International Finance Homework 1

Due Date： 2025-10-13, 23:59 pm

You can download the textbook here.

(1) On page 7, the textbook tells us that the unprofitable arbitrage interval is

$$f_p \in [\frac{\bar{C}(1+i)-(1+i^*)}{1+i^*}, \frac{(1+i)-\bar{C}(1+i^*)}{\bar{C}(1+i^*)}]$$

Can you show me how to get this result?

(2) On page 83, the textbook assumes the money supply is

$$M_t = \mu(R_t + D_t)$$

How can we get the equation (3.1):

$$m_t = \theta r_t + (1-\theta)d_t$$

where $\theta = E(R_t)/E(B_t)$, $r_t = ln(R_t)$ and $d_t = ln(D_t)$?

Hint: you need to use Taylor's expansion

$$f(x) = f(a) + f'(a)(x-a) + \frac{f''(a)}{2!}(x-a)^2 + \dots$$