Economics 6001: Monetary Theory and Policy Spring 2017, May 15 - June 9 Central European University Professor Max Gillman

## Course Summary:

After some background on the Fisherian Neoclassical and Keynesian traditions, we will set out current policy and that of the post Great Recession Period. Then a set of three Lost Decades are examined in terms of history and policy. The we will introduce some simple math in describing government finance and money supply use for it. Next into money demand, velocity and the welfare cost of inflation, first from the partial equilibrium literature and then from the money in utility function general equilibrium literature. Exchange economies in general equilibrium are worked through next, first without resource use being devoted to exchange and then with an exchange technology that uses resources, such as "shopping time" models and other related ones. The microfoundations of a banking approach to resource use to exchange is presented, and then the decentralization of this banking problem is done in order to bring out the implicit interest rate spreads that have implications for modeling the liquidity effect, the equity premium and the term structure of interest rates. Endogenous growth with inflation and investment is explored with findings about the "Tobin" effect of inflation. Then a derivation of a "Taylor rule" through equilibrium conditions in a monetary economy is done using the exchange economies already developed. And finally real business cycle facts are presented with extension to monetary facts.

Assessment: 10% Attendance, 30% Three Weekly Homework Sets, 30% Three (weekly) Short Essays, 30% Final Exam.

Course Topical Outline and other material to be on CEU elearning

- Required Text:
- 1. Gillman, Max, 2017a, Monetary Theory and Policy, draft lecture notes; under preliminary publisher review.
- Background Texts:
- 1. Gillman, Max, 2017b, *Principles of Macroeconomics: An Evolutionary Approach*, Kendall Hunt Publishing, Dubuque, Iowa.
- 2. Lucas, Robert E., Jr. 2013, Collected Papers in Monetary Theory, Gillman, Max, editor, Harvard University Press, Cambridge, MA.
- 3. Gillman, Max, 2011, Advanced Modern Macroeconomics: Analysis and Application, Pearson Financial Times Prentice Hall, London.
- 4. Gillman, Max, 2009, *Inflation Theory in Economics*, Routledge, London; available on CEU website and articles through Repec (Gillman at Ideas).
- 5. Walsh, Carl, 2010, Monetary Theory and Policy, 3rd Ed., MIT Press.

Various articles will be referenced as we go or below.

## Course Outline

- 1. Theory and Policy Overview: the last 100 years; Gillman 2017b various chapters
  - (a) Fisher vs. Keynes: Choose Carefully.
  - (b) Set of Neoclassical vs. Keynesian Models
    - i. Fisher:  $MV=PY,\,R=r+\pi,$  Phillips Curve, Price Stability, Debt-Deflation Spiral.
    - ii. Keynes: 1923: Price Stability, 1930: Keynesian Cross (K1); 1936: IS-LM (K2); AS-AD with nominal price: (K3), 3-equation dynamic model (K4).

- (c) Monetary Policy Rules: Today and Historical
  - i. Today: Inflation targeting, fixed interest rates, Taylor rule, Money supply rule, Macroprudential policy
  - ii. Historical: "Reflation" policy, bank policy, agg. demand management, oil price theory of stagflation, pick point on exploitable Phillips Curve, Expectations theory of Phillips curve.
- 2. Great Depression to Great Recession: Lost Decades Experience and Policy; Gillman 2017b Chapters 6, 11
  - (a) Great Depression and wartime background (East Asian, European wars and revolution)
  - (b) Vietnam War Era: Phillips curves, K3, and Monetarism
  - (c) Great Recession (Central Asian Wars) policy
- 3. Government Finance and Money; Gillman 2011; Gillman 2017a
  - (a) Seigniorage and Inflation Tax
  - (b) Fisher equation of interest rates in general equilibrium
- 4. Money Demand, Velocity and Welfare Cost of Inflation; Gillman 2017a
  - (a) Partial Equilibrium
  - (b) Early General equilibrium, static and dynamic money-in-the-utility function (MIUF)
  - (c) Backing out money demand from GE MIUF
- 5. General Equilibrium Exchange Economies; Gillman 2017a, Gillman 2009
  - (a) Without resource cost CIA, MIUF, and CIA with costless credit
  - (b) With resource cost: Shopping time and goods transaction cost

- 6. Microfoundations: Banking Production of Exchange Cost; Gillman 2017a, Gillman 2009
- 7. Decentralization of Banking Production of Exchange Cost; Gillman 2017a
  - (a) with Interest rate spreads
  - (b) implications for liquidity effect, equity premium and term structure of interest rates
- 8. Endogenous Growth, Investment and Inflation; Gillman 2017a, Gillman 2009
  - (a) intertemporal inflation tax
  - (b) Stockman and Tobin effects
- 9. Taylor rule from Euler equation of Exchange Economies; Gillman 2017a.
  - (a) Establishing Taylor principle
  - (b) Estimating the Taylor equation from simulated model evidence
  - (c) Taylor to Fisher in Long run?
- 10. Real Business Cycle: theory and facts; Gillman 2017 working paper.
  - (a) Without Money
  - (b) With monetary facts