Problem Set #2

Due Tuesday, September 19, 2006

Problem Sets MUST be word-processed except for graphs and equations.

QUESTIONS

1. Between 1990 and 2005, China had a saving rate of 35% and labor force growth rate of 1% while the United States had a savings rate of 10% and labor force growth rate of 2%. Although both countries had similar production functions and rates of depreciation, China’s economy grew by 10% per year while the U.S.’s economy grew by 2% per year. On a single Solow Growth Model diagram, clearly show the different economic performances of China (in red) and the U.S. (in blue). Also provide a brief economic explanation for the differences between China and the U.S. growth.

2. Consider the following 2 facts: (a) High-income people save a larger proportion of their incomes than do low-income people and (b) an increase in income inequality can lead to a fall in productivity due to political unrest. Based only on this information, use a Solow Growth Model diagram to clearly show the effects of an increase in income inequality on income-per-worker. Be sure to clearly identify the initial and final steady states. In addition, provide a brief economic explanation of the changes you showed in your diagram as well as the adjustment process that occurs during the transition period. Be sure to discuss what happens to the level of income-per-worker and to the rate of economic growth during both the transition period and in the long-run equilibrium.