

MACROECONOMIC POLICIES - FEUNL

Exam: 27/06/2008

2:30 hours

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I (4,5 values)

Describe 3 of the following concepts:

- i. Dutch disease.
- ii. Rent seeking.
- iii. The Debt Laffer Curve.
- iv. Tax cum subsidy schemes.
- v. Poverty trap.

II (7,5 values)

Consider an economy with a large number of equal firms. Each firm i produces a homogeneous consumption good according to $Y_i = AK_i^{\frac{1}{2}}N_i^{\frac{1}{2}}$. Although each firm considers A as an exogenous parameter, in the aggregate the following condition holds: $A = \left(\frac{G}{Y}\right)^{\frac{1}{3}}$.

1. Compute the aggregate production function in this economy and explain why there is a market failure. What would happen if there was no government?
2. Assume that the provision of public inputs is financed with a production tax τ , but that a fraction ϕ of the tax revenues is wasted in unproductive uses. Write down the government budget constraint.
3. Assume that in this economy the population is constant ($n=0$), there is no technological progress ($\gamma=0$), the saving rate is 20% and the capital depreciation rate (δ) is equal to 5%.
 - a) Find out the expression for the steady state levels of per capita income and per capita consumption, in terms of τ and ϕ .
 - b) Explain, with the help of a graph, the dual effect of the tax rate on the steady state level of per capita consumption.
 - c) Considering that the objective of the benevolent planner is to maximize consumption, compute the optimal values for τ and ϕ . Is this solution intuitive?
 - d) Now suppose that you were a kleptocrat, which aim was to maximize your theft on government expenditures. Which solution would you choose for τ and ϕ ?
 - e) Compare the solutions of c) and d), namely in terms of τ , ϕ , steady state per capita consumption and G/Y . Graph the equilibrium and discuss.
 - f) Would the Kleptocrat solution differ if he faced the possibility of being dismissed? Discuss.

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III (4 values)

Consider an economy where prices are flexible and annual inflation has been constant and equal to the rate of money growth, 1000%. Assume that the Fisher equation holds and that the equilibrium real interest rate is 5%.

1. With the help of a graph describe the money market equilibrium at each moment in time. Hint: use $(M/P, i)$ space.

Assume that the Central Bank of this economy wants fix the exchange rate and to reduce the inflation rate to 0%. To do so, it announces a reduction in the rate of money growth to 0% per year.

2. Assuming that the commitment is credible and that the policy was not anticipated, describe in the $(M/P, i)$ space the post stabilization equilibrium in the money market. Explain.
3. Sticking with the assumption of flexible prices, describe the temporal paths, at the time of the shock and after the shock, of M , i , π and P .
4. In Bolivia, there was a sudden capital inflow during the 1985 stabilization process. Explain why it happened and the extent to which it might have helped to stabilize the economy.

IV (4 values)

Choose and comment two of the following sentences:

1. "Imperfect competition is bad for growth".
2. "Transpiration responds to inspiration".
3. "If the government fails to reduce its budgetary deficit, less inflation today implies less inflation in the future".