

$$1. \begin{cases} C = 100 + 0.8 y_d \\ (1) \begin{cases} y_d = y - t + tr = 162.5 + 0.8 y_d \\ y = C + i + g = 350 + 0.8 y_d \end{cases} \end{cases} \quad \therefore y = 1000$$

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

$$\text{政府支出乘数} = 1 / (1 - 0.8) = 5$$

$$\text{税收乘数} = -0.8 / (1 - 0.8) = -4$$

$$\text{转移支付乘数} = \frac{0.8}{1-0.8} = 4$$

$$\text{平衡预算乘数} = \frac{1-0.8}{1-0.8} = 1$$

$$2. \text{ 收入缺口为 } 1200 - 1000 = 200 \text{ (1 Billion \$)}$$

$$(1) \frac{200}{5} = 40 \text{ 增加 } 40 \text{ b\$ 政府购买}$$

$$(2) \frac{200}{-4} = -50 \text{ 减少 } 50 \text{ b\$ 税收}$$

$$(3) \frac{200}{1} = 200 \text{ 同一数额增加 } 200 \text{ b\$}$$

$$3. \text{ 消费函数为 } C = 1600 + 0.75 y_d$$

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

$$\Delta y = \Delta i \times 4 = 200 \times 4 = 800$$

$$4. (4) \begin{cases} C = 1000 + 0.75 y_d \\ y_d = y - t \\ y = C + i + g \end{cases} \Rightarrow \begin{cases} y = 8400 \\ y_d = 7800 \end{cases}$$

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

$$\hookrightarrow C = 1000 + 0.75 y_d = 6850$$

$$(3) S = -1000 + 0.25 y_d = 950$$

$$i - S = -150$$

私人储蓄为 950

政府储蓄为 -150

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

$$5. \text{MPC} = 1 - \text{MPS} = 0.8$$

$$\text{消费支出乘数} = \text{政府购买乘数} = \frac{1}{1-0.8} = 5$$

$$\text{政府转移支付乘数} = \frac{0.8}{1-0.8} = 4$$

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

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

附加题

1.

$$(1) \begin{cases} y = C + i + g + nx \\ C = 30 + 0.8 y_d \\ y_d = y - t_n \end{cases} \Rightarrow \begin{cases} y = 600 \\ y_d = 550 \end{cases}$$

\therefore 均衡收入为 600

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

$$(3) \text{投资乘数} = \frac{1}{1-0.8} = 5$$

$$(4) \Delta i = 70 - 60 = 10$$

$$\Delta y = 10 \times 5 = 50$$

$$y' = 600 + 50 = 650$$

$$nx' = 50 - 0.05 \times y' = 17.5$$

$$(5) \begin{cases} y = C + i + g + nx \\ C = 30 + 0.8 y_d \\ y_d = y - t_n \end{cases} \Rightarrow \begin{cases} y = 560 \\ y_d = 510 \end{cases}$$

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