

University of Connecticut
College of Arts and Sciences
Department of Economics
Christian Zimmermann

Fall 2004, Intermediate Macroeconomics, section 3

ECON 219 Mid-term exam II

Name:

General recommendations:

- Read questions thoroughly and answer each.
- Work individually.
- There are four pages.
- No documentation, cell phones, pagers, calculators and bathroom breaks.
- You have until 10:45 and can leave early, if you wish.

1. [35%] Circle the correct answer to each of the following questions. Note that there may be several correct answers.

(a) Convergence is:

- i. poorer countries have higher growth rates;
- ii. poorer countries have lower growth rates;
- iii. poorer countries have very diverse growth rates;
- iv. poorer countries have uniform growth rates.

(b) Which of the following is true?

- i. export growth is positively correlated with output growth;
- ii. capital accumulation and population growth explain all of output growth;
- iii. the return of capital decreases in the long run;
- iv. poor countries have higher population growth rates.

(c) If current government expenses increase,

- i. labor demand increases;
- ii. labor demand decreases;
- iii. aggregate demand increases;
- iv. aggregate demand decreases.

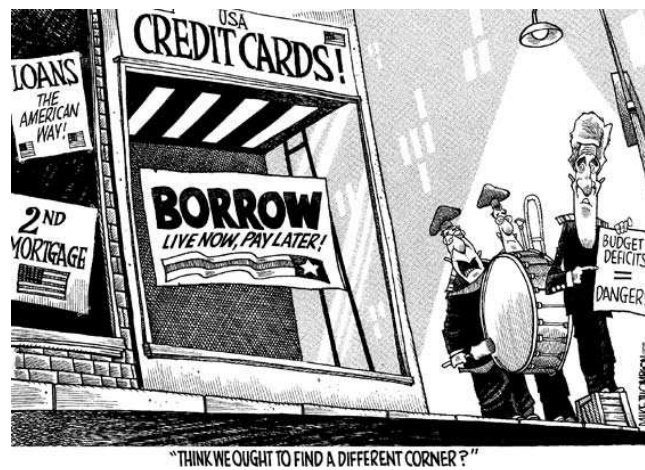
(d) If current taxes increase and future government expenses increase,

- i. labor supply increases;
- ii. labor supply decreases;
- iii. labor demand increases;
- iv. labor demand decreases.

(e) In the static model,

- i. the marginal product of labor equals the marginal product of capital;
- ii. the wage equals the marginal product of labor;
- iii. the PPF is tangent to the highest indifference curve;
- iv. the representative firm is maximizing profits.

2. [10%] Discuss the following cartoon in the light of the theory we have covered so far in this class.



3. [55%] Germany suffered extensive damage to its infrastructure during WWII.

- (a) Let us analyze the short-term effects of this, using the intertemporal model of the business cycle. How can we capture this shock in the model?

(b) Show graphically how the macroeconomic equilibrium is modified when this shock is taken into account, again for the intertemporal model of the business cycle.

(c) Can such shocks (of course of lesser amplitude) be a good explanation of cyclical fluctuations?

(d) Now think about this historical episode in the context of the Solow growth model. What would this model predict in terms of the evolution of capital, in the short term and the long term? Why?

(e) Finally, Germany also suffered big losses in population. Assume that there are only population losses, what would the Malthus model predict, in the short-term and in the long term?

4. **[Bonus: 10%]** Regarding the last two answers, have your theoretical predictions been verified by the actual experience of Germany?