

Graduate Macro 710 -- Midterm Exam

Directions: You must complete all parts of this exam. Read each question carefully and think your way through each question. Don't lose points due to carelessness. **Points will be deducted for irrelevant information and/or if your answer is incomprehensible.**

Failure to comply with the Rules on Group Work will result in failure on the exam.

1. (10 points) Using the Solow/MRW Model, explain why a country's growth rate of output per worker in the long run may differ from its growth rate in the short run. What is the growth rate of output per worker in the long run?
2. (10 points) Using the Solow/MRW Model, explain why – if all countries have the same saving rates, the same depreciation rate, the same labor force growth rate and the same rate of technological progress – we would expect countries with lower levels of output per worker to have faster growth rates of output per worker in the short run.
3. (20 points) In his empirical study of the determinants of economic growth, Barro (*QJE*, 1991) regressed growth rates of GDP per capita on a large number of variables. Describe his main findings. In what ways do Barro's findings provide support for the Solow/MRW Model? In what ways do they contradict it?
4. (60 points) In my opinion, the Solow/MRW Model and the Ramsey Model adequately explain the main findings of Barro (*QJE*, 1991) and Young (*QJE*, 1995). In my opinion, there is no need to use R&D models (D. Romer, chap. 3A) to explain growth rates of GDP per capita in a cross-section of countries. **PROVE ME WRONG.**

Please submit type-written answers in class on Thurs. 16 April 2009.

general reminder of course policies on the next page

Rules on Group Work

I strongly encourage you to work with your classmates on every assignment that I give you. You learn more when a classmate criticizes your solution to a problem and forces you to find a new method of solution.

"Working with" however does not mean "copy from."

You learn nothing by copying a classmate's answer.

Obviously, there will be many occasions when you and a classmate agree on an answer, but the thought process by which you both arrived at the same answer will differ.

Therefore, please work together on every assignment that I give you, but do not submit identical answers. The answers that you submit may be similar, but the thought process embodied in your answers must differ.

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Email at your Own Risk

Any take-home assignment (such as a make-up exam) should be submitted to me during regular class hours. If you cannot attend class that day, ask a friend to submit it for you.

I will also accept assignments submitted to me by email or left in my box at the Economics Department Office (Whitehead 217).

Keep in mind however that email does not always work perfectly. There is a low (but not insignificant) probability that the email will not be delivered to me. There is also a low (but not insignificant) probability that an assignment left in my box will disappear.

I will not be held accountable for vanishing emails. Nor will I be held accountable for assignments devoured by the mailbox gremlin. You assume ALL of the risk associated with email and/or mailbox submissions. If I don't receive it, it's your problem, not mine.