# BECO 1750A: MONEY AND BANKING

#### COURSE DESCRIPTION AND FAQ

Sciences Po, Fall Semester 2016

Instructor: Dr Johannes Boehm (Department of Economics, Sciences Po)

## Teaching Assistant: TBA

**Contact details:** If you have administrative questions, please email me at johannes.boehm@sciencespo.fr. Questions about the material of the course are best addressed after the lecture, during office hours (time TBA, in C402, 4th floor, 28 Rue des Saints Peres) or in the tutorials (see below).

**Format, time, and location:** The course is based around 12 lectures. Roughly every two weeks the teaching assistant will hold tutorials with you, where he/she will go through the more difficult sections of the material and answer your questions. These tutorials are not mandatory (for administrative reasons), but I cannot emphasize enough how important it is that you attend and use them to stay up to date with the material. In addition, I will hold weekly office hours (time TBA, in C402, 4th floor, 28 Rue des Saints Peres), as will the teaching assistant (time and location will be announced).

**Evaluation:** The course grade will be based on two hand-in assignments (25% each) in weeks 4 and 8, and a final exam in week 12 (50% of the course grade).

**Pre-requisites:** For Sciences Po students : AECO 1110 Macroéconomie, AECO 1105 Principes de Microéconomie. Exchange students are expected to have completed introductory courses in Macroeconomics, Microeconomics, as well as Mathematics/Statistics (covering calculus, constrained optimization, probability and statistics). Students are strongly encouraged to take this course together with 'Intermediate Macroeconomics'.

WARNING : This course requires a solid foundation in basic macro and micro economics, as well as mathematics and statistics. Students have to be proficient in algebra and calculus (taking derivatives, rearranging equations, taking first-order conditions etc) and probability and statistics (expectation, variance, distributions, etc). See also the FAQ below, and last year's student evaluations at

http://personal.lse.ac.uk/boehmj/eval/evaluations-mb-2015.pdf

**Course Content:** This is a second-year course on modern monetary economics. We will cover the following topics :

- 1. Weeks 1-3: Traditional monetary economics. Purpose and definitions of money, classical and Keynesian theories of money, efficacy of monetary policy, the relationship between monetary and fiscal policy
- 2. Weeks 3-7: Towards modern monetary economics. The dynamics of consumption and saving, the tools of monetary policy/models of the interbank market, the term structure of interest rates, the role of expectations and the New Keynesian Phillips curve, empirical evidence on the effects of monetary policy, monetary policy in the NK framework, discretion vs. commitment
- 3. Weeks 8-11: The financial crisis and current macroprudential policy. The history of the 2008-10 financial crisis, bank run/coordination failure models (Diamond-Dybvig), securitization,

adverse selection and moral hazard in financial markets, the financial accelerator and other amplification mechanisms, unconventional monetary policy, asset pricing puzzles

## A Word of Caution:

The course is going to be challenging, and I strongly encourage you to revise the lecture material every week, as well as doing the readings and attending tutorials. Do not hesitate to ask me or the TA if something is unclear.

# **Reading list:**

There is no core textbook for the course, and the slides will be self-contained. Should you wish to dig deeper, the following textbooks may be of interest.

- Carlin & Soskice (2014): Macroeconomics: Institutions, Instability, and the Financial System. Oxford University Press
- Hubbard, R. Glenn, and Anthony Patrick O'Brien, "Money, Banking, and the Financial System", 1st Ed., 2012
- Gali, J., (2008), "Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework", Princeton University Press
- Walsh, C.E. (2010), Monetary Theory and Policy, 3rd Edition, MIT Press

The list of readings will be updated from time to time. All readings will be available online on Moodle. Mandatory readings (examinable) are denoted by asterisks.

Week 1:

- \*\* Sweeney, J.; Sweeney, R. J. (1977). "Monetary Theory and the Great Capitol Hill Baby Sitting Co-op Crisis: Comment". Journal of Money, Credit and Banking 9 (1): 86–89. doi:10.2307/1992001. JSTOR 1992001
- Kiyotaki, N., and R. Wright (1989) "On Money as a Medium of Exchange", Journal of Political Economy, August, 927-54

Week 2:

- \*\* Bernanke, B., "Money, Gold, and the Great Depression". Speech on March 2, 2004. http://www.federalreserve.gov/boardDocs/speeches/2004/200403022/default.htm
- Romer, Christina D., "Great Depression", in: Encyclopaedia Britannica, 2003
- Samuelson, P (1968) "What Classical and Neoclassical Monetary Theory Really Was," Canadian Journal of Economics/Revue Canadienne d'Economique 1(1), 1-15

Week 3:

- \*\* Sachs, Jeffrey D., "The Bolivian Hyperinflation and Stabilization", The American Economic Review, Vol. 77, No. 2, May 1987, pp. 279-283
- Sargent, Thomas J., "The Ends of Four Big Inflations", in: R. E. Hall (ed.), Inflation: Causes and Effects, University of Chicago Press, 1982. http://www.nber.org/chapters/c11452

Week 4:

- \*\* "What 'forward guidance' is, and how it (theoretically) works", *The Economist*, 9/23/2014.
- Den Haan, Wouter, 2013, Introduction in Froward Guidance: Perspectives from Central Bankers and Market Participants. Available at http://www.voxeu.org/sites/default/files/forward\_guidance\_o.pdf.

