

Homework #5

1. Suppose that an economy was initially in steady state when part of its capital stock is destroyed by war. Assume that none of its residents are killed by the war. Use the Solow Model without technological progress to answer the following questions.
 - a. What is the immediate impact on total output?
 - b. What is the immediate impact on output per worker?
 - c. Assuming that the country's saving rate remains unchanged, what happens to:
 - output per worker in the postwar economy?
 - investment per worker in the postwar economy?
 - consumption per worker in the postwar economy?Illustrate your answers with diagrams
 - d. Is the growth rate of output per worker in the postwar economy greater or smaller than it was before the war?

1. Suppose that an economy was initially in steady state when many of its residents are killed by a war. Assume that none of its capital stock is destroyed by the war. Use the Solow Model without technological progress to answer the following questions.
 - a. What is the immediate impact on total output?
 - b. What is the immediate impact on output per worker?
 - c. Assuming that the country's saving rate remains unchanged, what happens to:
 - output per worker in the postwar economy?
 - investment per worker in the postwar economy?
 - consumption per worker in the postwar economy?Illustrate your answers with diagrams
 - d. Is the growth rate of output per worker in the postwar economy greater or smaller than it was before the war?