

Macroeconomía III**Topics in Open Economy Macroeconomics and International Finance****Maestría en Economía****Prof. Stephen McKnight****E-mail: mcknight@colmex.mx / Office: 4475**

Course Description / Descripción del Curso

- There are two 90 min classes per week for 16 weeks. All classes are online.
- The course is divided into 4 sections. We will focus on the following core issues: the importance of the current account and the role of international financial markets (Section 1), the mechanics and macroeconomic implications of the exchange rate (Section 2), the design of monetary and fiscal policy for open economies (Section 3) and international real business cycle theories (Section 4).
- In addition to attending classes, students will be expected to complete occasional problem sets as homework.
- The evaluation of the course will be based on both the problem sets and an end-of-term examination.

Textbooks / Libros de Texto

While there is no single textbook for this course, several assigned readings will be taken from:

- Obstfeld and Rogoff (1996), *Foundations of International Economics*, MIT Press.
- Uribe and Schmitt-Grohé (2017), *Open Economy Macroeconomics*, Princeton University Press.
- Végh (2013), *Open Economy Macroeconomics in Developing Countries*, MIT Press.

In addition, the following texts will be used at different stages throughout the course:

- Gali (2015), *Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework and its Applications*, 2nd Edition, Princeton University Press.
- Mark (2001), *International Macroeconomics and Finance: Theory and Econometric Methods*, Blackwell.
- Walsh (2010), *Monetary Theory and Policy*, 3rd Edition, MIT Press.

Section 1 – Intertemporal Trade Patterns

Topic 1: Intertemporal Trade and the Current Account

- A Small Two-Period Endowment Economy
- Explaining Intertemporal Trade Patterns
- Defining the Current Account
- The Role of Government Spending
- The Role of Investment Spending
- Puzzle 1: The Feldstein -Horioka Saving-Investment Puzzle
- ***Homework 1: The Intertemporal Current Account Model***

Reading List:

- (a) Feldstein and Horioka (1980), “Domestic Savings and International Capital Flows”, *Economic Journal*, 90, pp314 – 329.
- (b) * Obstfeld and Rogoff (1996), Chapter 1, Sections 1.1.1 – 1.1.6, 1.2.1 – 1.2.3, and pp161 – 164.
- (c) * Obstfeld and Rogoff (2001), “The Six Major Puzzles in International Macroeconomics. Is There a Common Cause?” *NBER Macroeconomics Annual 2000*, pp349 – 359.

Topic 2: Dynamics of the Current Account for Small Open Economies

- A Small Open Economy with Many Time Periods
- An Infinite Horizon Model
- An Introduction to Dynamic Programming
 - Finite-Horizon vs. Infinite-Horizon Dynamic Programming
 - Solution Techniques
 - Example: Solving the Cake-Eating Problem
 - A Little Bit of Stokey and Lucas (1989)
- When is a Country Bankrupt?
- Optimal Consumption Plans
- The Fundamental Current Account Equation
- Introducing Uncertainty into the Small Open Economy Model
- ***Homework 2: Dynamic Programming***

Reading List:

- (a) Adda and Cooper (2003), *Dynamic Economics: Quantitative Methods & Applications*, MIT Press, Chapter 2.
- (b) Ljungqvist and Sargent (2004), *Recursive Macroeconomic Theory*, Second Edition, MIT Press, Chapters 1 and 3.
- (c) * Obstfeld and Rogoff (1996), Chapter 2, Sections 2.1.1, 2.1.2, 2.2.1, and 2.3.1 – 2.3.3.
- (d) Stokey and Lucas (1989), *Recursive Methods in Economic Dynamics*, Harvard University Press, Chapters 2.1 and 4
- (e) * Végh (2013), Chapter 1, Section 1.5.

