

2. Klausur zu KV "Wachstum und Verteilung", 1.12.2008

Sie müssen in jedem der beiden Partiale mindestens 30% erreichen und insgesamt mindestens 50%!

1. The Solow Model

1. Discuss the main building blocks of the Solow model and their interaction.
2. What is meant by "dynamic equilibrium", what by "dynamic steady state equilibrium"? When does the former gravitate towards the latter (Inada conditions)?
3. Solow uses an aggregate production function of the type $Y = F(K, L)$. What is problematic with regard to such functions?

4. Let

$$Y = 2K^{1/3}L^{2/3} \quad (\S)$$

- (a) Derive (!!!) the rate of growth of Y .
- (b) Derive (!!!) the corresponding intensive form of the function (productivity function)
- (c) Illustrate the latter and show how for a given capital intensity one can read off in the diagram important economic variables.
- (d) Assume that the rate of growth of employment per year is -2% and the rate of growth of hours worked per year per person employed is $+3\%$. The savings rate is $+5\%$. Calculate the steady-state-values for k, y, v, x, r and w .
- (e) Define and illustrate in a diagram Harrod-neutral technical progress.

2. "New" Growth Theory

1. What did advocates of "new" growth theory criticise with regard to the Solow model?
2. What are the main ideas put forward in order to explain perpetual growth in the "new" growth models you know? Provide a summary and systematic account of the arguments provided.
3. Give a critical account of the basic features of Romer's 1988 model. What does it attempt to explain, how does it do it and what, if anything, is problematic with the approach?