宏经2次作业

1. (1) $y_d = y - (t - t_r)$

$y = c + i + g$

$y = 0.8y - 0.8 \times (250 - 62.5) + 100 + 250$

$0.2y = 200$

$y = 1000$

(2) $y = \alpha + \beta[y - (t - t_r)] + i + g$

$(1-\beta)y = \alpha + i + g - \beta t + \beta t_r$

$$y = \frac{\alpha + i + g - \beta t + \beta t_r}{1 - \beta}.$$

$k_i = \frac{1}{1-\beta} = 0.5$

$k_g = 5$

$k_t = -4$

$k_{tr} = 4$

$k_b = 1.$

2. (1) $\Delta y = k_g \Delta g$

$200 = 5\Delta g$

$\Delta y = 40$

(2) $-\Delta y = k_t \Delta t$

$-200 = -4\Delta t$

$\Delta t = 50$

(3) $\Delta y = \Delta t$

$\Delta y = k_g \Delta y + k_t \Delta t$

$200 = (k_g + k_t)\Delta y$

$\Delta g = \Delta t = 200.$

3. $\Delta y = k_i \Delta i = \frac{1}{0.25} \times 200 = 800$

4.

(1) $y_d = y - t$

$y = c + i + g$

$y = 1000 + 0.75(y - 600) + 1550$

$0.25y = 2100$

$y = 8400$

$y_d = y - t = 7800$

(2) $c = 1000 + 0.75 \times 7800 = 6850$

(3) $t + s = i + g$

$600 + s = 1550$

$S = 950$

$S_g = t - g = -150$

(4) $k_i = \frac{1}{0.25} = 4$

5. $\Delta g = 5 \times 300 = 1500$

$\Delta tr = 4 \times 300 = 1200$

$\Delta t = -1200$

$\Delta y = \Delta c - \Delta g - \Delta tr - \Delta t = 1500$

$\Delta c = 600 + 600 \times (1 - 0.2) + \cdots$

$= 600 \cdot \left(\frac{1 - 0.8^n}{1 - 0.8}\right)$

$= 3000$

附加题：

1.(1) $y_d = y - t_r$

$y = c + i + g + nx$

$y = 30 + 0.8(y - 50) + 110 + 50 - 0.05y$

$\therefore y = 600$

(2) $nx = 50 - 0.05 \times 600 = 20$

(3) $k_i = \frac{1}{1 - 0.8 + 0.05} = 4$

(4) $y' = y + \Delta y = y + k_i \Delta i$

$= 600 + 40 = 640$

$nx = 50 - 0.05 \times 640 = 18$

(5) $y = c + i + g + nx$

$y = 560$

$nx' = 40 - 0.05 \times 560 = 12$