UNIVERSITY OF PENNSYLVANIA

The Wharton School

MBAExec FNCE 613: Macroeconomics and the Global Economic Environment

This course focuses on macroeconomic analysis, data, models, and policies. The goal is to become able to think systematically about the changing macroeconomic environment in which firms and financial markets function and to understand data that tell us about that environment. We will build and use an analytic framework to consider macroeconomic data releases, policy issues, and the economic outlook. We will focus on the U.S. but treat other countries, too, the macroeconomics we study can be applied to any country with a market economy. No prior exposure to macroeconomics is necessary; we will start with the basics and build quickly.

The required readings include the class notes, several articles, and two slim books of essays:

Paul Krugman, *The Age of Diminished Expectations*, 3rd edition (MIT Press, 1995)

Paul Krugman, The Return of Depression Economics and the Crisis of 2008 (Norton, 2009)

In these books, Krugman treats important macroeconomic issues in a lively (for economics) and non-technical manner. His essays often seem flip, but a lot of careful macroeconomics lies beneath the surface. Sadly, *The Age of Diminished Expectations*, though published almost 25 years ago, is still relevant (but in chapter 11, on economic conflict between Japan and the U.S., you might want to substitute "China" for "Japan" everywhere that "Japan" appears). *The Return of Depression Economics* treats the financial and economic crises that we will discuss at the end of the semester. Chapters from both books are assigned for various class sessions but you may find it helpful to skim both early in the term. You need not agree with Krugman's politics or policy prescriptions to learn from his discussion of economic issues. During the semester, we will develop analytic tools you can use to evaluate his claims.

Krugman's treatment of economic conditions and policies in *The Return of Depression Economics* deals with developments through the financial crisis of 2007-08. (Krugman's *End this Depression Now*, not assigned, treats the ensuing recession, policy response, and sluggish recovery.) The Federal Reserve's semi-annual "Monetary Policy Report to the Congress" (MPR) contains a careful and readable (though dry) discussion of recent U.S. economic and financial developments. You will find a link to a sequence of those reports at http://www.federalreserve.gov/boarddocs/hh/. I suggest that you skim the July 2019 MPR.

If you have interest and time (or insomnia), the *Economic Report of the President* contains a thorough review of U.S. economic developments and key policy issues. It is slanted, of course, but it usually contains serious analysis prepared by the members of the President's Council of Economic Advisors (who typically are faculty on leave from academic institutions and who, with rare exceptions, typically are not political creatures) and the Council's professional staff. A link to the most recent *Economic Report of the* President can be found at: https://www.whitehouse.gov/wp-content/uploads/2019/03/ERP-2019.pdf

We will organize our class sessions around a set of class notes (and a few additional readings) that provide the standard models and data sources that Krugman uses without presenting. I

recommend that you read class notes and other assigned material before the class session for which it is assigned. Ideally, read the class notes again after the class session.

There is no required textbook. If you want a textbook, I suggest Dornbusch, Fischer, and Startz, *Macroeconomics*, 8th, 9th, 10th, or 11th edition (McGraw Hill). (There are later editions, but don't pay a premium for them.) This text doesn't quite match our course, but it comes close and it treats the same topics. A reading list for Dornbusch, Fischer, and Startz, keyed to our course, appears at the end of this syllabus. This text is **NOT** required.

There will be a take-home midterm exam and an in-class final exam; both will be open-book, open-notes exams. Both will ask you to *apply* what you've learned. During the exams, you may use your laptop or tablet to access course materials and your notes – and to write your answers if you wish. The midterm will cover classes 1 through 5 and will bear one-third of the weight in determining your course grade; the final will focus on classes 5 to 10 (yes, class 5 will be on both exams) and will bear two-thirds of the weight. Class 8 will cover some current policy issues; class 11 will cover the 2008-09 financial crisis and recession, the more recent euro area debt crisis, and policy responses to both, including negative interest rates. Class 11 will **not** be on the final exam. I will post several old midterm and final exams (and answers). Working through the old exams with your study group will help you prepare for this semester's exams; more important, doing so will help you learn how to apply the course material to analyze real-world macroeconomic issues and policies. For maximum benefit, try answering the old exam questions before reading my answers.

