

所別：財務金融學系碩士班 甲組 科目：經濟分析
乙組 丙組

1. Consider a large open economy with a floating exchange rate in the short-run:

$$\begin{aligned} C &= 0.5(Y - T) & (M/P)^d &= 0.5Y - 200r \\ T &= 2000 & M^s &= 1500 \\ I &= 1000 - 250r & P &= 2 \\ G &= 1500 \\ NX &= 1500 - 500e \\ CF &= 250 - 50r \end{aligned}$$

- Calculate (1) Income, Y . (4%) (2) Net capital outflow, CF . (4%) (3) Foreign exchange rate, e . (4%) (4) Private saving. (4%) (5) Foreign saving. (4%)
2. "Inflation is always bad. It creates additional social costs and makes people's life difficult. Therefore, any government should aim on zero inflation without doubt." Think about the above statement. Do you agree with it or not? Why? (5%)
3. Consider the following two things in an economy: (1) the government passes significant tax cuts on household income but the amount of its spending remains the same, and (2) at the same time, the population growth rate increases. Using the Solow growth model, show graphically the impact of the above two things on the steady state capital-labor ratio and the steady state level of output per worker. Make sure you label axes and curves clearly. (5%)
4. (1) What are the sticky-wage and the sticky-price models for aggregate supply (AS) in the short-run? Answer briefly, but make sure you write down the assumptions and equations clearly, and state how you end up with the upward sloping AS curve via these two models. (10%) (2) Now consider two countries: one operates under sticky-wage model and one operates under sticky-price model. Assume aggregate demand falls in both countries unexpectedly, leading to a recession and an unexpected decline in price level and the demand for output. Use graphs of the labor market to show the impact of the recession on the level of employment and the real wage. Also, can you tell the major difference implied in the two models? (10%)

注意：背面有試題

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5. 假設某國的工廠只生產一種產品，其生產函數為

$$q = b \ln(kl),$$

其中 k 和 l 分別為投入資本與勞工工作日數。令資本的利率為 r ，每日工資為 w ， p 為產品價格，請寫出工廠的勞動需求函數 (6%) 及產品供給函數 (6%)。

6. 承上題，假設該國的勞工每週的效用函數如下：

$$U(c, l) = c^{6/7}(7-l)^{1/7},$$

其中 l 為每週工作日數， $c = (wl + n)/p$ 為產品消費量， $n = 4.2$ 為非薪資所得。請寫出勞工的勞動供給函數 (10%)。

7. 承上題，假設該國有 1,000 個勞工及 F 家廠商，且勞動市場完全競爭，請將均衡工資率寫成 p 與 F 的函數 (10%)。
8. 承上題，假設產品市場完全競爭，且該國無非勞工的消費者。令 b 為自然對數的底 2.71828...， $r = 0.2$ ，請繪出勞動市場的供給與需求曲線 (2%)，並求算市場均衡時的廠商數量 (2%)、工資 (3%) 及供給量 (3%)。
9. 承上題，請繪出產品市場的供給與需求曲線 (2%)，並求算市場均衡時的價格 (3%) 及銷售量 (3%)。