hong Kong University of Science and Technology

Economics 5580 International Economics Spring 2023

Lecturer: Prof. David Cook and Prof. Jenny Xu Office Hours: TBA Phone: 2358-7604 Time and Venue: Wednesday, 3:00 - 5:50 PM, LSK 1011 Email: <u>davcook@ust.hk jennyxu@ust.hk</u> Course Website: Canvas

 Teaching Assistant:
 Xu, Feiting

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 TBA

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 TBA

# Course Objective:

The objective of this course is to familiarize graduate students with theories of international macroeconomics and related research questions. The course will focus on determination of the current account and exchange rate, business cycle comovement, and optimal monetary policy in open economies.

# Pre requisites

This course is for both MSc (ECON) and Ph.D students only. For Ph.D students, Econ 5250 is the prerequisite. For M.Sc students, Econ 5140 is the prerequisite, they should also be aware that course material is advanced and they need to get approval from the instructor to register for this course.

*Learning Outcomes* – School Intended Learning Outcomes ("SILOs"):

## Upon successful completion of this course, you should be able to:

- 1. Have an up-to-date and in-depth knowledge on international macroeconomics. Understand the important questions in the literature and the main components of international macroeconomic theories. (SILO # 1)
- 2. Grasp the advanced mathematical and quantitative tools to understand the important research questions discussed in the literature; (SILO # 1.2, #1.3)
- 3. Apply the concepts, principles, and models learnt in this course to analyze economic phenomena, understand and evaluate the international macroeconomics policies, possible effects and causes of recent financial crisis, and financial and monetary policies that may stabilize fluctuations. (SILO # 2.2)
- 4. Develop new research questions independently based on the literatures and current macroeconomic phenomenon; and carry out research independently to address these questions; (SILO # 4.1)
- 5. Think critically and creatively when making effective economic decisions and policy suggestions supported by international macroeconomic theories and analytical and quantitative techniques. (SILO # 1.3)
- 6. Communicate effectively in oral and written English; (SILO # 5, SILO # 6.1)
- 7. Demonstrate proficiency in using mathematical, quantitative and empirical tools in conducting economics research; (SILO # 3.2, #3.3)
- 8. Locate, gather, and analyze data using appropriate information technology, software and systems.

For the details of SILOs, please refer to: http://www.bm.ust.hk/sbmlearn/eng/thirdcat.php?sid=5&thirdid=8

# **Teaching Approach**

This course is primarily delivered through lectures, tutorials, and class discussion.

Teaching and	Roles in the Course	Course Learning
Learning Activities		Outcome addressed
Lectures with in-class	Explain key concepts and models to	1, 2, 3, 4, 5, 6, 7, 8
discussions	students	
Homework	Practice problem solving, matlab	1,2,3, 6,7,8
assignments	coding, data collection and apply	
	models to analyze economic issues	
Literature Review	Understand research questions,	1,2,3,4,6,7,8
and Referee Report	practice critical review on papers	
Exams	Problem solving and understanding of	1,2,3, 5,7,8
	course materials	

# Textbook, Reference Books, and Required Readings:

1. There are no required texts. However, the following texts are very helpful.

*Foundations of International Macroeconomics* (1996), Obstfeld, Maurice and Kenneth Rogoff, Cambridge, MIT Press (OR);

A useful reference for background material is the following textbook: Uribe, Martin and Schmitt-Grohe, Stephanie. *Open Economy Macroeconomics*. Princeton University Press, 2017.

2. Papers on Approximating Solution to Dynamic General Equilibrium Models

Klein, Paul, "Using the Generalized Schur Form to Solve a Multivariate Linear Rational Expectation Models," Journal of Economic Dynamics and Control, 24, 1405-1423.

Schmitt-Grohe, Stephanie and Martin Uribe, 2004, "Solving Dynamic General Equilibrium Models Using a Second-Order Approximation to the Policy Function," Journal of Economic Dynamics and Control 28(4), 755-775

We will also be using a number of articles to supplement the main text, deepen our understanding of selected topics, and follow the most recent debate in the literature and policy circles.

