Date: July 14, 2008 Time: 3 hours Reading Time: 20 minutes

## PRELIMINARY EXAMINATION FOR THE Ph.D. DEGREE

## Answer two questions from each section

## Section 1

- 1. Describe the crucial assumptions and the most important results of the unified model of growth that merges the Solow and Malthus Models and explains income per person from 10,000 B.C. to these days. It helps if you refer to the model and specific formulas. What are the stylized facts explained by the model? What are the most unsatisfactory assumptions of the model? Can the model explain difference in current levels of income per person? Can the model predict the "date" of an industrial revolution?
- 2. What are, according to Jones 2002 the sources of economic growth in the US? Illustrate with a simple model how one can decompose growth rates into each source and which sources have been the most relevant during the last century. Was the US on a balanced growth path? Based on this analysis what are the implications for future growth?
- 3. The recent empirical literature has used two methods, often called "growth accounting" and "development accounting" to inquire into determinants of different growth rates and different income per capita across countries. Having in mind Young (1995) as an example of growth accounting and Hall and Jones (1999) as an example of development accounting describe the procedures, what we learn from each and what are their limits.
- 4. What is "Directed technological Change"? What cross-countries and time-series phenomena can it explain? With specific reference to the work by Acemoglu and Zilibotti and by Caselli and Coleman, present the key ideas and implications of directed technical change and its effect on wage inequality within and across countries.

## Section 2

1. What is the Great Divergence? What are its main quantitative features? Discuss some of the main controversies surround the Great Divergence: When did it begin? Where did it begin? Why did it happen? Has it been exacerbated by globalization?

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- 2. Several authors have tried to lay out a unified growth model that can describe the evolution of an economy from a "Malthusian trap" through to "modern economic growth" (whether exogenous or endogenous). Describe in detail three such models and then compare and contrast their approaches. According to Clark, which features of these models look problematic?
- 3. "Democracy and growth go together." Is this true? In what sense?
- 4. Do you think Robert Mugabe [the President of Zimbabwe] would enjoy the explanation of the poverty of his country given in the paper by "Colonial OriginsŠ" by Acemoglu, Johnson, and Robinson? And, if so, should he enjoy it so much? To answer this question, spend half your time explaining the logic of AJR's account of global inequality and the role of institutions therein. Spend the rest of your time offering a criticism of AJR's account based on other explanations in the literature. Is the current poverty in the post-colonial world predestined and without remedy? If not, what can be done?