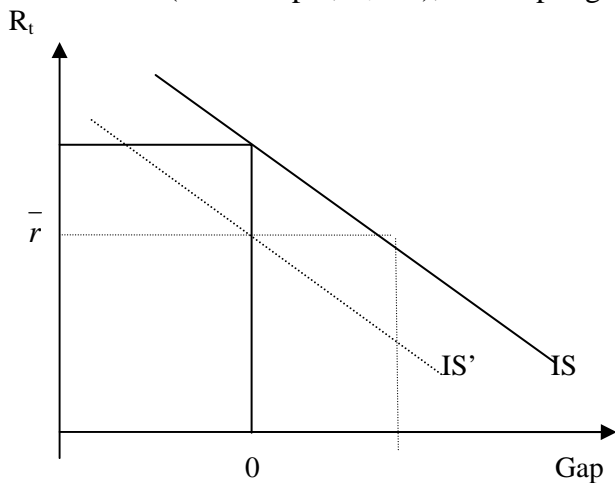
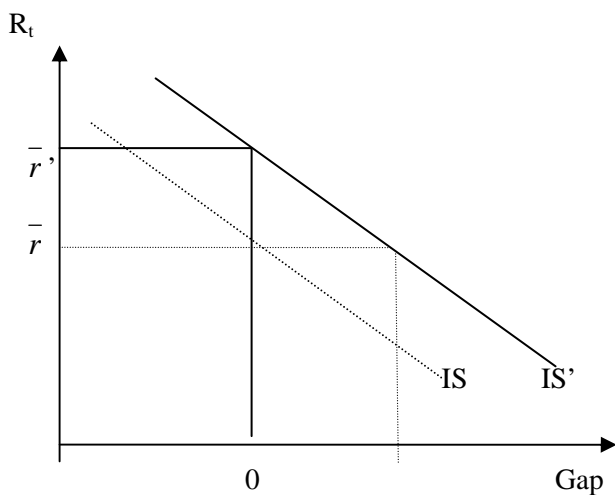


100b Midterm #2 Review Questions, Chapter 10, Si-Yeon Lee  
Answers

1. Because of higher budget deficit than people have expected, people want to consume less and save more. They expect possible increase in tax in future if the high budget deficit cannot be sustained. Following the permanent income hypothesis, people lower their consumption today because of possible increase in tax in future (decrease in permanent income). That is a decrease in  $\bar{a}_c$  and the IS will shift in. At the current level of real interest rate (for example,  $R_t = \bar{r}$ ), the output gap would decrease.



2. As  $\bar{r}$  rises, the IS curve shifts up. With the shift, the output gap=0 if  $R_t = \bar{r}'$ . If the economy keeps the current level of real interest rate ( $R_t = \bar{r}$ ) after the change, the output gap will increase. Assuming the economy had a zero output gap before ( $R_t = \bar{r}$ ), the output gap would become positive.



3. 1)

$$C_t = 0.2 \times \bar{Y}_t$$

$$G_t = 0.5 \times \bar{Y}_t$$

$$\frac{I_t}{Y_t} = 0.3 - 0.4(R_t - 0.04)$$

Using

$$\frac{Y_t}{Y_t} = \frac{C_t}{Y_t} + \frac{I_t}{Y_t} + \frac{G_t}{Y_t}$$

$$\Rightarrow \frac{Y_t}{Y_t} = 0.2 + [0.3 + 0.4 * (R_t - 0.04)] + 0.5$$

Subtracting 1 from both sides,

$$\frac{Y_t}{Y_t} - 1 = (0.2 + 0.3 + 0.5) - 1 + 0.4 * (R_t - 0.04)$$

$$\Rightarrow \text{Output Gap} = 0.3 * (R_t - 0.04)$$

2)