I generally will be available for "office hours" in our usual classroom early in the morning (about an hour before classes begin) on days we have class. In addition, you may ask questions by writing to me at meyers@wharton.upenn.edu or steve.meyer.pa@gmail.com

The following web sites provide economic data and commentary, along with links to a host of other sites. This is a small sample of potentially useful sites.

Bank of Canada-Banque du Canada – http://www.bank-banque-canada.ca (Economic commentary and statistics from Canada's central bank.)

Bank of England – http://www.bankofengland.co.uk (Includes the British central bank's very detailed and revealing "Inflation Report.")

Bank of Japan – http://www.boj.or.jp/en/ (Japan's central bank, in Englsih.)

Board of Governors of the Federal Reserve – http://www.federalreserve.gov (FOMC statements; minutes of FOMC meetings; financial and economic statistics; speeches and testimony by members of the Federal Reserve Board; regulatory information.)

Bureau of Economic Analysis (Commerce Dept.) – http://www.bea.gov (The original source for many U.S. economic statistics, including GDP.)

Bureau of Labor Statistics – http://www.bls.gov – (The original source for data on U.S. labor force and employment, and some inflation data.)

European Central Bank – http://www.ecb.int -- The central bank for the nineteen-country European Monetary Union.)

People's Bank of China – http://www.pbc.gov.cn/english/130437/index.html. The website of China's central bank is not easy to navigate but contains a wealth of data. Also see China's National of Bureau of Statistics: http://www.stats.gov.cn/english/

Federal Reserve Bank of St. Louis FRED – https://fred.stlouisfed.org/ – FRED (Federal Reserve Economic Data) is an easy-to-use, online database of U.S. economic and financial data that is free to the public.

Also, NPR's "Planet Money" offers an often-interesting (but sometimes slanted) podcast on economic issues and indicators. You can find it at *The Indicator from Planet Money*.

Here are links to the home pages of four think tanks that specialize in research and advocacy on economic (and other) policy issues. The four span about 97 percent of the U.S. political spectrum so there will be something to raise almost everyone's blood pressure.

American Enterprise Institute – http://www.aei.org

Brookings Institution – http://www.brookings.edu

Cato Institute – http://www.cato.org

Economic Policy Institute – http://www.epi.org

If you find yourself with too much free time and a strange desire for greater exposure to economics (micro and macro), here are links to four "econoblogs." Unlike many blogs written by economists, these often (but not always) contain something interesting.

http://econbrowser.com

http://economistsview.typepad.com

http://gregmankiw.blogspot.com

https://www.nytimes.com/column/paul-krugman (some columns contain economics)

And if for some odd reason you want to read articles in economics journals, I'd recommend the <u>Journal of Economic Perspectives</u> (published by the American Economic Association) and <u>Brookings Papers on Economic Activity</u> (published by the Brookings Institution). These are the only serious economics journals that can be read and understood by people who do not have a Ph.D. in economics and advanced training in mathematics.

PART I: MACROECONOMIC ISSUES, DATA, AND LONGER-RUN TRENDS

Class 1 (1) Macroeconomic questions Sept. 6

Class 1 Notes: I

(2) Trends, cycles, and short-term variability in economic activity: the basic framework for macroeconomic analysis

Class 1 Notes: II to IV Krugman, *Age of Diminished Expectations*: intro and chapters 1-5

(3) An introduction to macroeconomic data, concepts, and constraints.

Class 1 Notes: V to XXV

[optional: Federal Reserve, Monetary Policy Report to the Congress (July 2019)]

Class 2 (1) The sources of long-run (trend) growth in output: growth of labor sept. 7 and capital; improvements in technology and skills.

Class 2 Notes: I and II

Olson, "Big Bills Left on the Sidewalk: Why Some Nations are Rich and Others Poor"

Bosworth and Collins, "Accounting for Growth in India & China"

[optional: Wei Chen, Xilu Chen, Chang-Tai Hsieh, and Zheng Song,

"A Forensic Examination of China's National Accounts"]

(2) Does growth of real GDP (real output) raise the standard of living?

