

Examination:	Macroeconomic Analysis I (No. 20030)
Semester:	Winter Semester 2009/2010
Examiners:	Prof. Dr. Gerhard Schwödiauer/ Prof. Dr. Horst Gischer
Time available:	120 min.
The following aids may be used:	None.

The examination comprises three problems all of which have to be addressed.

1.
 - a) Formulate the log-linear IS-curve for a closed economy, and sketch how it is obtained from the standard goods-market equilibrium equation!
 - b) Define and explain the concept of “real” interest rate and of “natural” interest rate!
2.
 - a) Formulate and explain the standard Taylor Rule of monetary policy!
 - b) Derive the aggregate demand curve for a closed economy based on the Taylor Rule!
 - c) Discuss using the standard IS-LM framework the difference between a monetary policy trying to control the money supply and a Taylor Rule based monetary policy!

3. Consider the Cagan model

$$m_t - p_t = \alpha - \beta(E_t p_{t+1} - p_t) + u_t,$$

where u_t is a white noise shock.

- a) Explain briefly how the above equation is related to the standard LM equation, and explain in particular the term $E_t p_{t+1}$!
- b) Show how the equilibrium log-price level p_t is determined if the economic agents know the money supply rule

$$m_t = \bar{m} + e_t,$$

where e_t is a white noise shock.

- c) Discuss whether (and if yes, in what sense) the response of the equilibrium price level to a change in the supply of money conforms to the so-called “quantity theory of money”!

– End of text. Good luck! –