Topic 3: Government Budget Deficits, the Current Account and Ricardian Equivalence

- The Ricardian Equivalence Outcome under the Representative Agent Framework
- Reasons for Ricardian Non-Equivalence
- The (Diamond) Overlapping Generations (OLG) Model
- Government Budget Deficits in an OLG Model
- Empirical Evidence on Ricardian Equivalence
- Global Effects of Government Deficits
- ***Homework 3: The Overlapping Generations Model***

Reading List:

- (a) * Obstfeld and Rogoff (1996), Chapter 3, Sections 3.1, 3.2, and 3.6.
- (b) Seater (1993), “Ricardian Equivalence”, *Journal of Economic Literature*, 31, pp142 – 190.

Topic 4: Uncertainty and International Financial Markets

- Arrow-Debreu Securities and Complete Asset Markets
- A Two-Period Small Open Economy Model
- A Global Two-Country Model
- Puzzle 2: The International Consumption Correlations Puzzle
- Puzzle 3: The Backus-Smith Puzzle
- International Portfolio Diversification
- ***Homework 4: The Intertemporal Current Account Model with Uncertainty***

Reading List:

- (a) * Obstfeld and Rogoff (1996), Chapter 5, Sections 5.1 – 5.1.6, 5.2 – 5.2.1, and 5.3.
- (b) * Végh (2013), Chapter 2, Section 2.3.

- (c) Lewis (1999), “Trying to Explain the Home Bias in Equities and Consumption”, *Journal of Economic Literature*, 37, pp571 – 608.
- (d) Obstfeld and Rogoff (2001), “The Six Major Puzzles in International Macroeconomics. Is There a Common Cause?” *NBER Macroeconomics Annual 2000*, pp359 – 372.

Topic 5: Capital Inflows and Financial Crises: Understanding Sudden Stops and the 2007/08 Financial Crisis

- Stylized Facts
- The Origin of Capital Inflows
- The Economics of Sudden Stops
- A Theory of Leverage
- Leverage as an Amplification Mechanism
- A Decoupling-Recoupling Model

Reading List:

- (a) Diamond and Rajan (2009), “The Credit Crisis: Conjectures about Causes and Remedies”, *American Economic Review*, 99, pp606 – 610.
- (b) Hutchison and Hoy (2006), “Sudden Stops and the Mexican Wave: Currency Crises, Capital Flow Reversals and Output Loss in Emerging Markets”, *Journal of Development Economics*, 79, pp225 – 248.
- (c) * Jeanne and Korinek (2010), “Excessive Volatility in Capital Flows: A Pigouvian Taxation Approach”, *American Economic Review: Papers and Proceedings*, 100, pp403 – 470.
- (d) * Korinek, Roitman, and Végh (2010), “Decoupling and Recoupling”, *American Economic Review: Papers and Proceedings*, 100, pp393 – 397.
- (e) Mishkin (2011), “Over the Cliff: From the Subprime to the Global Financial Crisis”, *Journal of Economic Perspectives*, 25, pp49 – 70.
- (f) Turner (2014), “Leverage, Financial Stability, and Deflation”. In Akerlof, Blanchard, Romer and Stiglitz (Eds.), *What Have We Learned? Macroeconomic Policy After the Crisis*. MIT Press, pp165 – 175.
- (g) * Végh (2013), Chapter 14, Sections 14.1 – 14.4 and Chapter 17, Sections 17.1 – 17.4.

Section 2: Money and Exchange Rates

Topic 6: Nominal Exchange Rate Regimes

- The Cagan Model of Money and Prices
- A Simple Monetary Model of Exchange Rates
- The Cagan Model in Continuous Time
- Speculative Attacks on Fixed Exchange Rate Regimes: A First Generation Model
- Multilateral Arrangements to Fix Exchange Rates
- Speculative Attacks on Fixed Exchange Rate Regimes: A Second Generation Model

Reading List:

- (a) Calvo and Mendoza (1996), “Mexico’s Balance of Payments Crisis – A Chronicle of a Death Foretold”, *Journal of International Economics*, 41, pp235 – 264.
- (b) Flood and Garber (1984), “Collapsing Exchange Rate Regimes: Some Linear Examples”, *Journal of International Economics*, 17, pp1 – 13.
- (c) Obstfeld (1996), “Models of Currency-Crises with Self-Fulfilling Features”, *European Economic Review*, 40, pp1037 – 1047.
- (d) * Obstfeld and Rogoff (1996), Chapter 8, Section 8.4.
- (e) * Sachs, Tornell, and Velasco (1996), “The Mexican Peso Crisis: Sudden Death or Death Foretold?” *Journal of International Economics*, 41, pp265 – 283.
- (f) Saxena (2004), “The Changing Nature of Currency Crises”, *Journal of Economic Surveys*, 18, pp321 – 350.

Topic 7: Money and Exchange Rates under Sticky Prices

- Empirical Evidence on Sticky Prices and Exchange Rates
- The Mundell-Fleming-Dornbusch Model
- Solving the Mundell-Fleming-Dornbusch Model using Phase Diagrams
- Exchange Rate Overshooting
- Analytical Solution of the Mundell-Fleming-Dornbusch Model
- Fixed vs. Flexible Exchange Rate Regimes
- Puzzle 5: The Purchasing Power Parity Puzzle
- Puzzle 6: The Exchange Rate Disconnect Puzzle
- ***Homework 5: The Dornbusch Overshooting Model in Continuous Time***

Reading List:

- (a) Bilal and Klenow (2004), “Some Evidence on the Importance of Sticky Prices”, *Journal of Political Economy*, 112, pp947 – 985.
- (b) Meese and Rogoff (1983), “Empirical Exchange Rate Models of the Seventies: Do They Fit Out of Sample?” *Journal of International Economics*, 14, pp3 – 24.
- (c) Nakamura and Steinsson (2008), “Five Facts About Prices: A Reevaluation of Menu Cost Models,” *Quarterly Journal of Economics*, 123, pp1415 – 1464.
- (d) * Obstfeld and Rogoff (1996), Chapter 9, Sections 9.1 – 9.2 and Sections 9.3 – 9.32.
- (e) * Obstfeld and Rogoff (2001), “The Six Major Puzzles in International Macroeconomics. Is There a Common Cause?” *NBER Macroeconomics Annual 2000*, pages 372 – 382.
- (f) Rogoff (1996), “The Purchasing Power Parity Puzzle”, *Journal of Economic Literature*, 34, pp647 – 668.
- (g) Rogoff (2002), “Dornbusch’s Overshooting Model after 25 Years: IMF Mundell-Fleming Lecture”, *IMF Staff Papers*, 49 (Special Issue), pp1 – 34.

Section 3: Monetary Policy and Fiscal Policy in Open Economies

Topic 8: The “Redux” Model: The Creation of “New Open Economy Macroeconomics”

- What is New Open Economy Macroeconomics?
- A Brief Recap of the Mundell-Fleming Model
- The Redux Model
- Linearization Techniques
- The Steady State and the Log-Linearized System
- Monetary Shocks and Welfare Analysis
- ***Homework 6: The Redux Model and the Impact of Fiscal Policy Shocks***

Reading List:

- (a) Lane (2001), “The New Open Economy Macroeconomics: A Survey”, *Journal of International Economics*, 54, pp235 – 266.
- (b) * Mark (2001), Chapter 8, Section 8.1, and Chapter 9, Section 9.1.
- (c) * McCandless (2008), *The ABC’s of RBC’s*, Harvard University Press, Chapter 6.2.
- (d) * Obstfeld and Rogoff (1996), Chapter 10, Section 10.1.
- (e) Obstfeld and Rogoff (1995), “Exchange Rate Dynamics Redux”, *Journal of Political Economy*, 103, pp624 – 660.