# Course Evaluation:

Written Assignments (4 assignments)	20%
Literature reviews/Referee Report	10%
Midterm3	5%
Final Exam3	5%

# Course Outline:

## 1: International Capital Markets and the Current Account

- Intertemporal approach to current account determination (OR Chapter 1-2, SU Chapter 2)
- Adjustment of current account to shocks (OR Chapter 2)
- Government spending and the current account (OR Chapter 3)

Schmitt-Grohe S. and M. Uribe, "Closing Small Open Economy Models", Journal of International Economics, Oct. 2003, 61(1)

Backus, David K.; Patrick J. Kehoe; and, Finn E. Kydland. 1994. "The Dynamics of the Trade Balance and the Terms of Trade: The J-Curve?" <u>American Economic Review</u> vol. 84, no. 1, March 1994, pp. 84-103.

Obstfeld, Maurice, and Kenneth Rogoff. 1995. "The Intertemporal Approach to the Current Account." In <u>Handbook of International Economics, vol. 3</u>, Gene M. Grossman and Kenneth Rogoff, eds. (Amsterdam: Elsevier). Chapter 34, pp. 1731-1799. Earlier version published as NBER working paper no. 4893.

Nason, James M., and John. H. Rogers. 2006. "The Present-Value Model of the Current Account Has Been Rejected: Round Up the Usual Suspects." <u>Journal of International Economics</u>, vol. 68, no. 1, January 2006, pp. 159-187.

Caballero, Ricardo J.; Emmanuel Farhi; and, Pierre-Olivier Gourinchas, 2006. "An Equilibrium Model of 'Global Imbalances' and Low Interest Rates," American Economic Review 98(1) 2008 pp. 358-93

### 2: International Risk Sharing and Portfolio Diversification

- Real and nominal exchange rates (OR Chapter 4.1-4.4, SGU Chapter 7)

Robert P. Flood, Nancy P. Marion and Akito Matsumoto "International risk sharing during the globalization era," The Canadian Journal of Economics Vol. 45, No. 2 (May / mai 2012), pp. 394-416

Coeurdacier Helene Rey "Home Bias in Open Economy Financial Macroeconomics" Journal of Economic Literature Vol. 51, No. 1, March 2013 (pp. 63-115)

Obstfeld, Maurice, and Kenneth Rogoff. "The Six Major Puzzles in International Macroeconomics: Is There a Common Cause?," 2000, NBER Macroeconomics Annual, vol 15(1), pages 339-390.

Engel, Charles, 2016, "Exchange Rates, Interest Rates, and the Risk Premium," American Economic Review. VOL. 106, NO. 2,

#### **3: Exchange Rate and Terms of Trade**

- Real and nominal exchange rates (OR Chapter 4.1-4.4, 5.5, SGU Chapter 7)

Cole Harold and Maurice. Obstfeld, "Commodity Trade and International Risk Sharing: How much do Financial Mar-kets Matter?", Journal of Monetary Economics Aug 1991, 28(1), pp3-243.

Backus, David K. and Gregor W. Smith (1993) Consumption and real exchange rates in dynamic economies with non-traded goods. Journal of International Economics 35, 297-316.

Engel, Charles. 1996. "The Forward Discount Anomaly and the Risk Premium: A Survey of Recent Evidence. Journal of Empirical Finance, vol. 3, no. 2, June 1996, pp. 123-192.

Engel, Charles. 1999. "Accounting for US real exchange rate changes.?" Journal of Political Economy, 130(3): 507-538.

Itskhoki, Oleg, 2021, "The Story of the Real Exchange Rate," Anuual Review of Economics, August 2021, Volume 13: 423-455.

