

4 lectures

Theory and Practice of Monetary Policy.

These lectures will deal with the conduct of monetary policy in an open economy. Both the case of a developed industrial country whose domestic financial system is both highly developed and fully integrated in the international financial system and the case of an underdeveloped or transition economy with underdeveloped domestic financial markets and limited international capital mobility will be dealt with.

For those whose intermediate macroeconomics is rusty, I recommend a quick perusal of M. Burda and C. Wyplosz [1993], *Macroeconomics, A European Text*, Oxford University Press, which is useful for the advanced industrial countries and Jeffrey D. Sachs and Felipe Larrain B.[1993] *Macroeconomics in the Global Economy*, Harvester Wheatsheaf, which is quite informative on developing countries and transition economies.

To bone up on the concepts and some of the technicalities of rational expectations modelling, see Begg, D.D.H. *The rational expectations revolution in macroeconomics*. A more advanced treatment of these topics can be found in O.J. Blanchard and S. Fischer [1989], *Lectures on Macroeconomics*, The MIT Press. B.T. McCallum [1989], *Monetary Economics, Theory and Policy*, Macmillan Publishing, is a readable treatment of monetary theory and policy in a closed economy.

Examination questions for this course will be oriented towards problem solving. Typically the student will be asked to analyse a well-defined policy problem or economic event, by bringing appropriate theory and facts to bear on it. Some questions may involve the manipulation and analysis of a fully specified formal, mathematical model of the economy.

There will be no questions such as "Explain the difference between Baumol's, Tobin's and Allais' theories of the transactions demand for money". Instead, questions are more likely to look like the following:

(1) Following a successful anti-inflationary policy and progress on structural reforms, including liberalization of the capital account of the balance of payments, the government of Westonia, a small open transition economy, is faced with a large-scale capital inflow. Explain and justify the policy response you would recommend with respect to (a) the exchange rate, (b) the control of the domestic money stock and (c) the control of domestic interest rates. What would be the consequences for domestic inflation, international competitiveness and real economic activity of your policy recommendation?

(2) Financial innovation and deregulation have created many new close substitutes for the traditional monetary aggregates and have led to market-sensitive interest rates being paid on many previously non-interest-bearing components of the money stock. What are the implications for the conduct of monetary policy of these two types of innovations? Specifically, how do they

affect the desirability of monetary targetry as opposed to interest rate targets or an exchange rate target?

(3) Consider the following simple macroeconomic model of a small open economy with perfect international capital mobility, rational exchange rate expectations, a freely floating exchange rate and a sticky domestic price level.

$$y = -\gamma c + \delta f \quad (1)$$

$$m - p = k\bar{y} - \lambda i \quad (2)$$

$$\dot{i} = i^* + \dot{s} \quad (3)$$

$$\dot{p} = \phi(y - \bar{y}) \quad (4)$$

$$c \equiv s + p^* - p \quad (5)$$

y is real GDP, \bar{y} is the capacity level of GDP, p is the domestic price level, p^* is the foreign price level, m is the nominal stock of money, s is the nominal spot exchange rate, c is the real exchange rate, i is the domestic nominal rate of interest, i^* is the foreign rate of interest. f is a measure of the impact of fiscal policy on aggregate demand. γ , δ , k , λ , and ϕ are positive parameters. All variables other than the two interest rates are in natural logarithms. \bar{y} , p^* and i^* are exogenous. Without loss of generality, we set units such that $\bar{y} = p^* = i^* = 0$. m and f are policy instruments. s and p are the two state variables. p is predetermined, s is non-predetermined.

(A) Explain equation 3.

(B) Derive and explain the long-run (steady state) effects of an increase in m and an increase in f on real output, y , the price level, p , the nominal exchange rate, s , the real exchange rate, c , the nominal interest rate, i , and the real interest rate $i - \dot{p}$.

(C) Describe and explain the complete dynamic response of the economy to the unanticipated announcement at time t_0 of an immediate (starting at time t_0) permanent fiscal stimulus (increase in f).

(D) Describe and explain the complete dynamic response of the economy to the unanticipated announcement at time t_0 of a future (starting at time $t_i > t_0$) permanent fiscal stimulus (increase in f).

Topics

(0) *Some basic accounting: The balance sheet and flow-of-funds accounts of the central bank.*

Buiter, W. H. [1996], "Aspects of fiscal performance in some transition economies under Fund-supported programs", CEPR Discussion Paper No. 1535, December, pp. 19-22.

(1) *Monetary policy under uncertainty in an open economy.*

Poole, William [1970], "Optimal Choice of monetary policy instruments in a simple stochastic macromodel", *Quarterly Journal of Economics*, vol. 84, pp. 197-216.

Buiter, Willem H. [1996], "The Economic Case for Monetary Union in the European Union", mimeo, Cambridge University Faculty of Economics and Politics, forthcoming *Review of International Economics*.

Kydland, Finn E. and E. C. Prescott [1977], "Rules rather than discretion: the inconsistency of optimal plans", *Journal of Political Economy*, 85, June, pp. 473-492.

Barro, Robert J. and D. Gordon [1983], "A positive theory of monetary policy in a natural rate model", *Journal of Political Economy*, 91, August, pp. 589-610.

Obstfeld, M. [1996]

Buiter, W.H., G. Corsetti and Paolo Pesenti [1997], "Interpreting the ERM Crisis: Country-Specific and Systemic Issues", LSE CEP Discussion Paper No. 321, January