Kellogg School of Management Northwestern University

Syllabus
Macroeconomic Policy and Global Capital Markets (FINC 473)
Winter 2023

 $\label{eq:convergence} Professor\ Nicolas\ Crouzet \\ \underline{n\text{-crouzet@kellogg.northwestern.edu}}$

Office: KGH 4473

Course overview

What drives the global economy? How does government policy affect economic and financial conditions? This course focuses on the economic forces and the policy responses relevant for business, investment, and growth strategies.

Measurement underlies all analysis, so we begin by learning how to interpret data on national and international economic activity, with particular attention to the measurement of output and inflation. We then study patterns of economic growth in the long run, including the status of advanced economies, and growth in emerging markets.

Our focus then turns to two key markets: the market for labor, and the market for capital. We study key trends and cyclical changes in labor markets, connecting them to rising inequality. Credit and financial markets play a crucial role in the process of capital accumulation but are also prone to crises. We study their role in both driving growth, and propagating downturns.

We then shift attention to economic policy, starting with monetary policy. Monetary policy has been transformed by the Global Financial Crises and the COVID-19 crisis, and the rapid onset of inflation that followed. We study monetary policy decisions and their effect on financial institutions and credit markets. This includes both conventional policies and quantitative easing (QE) as implemented, and now expanded, by Central Banks around the world.

We then turn to fiscal policy. Fiscal policy is the other main tool of macro policy, which also directly interacts with financial markets through sovereign debt, such as the Treasury market, the largest and (usually) most liquid market in the world. We consider government spending and the revenue programs that fund it, plus the government liabilities that result when revenues fall short of expenditures. The sustainability of sovereign debt is a key issue, as budget deficits have ballooned with COVID-related fiscal expansions, and we analyze it in detail.

Since these markets are global, capital flows, trade balances, and the relative strength of currencies are behind all of these discussions. We look at these considerations explicitly as we pull together the topics at the conclusion of the course.

The course provides a high-level overview to aid business planning, investment strategies, and policy analysis. FINC 473 counts toward the Finance major and is on the short list of classes for the Analytic Finance major.

Modality

All Winter 2023 sections will be in-person. If students cannot attend in-person for health-related reasons, a zoom option will be made available for them to participate in the class in real time.

Pre-requisites

The prerequisite for this class is Finance I (FIN-430-0).

Material

Readings: Readings provide you with background material that will help make your experience in class more rewarding. They are listed by topic in the section "Detailed material" below. The material comes from four sources:

<u>Textbook:</u> Andrew Abel, Ben Bernanke, and Dean Croushore, Macroeconomics, Pearson, 10th Edition, 2020. The textbook is available <u>for rent</u> at:

https://www.pearson.com/store/p/macroeconomics/P100002678554

<u>Teaching notes:</u> these notes provide an in-depth description of theoretical tools that we will use in. They will be available in the "Files" section of Canvas.

<u>Discussion sets:</u> these are short and practical exercises on the topic that we will discuss that week in class. They are meant to get you thinking about the issues ahead of class, as well as to provide a basis for class discussion. Each discussion set contains a few questions, the answer to which you will have to turn in before class. The discussion sets are available in the "Files" section of Canvas.

<u>Articles and additional readings:</u> these are additional readings, also on the week's topic, that will provide you with more background on the key issues. The sources will typically be articles from the financial press or blogs, but sometimes also from academic review papers. Not all are required readings for the class. In fact, there are substantially more optional than required readings. The optional readings are meant to provide deeper background and extensions depending on your interests. All readings will be made available in the "Files" section of Canvas.

Slides: An electronic copy of the presentation slides for each lecture will be available on Canvas before each class. Make sure that you obtain these slides, as they will structure your in-class notes and reduce the pace of notetaking during class.

Structure of Graded assignments

The course grade is out of 100 points. There are five types of graded assignments:

<u>Problem sets (10 points):</u> There will be two **group** problem sets. These are intended to help you keep up to date on the analytic content of the material as the course proceeds. The problems and due dates are posted under the files tab on Canvas.

<u>Discussion sets (15 points for the written assignment)</u>: Discussion Sets include both quantitative and qualitative questions to prepare for class discussion. These are due before the relevant class. The answers to the questions are to be turned in and will be graded. You can prepare and hand in the questions **by group**. Class discussion will contribute to the participation score.

<u>Participation (15 points):</u> You are expected to actively participate in the class discussion. This does not require frequent or voluminous comments – thoughtful and substantive contributions are welcome. Also, good questions are an excellent way to participate. The participation grade will be centered around Discussion Sets (10 of 15 points), but additional points are available for consistent classroom participation (5 of 15 points).