#### 4: International Business Cycles (if time)

- Co-movement (OR Chapter 7.5)

Aguiar, Mark, and Gita Gopinath. 2007. "Emerging Market Business Cycles: The Cycle is the Trend." Journal of Political Economy 115 (1): 69-102.

Backus, David K.; Patrick J. Kehoe; and, Finn E. Kydland. 1992. "International Real Business Cycles." Journal of Political Economy, vol. 100, no. 4, August 1992, pp. 745-775.

Baxter, Marianne, and Mario J. Crucini. 1993. "Explaining Saving-Investment Correlations." American Economic Review, vol. 83, no. 3, June 1993, pp. 416-436.

Stockman, Alan C., and Linda L. Tesar. 1995. "Tastes and Technology in a Two-Country Model of the Business Cycle: Explaining International Comovements." American Economic Review, vol. 85, no. 1, March 1995, pp. 168-185.

Wen, Yi "By Force Of Demand: Explaining International Comovements," *Journal of Economic Dynamics and Control*, 31(1), pp. 1-23, January 2007.

## 5. Real Business Cycle Model in Small Open Economies

Emerging-country business cycles through the lens of the RBC Model (SGU Chapter 5)
Role of interest rate shocks (SGU Chapter 6)

Aguiar, Mark and Gopinath, Gita, 2006. "Emerging Market Business Cycles: The cycle is the Trend," Journal of Political Economics, 69(1), 64-83.

Bai, Yan and Jing Zhang, 2010 "Solving the Feldstein–Horioka Puzzle With Financial Frictions" <u>Econometrica</u>, Vol 78(2), 603–632.

Feldstein, Martin and Charles Horioka, 1980, "Domestic Saving and International Capital Flows," <u>The Economic Journal</u>, Vol. 90, pp. 314-329.

Mendoza, Enrique, 1991. "Real Business Cycles in a Small Open Economy," <u>American</u> <u>Economic Review</u>, 81, 797-818.

Mendoza, Enrique, 1995, "The Terms of Trade, the Real Exchange Rate, and Economics Fluctuations," <u>International Economic Review</u>, Vol 36 (1), 101-137.

Neumeyer, Pablo A. and Fabrizio Perri, 2005, "Business Cycles in Emerging Markets: The Role of Interest Rates," Journal of Monetary Economics, 52/2, 345-380.

Schmitt-Grohe, Stephanie and Martin Uribe, 2003. "Closing Small Open Economy Models," Journal of International Economics, 61, 163-185.

Uribe, Martin and Vivian Z. Yue. 2006. "Country Spreads and Emerging Countries: Who Drives Whom?" Journal of International Economics, 69(1), 6-36.

### 6. Monetary Policy in the Open Economy

-A simple monetary model of exchange rates (OR 8.3) -Sticky-price model of output, the exchange rate and the current account (OR 10.1-10.4, SGU Chapter 9)

Obstfeld, Maurice, and Kenneth Rogoff. 1995. "Exchange Rate Dynamics Redux." Journal of Political Economy vol. 103, no. 3, June 1995, pp. 624-660.

Obstfeld, Maurice, and Kenneth Rogoff. 2000. "New Directions for Stochastic Open Economy Models." Journal of International Economics, vol. 50, no. 1, February 2000, pp. 117-153.

Chari, V.V., Patrick J. Kehoe, and Ellen R. McGrattan, 2002, "Can Sticky Price Models Generate Volatile and Persistent Real Exchange Rates?" <u>Review of Economics Studies</u> 69, 533-563.

Benigno, Gianluca, and Piepaolo Benigno. 2006. "Designing Target Rules for International Monetary Policy Coordination." Journal of Monetary Economics, vol. 53, no. 3, April 2006, pp. 473-506.

### 7. Optimal Monetary Policy and International Coordination

-Optimal monetary policy rules in open economies: Fixed or flexible Exchange rate Regimes (notes)

- Coordinated versus non-corporative policies. (notes)

Obstfeld, Maurice, and Kenneth Rogoff. 2002. "Global Implications of Self-Oriented National Monetary Rules." <u>Quarterly Journal of Economics</u>, vol. 117, no. 2, May 2002, pp. 503-535.