Class 2 Notes: III

(3) Why does trend growth differ across time and across countries?

Class 2 Notes: IV to VI

Krugman, Age of Diminished Expectations, chapter 15-17

(4) Are there limits to growth? Why is China's trend growth slowing?

Class 2 Notes: VII to VIII

(5) The sources of trend inflation. What are the roles of money growth and budget deficits? What causes hyperinflation?

Class 2 Notes: IX to XIV

PART II: A BASIC SHORT-RUN MACROMODEL, WITH APPLICATIONS

Class 3
Sept. 13

(1) What causes output and employment to vary in the short run? An introduction to short-run macroeconomic equilibrium and "shocks."

Class 3 Notes: I to VI

(2) Introduction to monetary and fiscal policies; "shocks" to demand Class 3 Notes: VII to X

(3) The macroeconomics of budget deficits and international trade.

Class 3 Notes: XI to XII

Class 4 (1) Connections between goods markets and financial markets. Sept. 13 late slot

Class 4 Notes: I to V

(2) How and why do monetary and fiscal policy, and other economic "shocks," affect interest rates (as well as output) in the short run?

Class 4 Notes: VI to XI

(3) Zero interest rates (in Japan, the euro area, and – from late 2008 to late 2015 – the U.S.) and the "liquidity trap."

Class 4 Notes: XII to XIV Krugman, *Return of Depression Economics*, chapter 3

Class 5 (1) Aggregate Supply and Demand; full short-run equilibrium. Sept. 28

(2) Short-run adjustment in output, interest rates, and prices.

Class 5 Notes: VI

Class 5 Notes: I to V

(3) "Supply shocks" (such as a jump in the price of oil or a drought)

Class 5 Notes: VII and VIII

(4) Simplified short-run dynamics and real-world lags

Class 5 Notes: IX and X

PART III: MORE ON CONSUMPTION AND INVESTMENT

Class 6 (1) A more careful look at consumption: how expectations, asset prices, and the business cycle affect consumption and saving.

Class 6 Notes: I to V ("Consumption")

(2) A more detailed look at real investment. Why does investment vary with the cycle? How do investment incentives work?

Class 6 Notes: VI to XIII ("Investment"), plus Appendix

Oct. 12, early morning (before class) OPTIONAL REVIEW SESSION

Oct. 12-16 <u>90-MINUTE TAKE-HOME MIDTERM EXAM</u> Covers Classes 1 to 5 To be returned no later than the end of the day on October 16.

PART IV: BEYOND THE SHORT RUN – MEDIUM-RUN DYNAMICS OF OUTPUT AND INFLATION; THE ROLE OF EXPECTATIONS

Class 7 Oct. 25

(1) Moving from the short run to the long run: medium-run dynamics

Class 7 Notes: I to III

(2) Is there a trade-off between inflation and unemployment?

Class 7 Notes: IV to VII

(3) What are the costs (and benefits) of inflation?

Krugman, *Age of Diminished Expectations*, chapter 5 Class 7 Notes: IX to X

(4) How can we reduce inflation? At what cost? The role of "credibility."

Class 7 Notes: XI to XII

Class 8 Nov. 8 late slot

Current Hot Button Issues: Trade, Immigration, Brexit, etc. (all readings but Krugman are optional)

Krugman, Age of Diminished Expectations, chapter 10

[Peri, "Immigrants, Productivity, and Labor Markets"]

[Fort, Pierce, and Schott, "New Perspectives on the Decline of US

Manufacturing Employment"]

[Rodrick, "What Do Trade Agreements Really Do?"]

[Sampson, "Brexit: The Economics of International Disintegration"]

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PART V: BUSINESS CYCLES AND MACROECONOMIC POLICIES

Class 9 (1) Discretionary policies vs. automatic stabilizers and "rules." Nov. 22

Class 9 Notes: I to V

Bernanke, "The Logic of Monetary Policy"

Bernanke, "The Taylor Rule: "A Benchmark for Monetary Policy?"

