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

Fall 2004, Intermediate Macroeconomics, section 4

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 12:15 and can leave early, if you wish.

1. **[40%]** Circle the correct answer to each of the following questions. Note that there may be several correct answers.

   (a) In a Malthusian world, why is misery recurrent?

      i. the marginal returns of capital are decreasing;
      ii. fertility is not under the people's control;
      iii. output is increasing in labor;
      iv. mortality depends on the standard of living.

   (b) In a Malthusian world, what events would improve temporarily the standard of living, as measured by output per capita?

      i. a peace keeping mission;
      ii. an increase in violent crime;
      iii. a new mutation of germs;
      iv. a new sewer system.

   (c) In the Solow growth model, suppose a country is extremely rich. What will happen next?

      i. the other countries will catch up to it;
      ii. the growth rate of capital matches the population growth rate;
      iii. the growth rate of output is lower the population growth rate;
      iv. the savings per capita decrease.

(d) Which of these stylized facts of growth are generally accepted as true:

   i. in the long run, all countries tend to have similar growth rates of output per capita;
   ii. the returns to capital tend to grow;
   iii. the labor income share does not have a trend;
   iv. capital per capita tends to grow.

(e) In the intertemporal model, a borrower is someone with:

   i. $y > c$;
   ii. $y' > c'$;
   iii. $y - t > c$;
   iv. $y' - t' > c'$.

(f) With Ricardian Equivalence:

   i. fiscal deficits do not matter;
   ii. trade deficits do not matter;
   iii. governement expenses do not matter;
   iv. interest rates do not matter.

2. **[20%]** Suppose an economy has no governement. It introduces one whose sole purpose in to tax this period and return this in the from of transfers the next period (with interest). Among the following variables, explain which are affected, how and why: today's consumption, tomorrow's consumption, output, savings, wages, interest rate.

3. **[40%]**

   (a) The government decides to reduce government spending in the current budget, but without modifying the future budget. Why does this mean it is also reducing taxes?

   (b) Take the intertemporal model of the business cycle with investment. Show graphically how the macroeconomic equilibrium is modified.

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

4. **[Bonus: 10%]** Some countries face harsher climates. Using the Solow growth model, show why they may be poorer.