高支一 20222201601

1. (1) $y = C + i + g$

$= 100 + 0.8(y - t + t_r) + i + g$

$= 0.8y + 200$

$\therefore y = 1000$

(2) $k_i = \frac{1}{1-\beta} = \frac{1}{1-0.8} = 5$

$k_g = \frac{1}{1-\beta} = 5$

$k_t = -\frac{\beta}{1-\beta} = -\frac{0.8}{1-0.8} = -4$

$k_{tr} = \frac{\beta}{1-\beta} = 4$

$k_b = \frac{1-\beta}{1-\beta} = 1$

2. (1) $\because k_g = \frac{\Delta y}{\Delta g} = 5$

$\therefore \Delta g = \frac{\Delta y}{k_g} = \frac{1200-1000}{5} = 40$

(2) $\because k_t = \frac{\Delta y}{\Delta t} = -4$

$\therefore \Delta t = \frac{\Delta y}{k_t} = \frac{1200-1000}{-4} = -50$

$\therefore$ 减少50

(3) 设需增加 x

$y' = c + i + g$

$= 100 + 0.8[y' - (t+x) + t_r] + i + (g+x)$

$= 0.8y' + 0.2x + 200$

$\therefore 0.2x = 0.2y' - 200$

$\therefore x = 200$

$\therefore$ 需增200

3. $\because S = -1600 + 0.25y_d$

$\therefore \beta = 1 - 0.25 = 0.75$

$\because k_i = \frac{\Delta y}{\Delta i} = \frac{1}{1-\beta} = \frac{1}{1-0.25} = 4$

$\therefore \Delta y = k_i \cdot \Delta i = 4 \times (600 - 400) = 800$

4. (1) $y = c + i + g$

$= 1000 + 0.75(y - t) + i + g$

$= 0.75y + 2100$

$\therefore y = 8400$

$y_d = y - t = 8400 - 600 = 7800$

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

(3) $S = y_d - C = 7800 - 6850 = 950$

$S_g = t - g = 600 - 750 = -150$

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

5. 由题. $1 - \beta = 0.2 \quad \therefore \beta = 0.8$

$k_g = \frac{1}{1-\beta} = \frac{1}{0.2} = 5$

$k_{tr} = \frac{\beta}{1-\beta} = \frac{0.8}{0.2} = 4$

$k_t = -\frac{\beta}{1-\beta} = -\frac{0.8}{0.2} = -4$

$\therefore \Delta y = k_g \cdot \Delta g + k_{tr} \cdot \Delta tr + k_t \cdot \Delta t$

$= 5 \times (-30) + 4 \times (-30) + (-4) \times (-30)$

$= -150$

故 新均衡国民收入将减少150.

附加题

(1) $y = C + i + g + nx$

$= 30 + 0.8(y - t_n) + i + g + nx$

$= 0.75y + 150$

$\therefore y = 600$

(2) $nx = 50 - 0.05y = 20$

(3) $k_i = \frac{1}{1-\beta} = \frac{1}{1-0.8} = 5$

(4) $y' = C + i' + g + nx'$

$= 30 + 0.8(y' - t_n) + i' + g + 50 - 0.05y'$

$= 0.75y' + 160$

$\therefore y' = 640$

$nx' = 50 - 0.05y' = 18$

(5) $y'' = C + i + g + nx''$

$= 30 + 0.8(y'' - t_n) + i + g + 40 - 0.05y''$

$= 0.75y'' + 140$

$\therefore y'' = 560$

$nx'' = 40 - 0.05y'' = 12$