Devereux, Michael B. and Charles Engel. 2003. "Monetary Policy in the Open Economy Revisited: Price-Setting and Exchange Rate Flexibility." <u>Review of Economic Studies</u>, vol. 70, no. 4, October 2003, pp. 765-783.

Clarida, Richard; Jordi Gali; and Mark Gertler, 2002. "A Simple Framework for International Monetary Policy Analysis." <u>Journal of Monetary Economics</u>, vol. 49, no. 5, July 2002, pp. 879 - 904.

Gali, Jordi, and Tommaso Monacelli, 2005. "Monetary Policy and Exchange Rate Volatility in a Small Open Economy." <u>Review of Economic Studies</u>, vol. 72, no. 3, July 2005, pp. 707-734.

Devereux, Michael B. and Charles Engel. 2007. "Expenditure switching versus real exchange rate stabilization: Competing objectives for exchange rate policy." Journal of Monetary Economic, vol. 54, no. 8, pp. 2346-2374.

Devereux, Michael B, Kang Shi and Juanyi Xu, 2007, "Global Monetary Policy under a Dollar Standard", <u>Journal of International Economics</u>, vol. 71(1), Pg. 113-132.

Engel, Charles, 2012, "Currency Misalignments and Optimal Monetary Policy: A Reexamination," <u>American Economic Review</u> 101, 2796-2822.

Engel, Charles, 2015, "International Coordination of Central Bank Policy," NBER Working Paper 20952.

Fujiwara, Ippei and Jiao Wang, 2017, "Optimal Monetary Policy in Open Economies Revisited," Journal of International Economics, 108, 300-314.

Gopinath, Gita and Jeremy Stein (2017) "Banking, Trade and the Making of a Dominant Currency," Quarterly Journal of Economics 136(2), 783-830.

### 8. Financial Frictions and Shocks

- Exchange rate and Capital Control (SGU Chapter 10)
- Financial Frictions and Aggregate Instability (SGU Chapter 12)

Gourinches, Pierre-Olivier and Helene Rey, 2007, "International Financial Adjustment," Journal of Political Economy 115:4, 665-703.

Tille, Cedric, 2008, "Financial Integration and the Wealth Effect of Exchange Rate Fluctuations," <u>Journal of International Economics</u> 75, 283-294.

Farhi, Emmanuel, and Ivan Werning. 2016. "Theory of Macroprudential Policies in the Presence of Nominal Rigidities.?" <u>Econometrica</u> 84 (5): 1645-1704.

Devereux, Michael and James Yetman, 2014, "Capital Controls, Global Liquidity Traps and the International Policy Trilemma," <u>Scandinavian Journal of Economics</u> 116, 158-189, and NBER Working Paper No. 19091

Gourinchas, P.O. and Helene Rey, 2014. "External adjustment, Global Imbalances and Valuation Effects." in <u>Handbook of International Economics</u> volume 4.

Schmitt-Grohe, Stephanie and Martin Uribe, 2016, "Downward Nominal Wage Rigidity, Currency Pegs, and Involuntary Unemployment," Journal of Political Economy 124, 1466-1514.

Devereux, Michael B, Eric Young, and Changhua Yu, 2015, "A New Dilemma: Capital Controls and Monetary Policy in Sudden Stop Economies," <u>NBER Working Paper</u> 21791.

Heathcote, Jonathan and Fabrizio Perri, 2016, "On the Desirability of Capital Controls," <u>NBER</u> <u>Working Paper 21898</u>.

Aeimit Lakdawala, Timothy Moreland, Matthew Schaffer, 2021, "The international spillover effects of US monetary policy uncertainty", Journal of International Economics, Volume 133, 103525,

*Remark:* Depending on our progress, we may or may not cover all these topics. Time constraints will force us to deviate at times.