Topic 9: The Redux Model under Pricing-to-Market

- Pricing-to-Market
- The Redux model under Pricing-to-Market
- The Steady State and the Log-Linearized System
- Monetary Shocks
- Predictions regarding the International Transmission of Monetary and Fiscal Shocks

Reading List:

- (a) Betts and Devereux (2000), “Exchange Rate Dynamics in a Model of Pricing-to-Market”, *Journal of International Economics*, 50, pp215 – 244.
- (b) Knetter (1993), “International Comparisons of Pricing-to-Market Behavior”, *American Economic Review*, 83, pp473 – 486.
- (c) * Mark (2001), Chapter 9, Section 9.2.

Topic 10: Optimal Fiscal and Monetary Policy in the Open Economy

- Optimal Fiscal Policy in an Endowment Economy
- Optimal Fiscal Policy in a Production Economy
- Optimal Fiscal Policy under Financial Autarky
- Optimal Fiscal Policy under Uncertainty
- Procyclical Fiscal Policy
- Optimal Monetary Policy

Reading List:

- (a) Bordo and Végh (2002), “What if Alexander Hamilton had been Argentinean? A Comparison of the Early Monetary Experiences of Argentina and the United States”, *Journal of Monetary Economics*, 49, pp459 – 494.
- (b) Talvi and Végh (2005), “Tax Base Variability and Procyclical Fiscal Policy in Developing Countries”, *Journal of Development Economics*, 78, pp156 – 190
- (c) * Végh (2013), Chapter 10.
- (d) * Walsh (2003), Chapter 3, Section 3.2 and Chapter 4, Section 4.6.

Topic 11: International Policy Coordination

- An Introduction to International Policy Coordination
- The Corsetti -Pesenti (2005) Model
- The Optimal Monetary Policy Problem Under Commitment
- The Optimal Monetary Policy Problem Under Discretion
- Limitations of the Corsetti -Pesenti (2005) Model

Reading List:

- (a) * Corsetti and Pesenti (2005), “International Dimensions of Optimal Monetary Policy”, *Journal of Monetary Economics*, 52, pp281 – 305.

Topic 12: New Keynesian Open Economy Macroeconomics

- A New Keynesian Model for Monetary Analysis: A Closed Economy Example
- The New Keynesian Phillips Curve for Closed Economies
- Interest-Rate Rules, the Taylor Principle and Equilibrium Determinacy
- An Open Economy New Keynesian Model
- The Taylor Principle in Open Economies
- An Introduction to DYNARE – Reference Manual [link](#) and User Guide [link](#)

Reading List:

- (a) Blanchard and Kahn (1980), “The Solution of Linear Difference Models under Rational Expectations”, *Econometrica*, 48, pp1305 – 1311.
- (b) De Fiore and Lui (2005), “Does Trade Openness Matter for Aggregate Instability?”, *Journal of Economic Dynamics and Control*, 29, pp1165–1192.
- (c) * Gali (2015), Chapters 3 and 7.
- (d) Gali and Monacelli (2005), “Monetary Policy and Exchange Rate Volatility in a Small Open Economy”, *Review of Economic Studies*, 72, pp707 – 734.
- (e) * McKnight (2014), “Designing Monetary Policy Rules for Small Open Economies”. In Leal and McKnight (Eds.), *Contemporary Topics in Macroeconomics*. El Colegio de México, pp73 – 103.
- (f) McKnight (2011), “Investment and Interest Rate Policy in the Open Economy”, *Oxford Economic Papers*, 63, pp673 – 699.
- (g) McKnight (2011), “Should Central Banks Target Consumer or Producer Prices?”, *International Finance*, 14, pp445 – 479.
- (h) McKnight and Mihailov (2015), “Do Real Balance Effects Invalidate the Taylor Principle in Closed and Open Economies”, *Economica*, 82, pp938 – 975
- (i) * Walsh (2003), Chapter 5, Section 5.4 and Chapter 6, Section 6.5.

Section 4: International Real Business Cycle Theory

Topic 13: International Real Business Cycles

- International Business Cycle Facts
- The Single Good IRBC Model
- The Unit-Root Problem of International Macroeconomics
- Addressing the Unit-Root Problem
- The Two Good IRBC Model
- Solving the Puzzles?