<u>Country Project (10 points):</u> At the end of the class, each **group** will be asked to prepare an analysis of the current macroeconomic situation and performance in a country of their choice. Groups can choose to either do an in-class presentation, or hand in their analysis as a written assignment. A description of the assignment and the due date will be posted on Canvas.

<u>Take-home midterm and in-class final exam (20 points for the midterm, 30 for the final):</u> An individual, take-home midterm, and a final exam will cover the analytic content of the course. The midterm will cover the material in topics 1 through 4, and the final exam covers all topics. Since the final exam covers all topics, the midterm score will be dropped (and the final exam score substituted) if the final exam score is higher. The grades are 20 points for the midterm, 30 points for the final. The overall exam grade is given by the formula:

Overall exam grade = max((5/3))*(Final exam grade), Final exam grade + Midterm exam grade).

Problem Sets	10
Discussion Sets	15
Participation	15
Overall exam grade	50 (final is 30, take-home midterm is 20, and the overall grade is computed as described above)
Country Project	10

Case packet

The case packet is slim: it only contains three items (two case studies used as basis for discussion sets, and one optional reading). Both case studies are required reading, so you should purchase the packet (it is comparatively very cheap). The material in the case packet is marked in the reading list below with a (C).

Supplementary Information

Up-to-date information, calendar items, and announcements will be kept on Canvas, where you can always check for current course information. Announcements and any additional course materials will be posted there as well. Finally, I will regularly post interesting readings from the financial or academic press on Canvas, as well as useful links to blog, podcasts, and twitter feeds connected to the topics we'll cover in class.

Main Topics

<u>Topic 1.</u> <u>Introduction to macroeconomic Issues</u>

- I. The measurement of economic activity
- II. Saving and Investment

Topic 2. Long-run growth: proximate and fundamental causes

- I. Growth accounting
- II. How institutions shape long-run growth

<u>Topic 3.</u> <u>Inequality and labor markets</u>

- I. Labor demand and labor supply
- II. Unemployment and labor market policies
- III. Income inequality, social mobility, and labor market polarization

<u>Topic 4.</u> <u>Financial Markets: credit, growth, and crises</u>

- I.The structure of financial markets in advanced economies
- II. Financial frictions and the role of financial intermediaries
- III. Balancing growth and crises in financial markets

<u>Topic 5.</u> <u>Monetary Policy and the Financial System</u>

- I. Money and Inflation
- II. Conventional Monetary Policy
- III. Unconventional Monetary Policy
- IV. Financial regulation

<u>Topic 6.</u> <u>Fiscal Policy: Taxes and Spending, Stimulus, Sovereign Debt</u> and Crises

- I. Taxes, spending, and the government budget
- II. Fiscal stimulus
- III. Government debt sustainability
- IV. Long run fiscal challenges

Topic 7. Global Trade and Global Capital Flows

- I. Exchange rate regimes
- II. International capital flows and global imbalances
- III. Liquidity traps (if time)

Detailed readings

Required material is marked by (R). Optional material is marked by (O). Material only available in the case packet is marked by (C). "ABC" denotes the textbook. Green text refers to the week of class for the topic.

Topic 1. Introduction and metrics of economic performance

Week 1

- 1. (R) Measurement of Economic Activity: *ABC* chapter 2
- 2. (R) Teaching note on "Savings and Investment"
- 3. (R) Balance of Payments: ABC chapter 5, introduction and section 5.1
- 4. (0) "What GDP can and cannot tell you about the post-pandemic recovery," *The Economist*, Oct 29th, 2020
- 5. **(0)** "Beyond GDP," *The Economist*, Apr 18, 2013
- 6. **(0)** "There is shadow inflation taking place all around us" *New York Times,* October 13, 2021
- 7. (0) "Why real inflation is so hard to measure" *Financial Times,* February 3, 2022
- 8. (0) "Does high inflation matter?" *The Economist,* August 3, 2022
- (0) <u>Book of the week:</u> Robert Gordon, "The Rise and Fall of American Growth"

Topic 2. Long-run growth: proximate and fundamental causes

Week 2

- a) Growth accounting
 - 1. **(R)** Long-Run Economic Growth: *ABC* section 6.1.
 - 2. (R) Teaching note on Growth Accounting
 - 3. **(0)** "The curious case of the missing global productivity growth," *The Economist*, Jan 11th, 2017
 - 4. (0) "Reasons to be cheerful," *The Economist*, Dec 11th, 2020
 - 5. (0) "Measuring management," The Economist, Jan 18th, 2014
 - 6. (0) "When the lights go out," *The Economist*, May 4th, 2019
 - 7. (0) "China's economic data," St Louis Fed Regional Economist, Q2, 2017
- b) How institutions shape long-run growth
 - 1. (R) "The quest for secure property rights in Africa," *The Economist*, Sep 20th, 2020
 - 2. (0) "Economists understand little about the causes of economic growth," *The Economist*, Sep 10th, 2018
 - 3. (0) (C) "Getting institutions right," *Harvard University working paper*, Dani Rodrik, 2004

