

Goals for this session

- (Don't forget about Malthus)
- Begin to master the Solow Model

Important Aspects of Solow Model

- How is this model different from the one-period GE model we looked at in the beginning of class?
- Capital vs. lower case variables - what do they mean?
- In the 'steady state' of the model, is GDP growing?

Problems

1. Find the savings rate that satisfies the golden rule (using the graph only).
2. Explain in words why the Solow model predicts that per capita GDP growth must come from tech progress, rather than 's' or 'n'. Show graphically.
3. Population Growth Rate Shock (n):
 - (a) Show the effect of an increase of 'n' on:
 - k^*
 - y^*
 - c^*
 - golden rule k_{gr}^*
 - golden rule c_{gr}^*
 - (b) Holding savings constant, does the drop in population growth initially cause the economy to move above or below the golden rule level of consumption? Explain in words.
 - (c) Explain why this change in the population growth rate doesn't affect per capita GDP growth or convergence between the rich and poor countries of the world.
4. List the three main implications of the Solow model.