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

Examination Problems (1.-6.):

1. a) Formulate the standard short-run aggregate supply function (in log-linear form) for a closed economy!

   b) Explain briefly the economic logic behind this function, in particular the concept of "natural" level of GDP, and give two different causal interpretations (from "price to quantity" and from "quantity to price")!

2. a) Formulate the log-linear IS-curve for a small open economy, and explain and justify the introduction of that new variable which makes the difference between the closed- and the open-economy IS-curve!

   b) Derive and explain the so-called Marshall-Lerner condition in the general form which does not presuppose a zero trade balance!

3. a) Formulate and explain briefly the adaptive-expectations hypothesis for inflation rates!

   b) Combine adaptive inflation expectations with the standard short-run aggregate supply function using the Koyck transformation to obtain an equation involving just current and one-period lagged inflation and output variables!

4. a) Formulate and explain briefly the standard Taylor rule!

   b) Derive the aggregate demand curve for a closed economy based on the Taylor rule!

5. a) Formulate the standard log-linear AS-AD model (with a Taylor rule) assuming that the central bank does not observe current inflation and output when it sets the interest rate but, like the private sector, just uses "rational expectations" based on information from the previous period! What is meant by "rational expectations"?

   b) Show that under the above assumptions the central bank cannot control the variance of inflation and output!

6. Assume that individuals are risk-neutral. Explain, using a geometrical sketch, why reducing the volatility of employment is nevertheless welfare-increasing if the natural level of employment corresponds to an equilibrium in the labor market which is inefficient because of monopolistic price-selling power of the firms, but would not be welfare-increasing in an economy with perfect competition in output and labor markets!

– End of text. Good luck! –