(0) <u>Book of the week:</u> Daron Acemoglu and James A. Robinson, "Why Nations Fail"

<u>Topic 3.</u> <u>Labor markets, unemployment, and inequality</u>

Week 3

- a) Labor supply and labor demand
 - 1. (R) Teaching note on "Labor supply and labor demand"
 - 2. **(0)** "Where have all the workers gone?" *Brookings Papers on Economic Activity,* Alan Krueger, 2017
 - 3. (0) "Do wages drive prices, or vice-versa?" Wall Street Journal, Sep 18th, 2022
- b) Unemployment and labor market policies
 - 1. **(R)** Unemployment: *ABC* section 3.5.
 - 2. (0) "How has Covid affected the US labor market?" St Louis Fed Blog, 2020
 - 3. (0) "The Curse of Econ 101," The Atlantic, Jan 10th, 2017
- c) Income inequality, social mobility, and labor market polarization
 - 1. (R) "Measuring the 1%," The Economist, Nov 28th, 2019
 - 2. (0) "Inequality in America has lessons for the UK," Financial Times, May 14, 2019
 - 3. (0) "The fear of robots displacing workers has returned," *The Economist*, Jul 30th, 2020
- (0) <u>Book of the week:</u> Goldin and Katz, "The race between education and technology"

<u>Topic 4.</u> <u>Financial Markets: credit, growth, and crises</u>

Week 4

- a) The structure of financial systems in advanced economies
 - 1. (R) Teaching note on "Financial markets: structure and function"
 - 2. (0) "Putting the capital into capitalism," *The Economist*, Jul 25th, 2020
- b) Financial frictions and the role of financial intermediaries
 - 1. (0) "Facebook isn't so good at judging your credit after all," *Wall Street Journal*, Feb. 24th, 2016.
 - 2. (0) "From the people, for the people," *The Economist*, May 7th, 2015
- c) Balancing growth and crises in financial markets
 - 1. (R) "A template for understanding big debt crises," (pp.1-12), Ray Dalio, 2018
 - 2. (0) "How debt markets have malfunctioned in the crisis," *Journal of Economic Perspectives*, Arvind Krishnamurthy, Winter 2010
- (0) <u>Books of the week:</u> Adam Tooze, "Crashed"; Michael Lewis, "The Big Short"

<u>Topic 5.</u> <u>Monetary Policy and the Financial System</u>

Week 5: Money, inflation, and conventional monetary policy

- a) Money and inflation
 - 1. (R) Teaching note on "Money Supply and Inflation"
 - 2. (R) Money and Money Demand: ABC Chapter 7, intro and section 1
 - 3. (0) "The shawarma paradox," *The Economist*, Aug 11th, 2020
 - 4. (0) "America's most profitable export: money," *The New York Times*, Mar 9th, 2019
 - 5. **(0)** "How fast are prices skyrocketing in Venezuela? See Exhibit A: the Egg," *The Wall Street Journal*, Feb 5th, 2018
- b) Conventional monetary policy
 - 1. (R) Teaching note on "The Federal Reserve and Money Markets"
 - 2. (R) Money supply and monetary institutions: ABC Chapter 14, sections 1 through 4
 - 3. (0) "The Taylor Rule: a Benchmark for Monetary Policy?", *Brookings Institution blog*, Ben Bernanke, Apr 28, 2015
 - 4. (0) "How the World Achieved Consensus on Monetary Policy," *Journal of Economic Perspectives,* Marvin Goodfriend, Fall 2007
 - 5. **(0)** "What is the Philips curve (and why has it flattened)?", *St Louis Fed Economics Blog*, Jan 2020
 - 6. **(0)** "The transmission of monetary policy," *speech by Philip Lane, executive board member of the ECB*, Oct 11, 2022
 - 7. (O) "Bad news from the Fed? We've been here before," *The New York Times,* Sep 22, 2022

(0) Book of the week: Liaquat Ahamed, "The Lords of Finance"

Week 6: Unconventional monetary policy

- c) Unconventional monetary policy
 - 1. (R) Teaching note on "Monetary Policy and Long-Term Rates"
 - 2. (0) "Rewriting monetary policy 101," *Journal of Economic Perspectives*, Fall 2015, Jane E. Ihrig, Ellen E. Meade, Gretchen C. Weinbach
 - 3. (0) "What tools does the Fed have left? Part 3: Helicopter Money," *Brookings Institution Blog*, Apr 11th, 2016, Ben Bernanke.
 - 4. (0) "How did Covid disrupt the market for Treasury debt?", *Brookings Institution Blog*, May 1, 2020
 - 5. (0) "The Corporate Credit Facilities", NY Fed Liberty Street Blog, May 26, 2020
- d) Financial regulation
 - 1. (R) Teaching note on "Leverage and risk-taking"
 - 2. (0) "Bother over Basel," *The Economist,* May 4th, 2017

