

Eco 362: Economic Growth
Fall 2013
Problem Set 4

Question 1

Consider the Solow model without technology growth $Y_t = AK_t^\alpha L_t^{1-\alpha}$. Consider the model of an economy open to capital flows. How will an increase in the growth rate of population, holding constant the saving rate, affect GDP per capita? How do these results contrast with the Solow model where funds for investment come from domestic savings?

Question 2

A recent study has concluded that the tariff on the import of widgets has raised real wages in the domestic widget industry. Based on this finding, it has been suggested that tariffs be raised in all industries. Comment on the wisdom of this proposal

Question 3

Coffee is primarily made from two different beans, Arabica and Robusta. The beans grow in different countries. Suppose that in the year 2008, a major scientific study finds that drinking coffee made from Arabica beans contributes to heart disease, while drinking coffee made from Robusta promotes better health. As a result, the price of Arabica beans falls and the price of Robusta beans rises. An economist reads about these goings-on and says “Great. This will help me understand the connection between income and quality of government.” Explain her thinking, what data she would look at to carry out this investigation, and how she would interpret the results. Also, explain why looking at this data would be superior to simply examining the correlation between income and the quality of government.

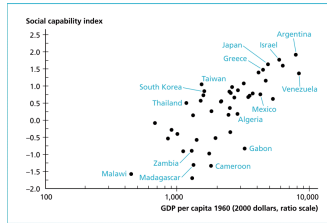
Question 4

How would the availability of student loans to finance education influence the relationship between inequality and the accumulation of factors of production? In particular, how would student loans affect the level of inequality that maximizes factor accumulation?

Question 5

Based on the diagram below, but not on what you know of their subsequent history, which country would you expect to have a higher growth rate over the

period 1960-2005, Mexico or Thailand? Explain why.



Source: Temple and Johnson (1998); Heston, Summers, and Aten (2002).