Reading List:

- (a) Backus, Kehoe, and Kydland (1992), “International Real Business Cycles”, *Journal of Political Economy*, 100, pp745 – 775.
- (b) Backus, Kehoe, and Kydland (1995), “International Business Cycles: Theory and Evidence”. In: Cooley (Ed.), *Frontiers of Business Cycle Research*. Princeton University Press, pp. 331–356.
- (c) Baxter (1995), “International Trade and Business Cycles”, NBER Working Paper, No. 5025.
- (d) Chari, Kehoe, and McGrattan (2002), “Can Sticky Price Models Generate Volatile and Persistent Real Exchange Rates?”, *The Review of Economic Studies*, 69, pp533 – 563.
- (e) Corsetti, Dedola, and Leduc (2008), “International Risk Sharing and the Transmission of Productivity Shocks”, *The Review of Economic Studies*, 75, pp443 – 473.
- (f) Farmer, Khramov, and Nicoló (2015), “Solving and Estimating Indeterminate DSGE Models”, *Journal of Economic Dynamics and Control*, 54, pp17 – 36.
- (g) Lubik (2007), “Non-Stationarity and Instability in Small Open-Economy Models Even When They Are Closed”, *Federal Reserve Bank of Richmond Economic Quarterly*, 93, pp393 – 412.
- (h) McKnight and Povoledo (2022), “Endogenous Fluctuations and International Business Cycles”, *Canadian Journal of Economics*, Forthcoming.
- (i) Raffo (2010), “Technology Shocks: Novel Implications for International Business Cycles”, *International Finance Discussion Papers*, No: 992, Board of Governors of the Federal Reserve System.
- (j) * Schmitt-Grohé and Uribe (2003), “Closing Small Open Economy Models”, *Journal of International Economics*, 61, pp.163 – 185.
- (k) * Thoenissen (2010), “Exchange Rate Dynamics, Asset Market Structure, and the Role of the Trade Elasticity”, *Macroeconomic Dynamics*, 15, pp119 – 143.
- (l) * Uribe and Schmitt-Grohé (2017), Chapters 1 and 4.

Topic 14: Emerging Market Business Cycles

- Stylized Facts
- Permanent Productivity Shocks
- Interest Rate Shocks
- Informality and Aggregate Fluctuations

Reading List:

- (a) * Aguiar and Gopinath (2007), “Emerging Market Business Cycles: The Cycle is the Trend”, *Journal of Political Economy*, 115, pp69-102.
- (b) Boz, Daude, and Durdu (2011), “Emerging Market Business Cycles: Learning About the Trend”, *Journal of Monetary Economics*, 58, pp616 – 631.
- (c) * Fernandez and Meza (2015), “Informal Employment and Business Cycles in Emerging Economies: The Case of Mexico”, *Review of Economic Dynamics*, pp381-405.
- (d) Garcia-Cicco, Pancrazzi, and Uribe (2010), “Real Business Cycles in Emerging Countries?”, *American Economic Review*, 100, pp2510-2531.
- (e) Horvath (2018), “Business Cycles, Informal Economy, and Interest Rates in Emerging Countries”, *Journal of Macroeconomics*, 55, pp96-116.
- (j) Neumeyer and Perri (2005), “Business Cycles in Emerging Economies: The Role of Interest Rates”, *Journal of Monetary Economics*, 52, pp345-380.
- (f) Restrepo-Echavarria (2014), “Macroeconomic Volatility: The Role of the Informal Economy”, *European Economic Review*, 70, pp454-469.
- (g) Rothert (2020), “International Business Cycles in Emerging Markets”, *International Economic Review*, 61, pp753-781.
- (k) * Uribe and Schmitt-Grohé (2017), Chapters 1, 5, and 6.
- (l) Uribe and Yue (2006), “Country Spreads and Emerging Countries: Who Drives Whom?”, *Journal of International Economics*, 69, pp6-36.