- 3. (0) "How resilient are the banks?" *The Economist,* Jul 2nd, 2020
- (0) <u>Book of the week:</u> Bernanke, Geithner and Paulson, "Firefighting"

<u>Topic 6.</u> <u>Fiscal Policy: Taxes and Spending, Stimulus, and Government Debt</u>

Week 8: Taxes, spending, and stimulus

- a) Taxes, spending, and the government budget
 - 1. (R) Government Spending and its Financing: ABC Chapter 15, section 1
 - 2. (0) "How Can Scandinavians Tax So Much?" Henrik Jacobsen Kleven, *Journal of Economic Perspectives*, Fall 2014.
 - 3. **(0)** "Why Do Developing Countries Tax So Little?" Timothy Besley and Torsten Persson, *Journal of Economic Perspectives*, Fall 2014.
 - 4. (0) "The state-budget train crash," *The Economist*, Jun 18th, 2020
- b) Fiscal stimulus
 - 1. (R) Teaching note on "Ricardian Equivalence"
 - 2. (R) Government spending, taxes, and the macroeconomy: ABC Chapter 15, section 2
 - 3. **(0)** "If, When, How: A Primer on Fiscal Stimulus," Douglas Elmendorf and Jason Furman, *Brookings Papers on Economic Activity*, Jan 2008
 - 4. (0) "How many jobs were saved by the US small business bailout?" *Financial Times*, Aug 5, 2020
 - 5. (0) "Has the pandemic shown inflation to be a fiscal phenomenon?," *The Economist,* Dec 18th, 2021
- (0) Book of the week: William G. Gale, "Fiscal Therapy"

Week 9: Government debt

- c) Government debt sustainability
 - 1. (R) Teaching note on "Sovereign Debt Dynamics"
 - 2. (R) Government deficits and debt: ABC Chapter 15, section 3
 - 3. (0) "Financing the US response to Covid," St Louis Fed Blog, Dec 1st, 2020
 - 4. (0) "Thoughts on debt sustainability after Covid," Olivier Blanchard, *UCL conference on economic policy*, Dec 26, 2020. Youtube link.
 - 5. **(0)** "Low interest rates and government debt," John Cochrane, *The grumpy economist blog*, Jan. 11, 2021
- d) Long-run fiscal challenges
 - 1. (O) "The Long-term budget outlook for the US," Congressional Budget Office (CBO), Sep. 21st, 2020 (Executive summary, 4 pages)
 - 2. (O) "A summary of the status of Social Security and Medicare," Social Security and Medicare boards of trustees, Apr. 22nd, 2020

- 3. (0) "US government debt shrinks against soaring inflation," *Bloomberg News,* Sep 23rd, 2022
- (0) Book of the week: Michael Lewis, "Boomerang"

<u>Topic 7.</u> <u>International capital flows</u>

Week 9

- a) Exchange rate regimes
 - 1. (R) Fixed exchange rate regimes: ABC Chapter 13, section 5
 - 2. **(R) (C)** "Reducing Inflation in Argentina: Mission Impossible?," pp.10-17, *Columbia Caseworks*, Fernando Alvarez and Stephen Zeldes
 - 3. (0) "Lessons from Latvia," *IMFBlog*, Jun 11th, 2012
 - 4. (0) "Sudden stops: a primer," Stephen Cecchetti and Kim Schoenholtz, Jul 9th, 2018
- b) International capital flows and global imbalances
 - 1. (R) Savings and Investment in an open Economy: ABC Chapter 5, sections 1-5.
 - 2. (O) "The global savings glut and the US current account deficit," Ben Bernanke, Mar 10th, 2005
 - 3. (0) "What a rising current account surplus means for the Euro area," *The Economist,* Aug 23rd, 2018
 - 4. (0) "Capital in the 14th Century," *The Economist*, Jan 9th, 2020
 - 5. (0) "Lessons from Japan," *The Financial Times,* Nov 22nd, 2020
 - 6. (0) "Beggars' banquet," *The Economist*, Oct 8th, 2020
 - 7. (O) "Global fallout from rate moves won't stop the Fed," *The New York Times*, Oct 7th, 2022
- c) Liquidity traps (if time)
 - 1. (R) Teaching note on "Liquidty Traps and Deflation Traps"
- (0) Book of the week: Carmen Reinhart and Kenneth Rogoff, "This Time is Different"

Week 10: Conclusion; review session and/or country project presentations.

Last update: 13-Oct-22