# Week 5:

- \*\* McCandless, George T., Jr., and Warren E. Weber, "Some Monetary Facts" Federal Reserve Bank of Minneapolis Quarterly Review, Vol 19., No. 3, Summer 1995
- Romer, Christina D., and David Romer, "A New Measure of Monetary Shocks: Derivation and Implications", American Economic Review 94(4), 2004

Week 6:

- Clarida, R., J. Gali, and M. Gertler, "Monetary Policy Rules and Macroeconomic Stability: Evidence and some Theory," Quarterly Journal of Economics 115(1), 2000, p. 147–180
- Taylor, John B., "Discretion versus policy rules in practice", Carnegie-Rochester Conference Series on Public Policy 39, 1993, pp. 195–214

Week 8:

- \*\* Brunnermeier, Markus, "Deciphering the Liquidity and Credit Crunch 2007–2008", Journal of Economic Perspectives 23(1), 2009, p. 77–100
- Shiller, Robert, "The Liquidity Puzzle", Project Syndicate, 16 July 2007. https://www.projectsyndicate.org/print/the-liquidity-puzzle
- Bernanke, Ben, "The Crisis and Policy Response", Speech at the London School of Economics, January 13, 2009, http://www.federalreserve.gov/newsevents/speech/bernanke20090113a.htm

Week 9:

- Williamson, Stephen D., "Macroeconomics", 4th Ed., Prentice-Hall, 2011 (Chapter 16)
- Hubbard, R. Glenn, and Anthony Patrick O'Brien, "Money, Banking, and the Financial System", 1st Ed., 2012, Chapter 9

# Week 10:

- Williamson Chapter 9
- Bernanke, Ben S., Mark Gertler, and Simon Gilchrist. "The financial accelerator in a quantitative business cycle framework." Handbook of Macroeconomics Vol. 1 (1999): 1341-1393.

Week 11:

- \*\* Lane, Phillip R., "The European Sovereign Debt Crisis", Journal of Economic Perspectives 26(3), 2012, pp. 49–68
- Wolf, Martin, "Financial reform: Call to arms", Financial Times, 3 September 2014

• Bernanke, Ben, "The Federal Reserve's Response to the Financial Crisis", March 2014, http://www.federalre reserve-response-to-the-financial-crisis.htm

### FREQUENTLY ASKED QUESTIONS

## Q: I'm not sure whether my maths background is strong enough. Should I take the course?

A: We will mostly need basic calculus and (to a lesser extent) probability/statistics for the course. On the calculus side, you need to be able to take derivatives of functions, solve (systems of) equations, find extremal values (i.e. maxima and minima of function) and be able to calculate the sum of a geometric series. On the probability/statistics side, you need to know about distributions, density functions, the expected value, variance, and moments of a random variable, and know some basic linear regression analysis.

If you're unsure, I would recommend revising the material from your high school math courses. The following books may also be helpful:

• Ayres and Mendelson, "Schaum's Outline to Calculus", 4th Ed., 1999

Try to solve the following two maths problems:

• Find the derivative with respect to *x* of the following function:

$$f(x,y) = \sqrt{xy} - 3(x+y)^5 + a \cdot x + x \cdot \log x$$

where *a* is a constant (so you can treat it just like 2, 3, or 5).

• Solve the following system of equations for *x* as a function of *a* and *b*:

$$ax + by = 2$$
$$-\frac{1}{b} = \frac{4y}{x}$$

If you can solve both questions without problems, your math preparation is most likely good enough for the course. Likewise, if you're a French student, and you have done the *baccalaureat scientifique*, you should be fine.

## Q: I'm really interested in topic XY. Could we discuss it in the course?

A: Possibly. Send me an email and if it's related to our topics, I'll make sure to discuss it as we go along with the material.

## Q: Is the final exam going to be hard? Will it involve maths?

A: It's not going to be hard if you have understood the lecture materials and independently completed the assignments. Yes, it will involve maths, although the level of maths will be a bit lower than what is required in the assignments. I'll discuss the format of the exam during the lectures.