

宏观经济第二次作业:

T1. (1) 均衡收入 $y = \bar{i} + g = s + (t - tr)$ $c = \alpha + \beta(y - t + tr)$
 $c = 50 + 0.8y$

净税收 $t - tr = 250 - 62.5 = 187.5$

$s = -\alpha + (1 - \beta)y_d = -137.5 + 0.2y$

$\therefore 50 + 200 = -137.5 + 0.2y + 187.5, \therefore y = 1000$ (1012美元)

(2) $\beta = 0.8$ 投资乘数 $k_i = \frac{1}{1 - \beta} = 5$; 政府支出 $\sim k_g = \frac{1}{1 - \beta} = 5$

税收 $\sim k_t = -\frac{\beta}{1 - \beta} = -4$; 转移支付 $\sim k_{tr} = \frac{\beta}{1 - \beta} = 4$; 平衡预算 $k_b = 1$

T2. 潜在国民收入 = 1200, 均衡收入 $y = 1000$, GDP 缺口 = 200.

某项支出乘数 $k = \frac{\text{GDP缺口}}{\Delta \text{支出}}$

(1) 政府购买 g : $k_g = 5, \therefore \Delta g = \frac{200}{5} = 40$

(2) 税收 t : $k_t = -4, \therefore \Delta t = \frac{200}{-4} = -50$

(3) 平衡预算 ($\Delta g = \Delta t$): $k_b = 1, \Delta b = \frac{200}{1} = 200$ g 和 t 各需增加 200.

T3. $s = -1600 + 0.25y_d$ $\alpha = 1600, \beta = 0.75$ 投资: $\Delta i = 600 - 400 = 200$

$k_i = \frac{1}{1 - \beta} = \frac{1}{0.25} = 4 = \frac{\Delta y}{\Delta i} \therefore \Delta y = 4 \times 200 = 800$ y 增加 800.

T4. $c = 1000 + 0.75y_d$ $\alpha = 1000, \beta = 0.75$ 净税收 $t = 600$.

$\therefore s + t = \bar{i} + g$ $y_d = y - t = y - 600$ $s = -1000 + 0.25(y - 600)$

$\therefore -1000 + 0.25(y - 600) + 600 = 800 + 750$

(1) $\therefore y = 8400, y_d = 7800$

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

(3) $s = 950$, 政府储蓄 = 政府净收入 - $g = t - g = 600 - 750 = -150$
 私人储蓄 = $950 - 50 = 900$

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

$\Delta C = 600, \Delta g = \Delta t = \Delta tr = -300, 1 - \beta = 0.2, \beta = 0.8$, 求总的 Δy .

消费者支出、政府购买乘数 $k_c = k_g = \frac{1}{1 - \beta} = \frac{\Delta y_1}{\Delta C} = \frac{\Delta y_2}{\Delta g} = 5$

$k_t = -\frac{\beta}{1 - \beta} = -4 = \frac{\Delta y_3}{\Delta t}$

$k_{tr} = \frac{\beta}{1 - \beta} = 4 = \frac{\Delta y_4}{\Delta tr}$

$\therefore \Delta y = 5 \times 600 + 5 \times (-300) + (-4) \times (-300) + 4 \times (-300) = 1500$

附加题: $c = 30 + 0.8(y - t_n)$ $y_d = y - t_n = y - 50$ (28)

$c = 0.8y - 10$ (2)

(1) $y = c + \bar{i} + g + nx = 0.8y - 10 + 60 + 50 + 50 - 0.05y$

$\therefore y = 600$

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

(3) $k_i = \frac{1}{1 - \beta} = \frac{1}{0.2} = 5$

(4)(3) $\Delta i = 70 - 60 = 10, k_i = 5 = \frac{\Delta y}{\Delta i}, \therefore \Delta y = 50, y_2 = 650$ ①

② $nx_2 = 50 - 0.05 \times 650 = 17.5$

(5) $nx = 40 - 0.05y, y = 570 \times 4, y = 140 \times 4 = 560$ ①

② $nx = 50 - 0.05 \times 560 = 22$