

2023 春季宏观第二次作业

$$1. c = 100 + 0.8y \quad i = 50 \quad g = 200 \quad t = 250 \quad tr = 62.5$$

$$(1) y = c + i + g = 100 + 0.8y_d + 200 + 50 = 100 + 0.8(y - 250 + 62.5) + 250$$

$$y = 1000$$

$$(2) \text{投资乘数} \quad \frac{1}{1-0.8} = 5$$

$$\text{政府支出乘数} \quad \frac{1}{1-0.8} = 5$$

$$\text{税收乘数} \quad \frac{-0.8}{1-0.8} = -4$$

$$\text{转移支付乘数} \quad 4$$

$$\text{平衡预算乘数} \quad 1$$

$$2. (1) g = \frac{1200 - 1000}{kg} = \frac{200}{5} = 40$$

$$(2) t = \frac{1200 - 1000}{|k_t|} = \frac{200}{4} = 50$$

$$(3) \text{政府购买} \quad \frac{100}{5} = 20$$

$$\text{税收} \quad \frac{100}{4} = 25$$

$$3. s = -1600 + 0.25y_d \quad i = 400 \rightarrow i = 600$$

$$s = i \quad \Delta y_d = \frac{600 - 400}{0.25} = 800$$

$$4. c = 1000 + 0.75y_d \quad i = 800 \quad g = 750 \quad t = 600$$

$$(1) y = c + i + g = 1000 + 0.75(y - t) + 800 + 750 \quad y = 8400 \quad y_d = 7800$$

$$(2) c = 1000 + 0.75y_d = 6850$$

$$(3) \text{私人储蓄: } y_d - c = 950$$

$$\text{政府储蓄: } t - g = -150$$

$$(4) \text{投资乘数} \quad \frac{1}{1-0.75} = 4$$

$$5. y = c + s \quad s = y - c = y - \alpha - \beta(y - t + tr)$$

$$y = \alpha + \beta y_d \quad = (1 - \beta)y - \alpha + \beta(t - tr) \quad 1 - \beta = 0.2 \quad \beta = 0.8$$

$$y = c + i + g \quad kg = \frac{1}{1-\beta} = 5 \quad ker = \frac{\beta}{1-\beta} = 4 \quad ke = -4 \quad kc = 5$$

$$c = \alpha + \beta y_d \quad \therefore c \uparrow 600 \quad y \uparrow 600 \times 5 = 3000$$

$$g \downarrow 300 \quad y \downarrow 300 \times 5 = 1500$$

$$tr \downarrow 300 \quad y \downarrow 1500 \quad t \downarrow 300 \quad y \uparrow 1500$$

$$\Delta y = 3000 - 1500 + 1500 - 1500 = 1500$$

附加题

1. $C = 30 + 0.8y_d$ 净税收 $tn = 50$ $i = 60$ $g = 50$ 净出口 $nx = 50 - 0.05y$

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

$$= 30 + 0.8(y - 50) + 50 + 60 + 50 - 0.05y$$

$$y = 600$$

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

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

(4) $y = 600 + 5 \times (70 - 60) = 650$

$$nx = 17.5$$

(5) $y = C + i + g + nx$ $y = 560$

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