EC1010: Midterm Exam 2012 Solutions

March 23, 2012

1. C
2. D
3. C
4. D
5. C
6. E
7. D
8. B
9. E
10. A
11. E
12. A
13. D
14. C
15. E
16. A
17. A
18. A

Question 1

i.) See Figure 1. Japan had a lower level of capital than Canada in 1960. It was further from its steady state, and from the shape of production function, we see that diminishing returns were not so severe. As a result, more capital accumulation led to greater increases in output in Japan. Compared to Canada, therefore, output grew faster as capital accumulated. It is the respective strengths of diminishing returns in each country that accounts for the different growth experiences.

ii.) From the quantity theory,

$$\pi = g_M - g_Y$$

While g_M was the same in each country, average output growth was lower in Canada. As a result, $\pi = g_M - g_Y$ was *higher* in Canada. There were fewer new goods to absorb the money growth—i.e., "demand" was well above "supply"—so inflation was higher in Canada.

Question 2

i.) According to the permanent income hypothesis (PIH), today's consumption depends on lifetime income and wealth. Because expectations of future lifetime income fell in 2008, the theory predicts consumption should fall in 2008. This fall in consumption corresponds to a rise in private savings in 2008.

ii.) See Figure 2. The real interest rate fell.

iii.) The decline in the real interest rate would have reduced the attractiveness of the U.S. financial assets as a destination for savings, and hence reduced the demand for dollars. For this reason, the dollar would have weakened. Accompanying the fewer inflows would be greater outflows of savings from the U.S., thereby increasing the supply of dollars and further weakening the currency.

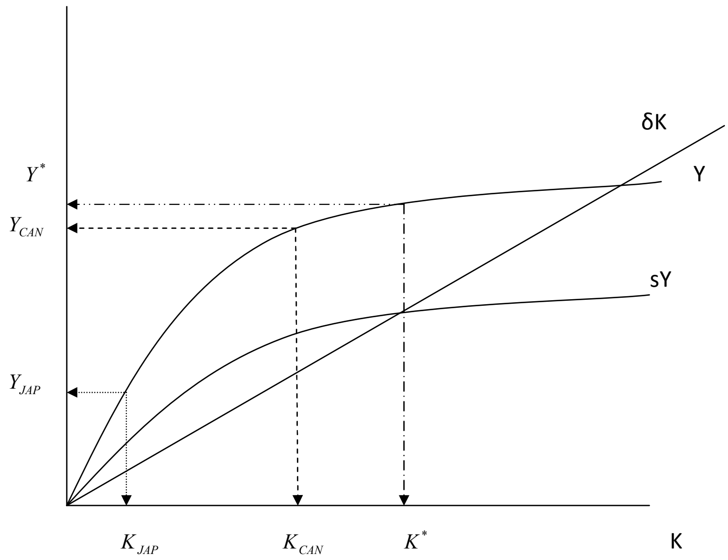

Figure 1: Canada and Japan in 1960

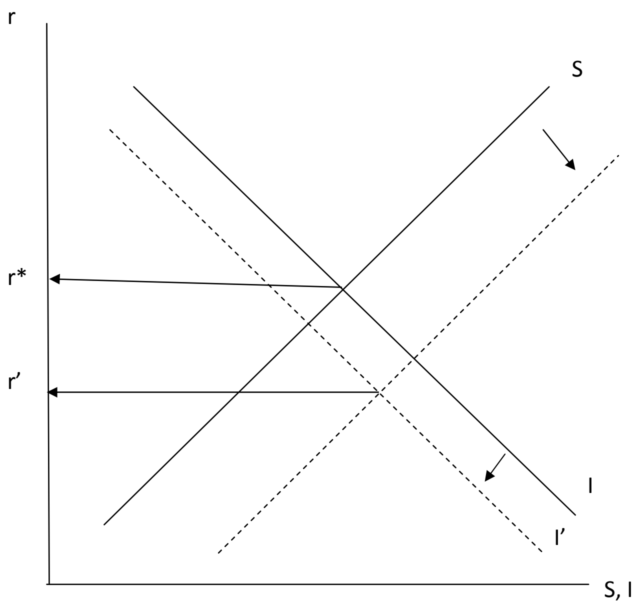

Figure 2: A rise in savings and a fall in investment demand