(2) Expectations, credibility, and goals Class 9 Notes: VI and VII

(3) Does the national debt impose a burden on future generations?

Class 9 Notes: VIII

Krugman, Age of Diminished Expectations, chapter 7

Class 10 Nov. 23 (1) How the Fed and other central banks run monetary policy in the real world. How "open market operations" affect short-term interest rates and the supplies of money and credit.

Class 10 Notes: I to V

(2) Unconventional monetary policy: Crisis response and "QE;" policy normalization.

Class 10 Notes: VI and VII

[optional: Rogoff, "Dealing with Monetary Paralysis at the Zero Bound"]

(3) Foreign exchange intervention as monetary policy.

Class 10 Notes: VIII

(4) How monetary policy affects long-term interest rates: policy expectations and guidance; the term structure of interest rates.

Class 10 Notes: IX to XII

Bernanke, "Communication and Monetary Policy" (Nov. 2013)

(6) A rule-of-thumb for predicting recessions and expansions.

Class 10 Notes: XIII and XIV

Bauer and Mertens, "Economic Forecasts with the Yield Curve"

(March 2018)

Engstrom and Sharpe, "(Don't Fear) The Yield Curve" (June 2018)

PART VI: ECONOMIC PATHOLOGY

[Note: We probably will cover topics (1), (4), and (5) in the class notes for class 11. The final exam will NOT include material from class 11.]

Class 11 Dec. 13

(1) The Great Depression

Class 11 Notes: I and II

Romer, "The Nation in Depression"

Calomiris, "Financial Factors in the Great Depression"

(2) Latin American and Asian Currency Crises (Currency Crises and Speculative Attacks)

Class 11 Notes: IV to XV

Krugman, Return of Depression Economics, chapters 2, 4, 5, 6

(3) Hong Kong and Argentina (The Problem with Currency Boards, or "Breaking the Peso")

Class 11 Notes: XVI to XXI

(4) The "Financial Crisis" and "Great Recession" of 2007 to 2009

Class 11 Notes: III

Krugman, *Return of Depression Economics*, ch. 7 to 10 and Epilogue Gertler and Gilchrist, "What Happened: Financial Factors in the Great Recession"

Blinder and Zandi, "How the Great Recession was Brought to an End"

(5) The Euro Area Sovereign Debt Crisis

Class Notes XXII

Higgins and Klitgaard, "Saving Imbalances and the Euro Area

Sovereign Debt Crisis"

[optional: Lane, "The European Sovereign Debt Crisis"]

Class 12 FINAL EXAM – Covers Classes 5 through 10 Dec. 14, morning

FNCE 613: Key to Dornbusch, Fischer, and Startz, *Macroeconomics* This textbook is NOT required.

(8th or 9th edition):

Class 1: chapters 1 and 2

Class 2: chapters 3 and 4; chapter 18 sections 3, 4, 5

Class 3: chapter 9; chapter 12 sections 1, 2, 3; chapter 5

Class 4: chapter 10 (but ignore IS-LM); chapter 15; chapter 11

Class 5: chapter 5 section 1; chapter 6 sections 1 and 7

Class 6: chapters 13 and 14

Class 7: chapter 6 sections 2, 3, 4, 5, 6; chapter 7

Class 9: chapter 8; chapter 18 sections 6 and 7; chapter 20 (optional)

Class 10: chapters 16 and 17

Class 12: chapter 18 sections 1 and 2

(10th or 11th edition):

Class 1: chapters 1 and 2

Class 2: chapters 3 and 4; chapter 19 sections 3, 4, 5

Class 3: chapter 9; chapter 12 sections 1, 2, 3; chapter 5

Class 4: chapter 10 (but ignore IS-LM); chapter 15; chapter 11

Class 5: chapter 5 section 1; chapter 6 sections 1 and 6

Class 7: chapters 13 and 14

Class 8: chapter 6 sections 2, 3, 4, 5; chapter 7

Class 9: chapter 8; chapter 17; chapter 19 sections 6 and 7; chapter 21 (optional)

Class 10: chapters 16 and 18

Class 12: chapter 19 sections 1 and 2