

1. 常用的共同基金績效評估方法有那些？他們背後的原理為何？(15%)

2. 假設日圓的即期匯率是 1 美元=¥125, 90 天期遠期匯率為 1 美元=¥120 (13%)
 - a. 日圓預期會走強或走軟？
 - b. 若目前美元的利率為 10% , 日圓的利率為 8% , 是否有套利空間？如何套利？

3. 有一家公司發行 A 與 B 兩種普通股股票，除了股利之外，其餘的權利與風險皆相同。今天為除息日，A 股股票的現金股利為每股\$2.00，預期股利的成長率為 4% , A 股的股價為\$20(已除息)。B 股股票預期自二年後才能開始配現金股利(即 B 股明年沒有現金股利的配息權)，且以後每年 B 股的現金股利是 A 股的 80%。請問：B 股的合理股價為多少元？(15%)

4. Bond pricing: (16%)
 - a. A newly issued 2-year maturity, zero-coupon bond is issued with a yield to maturity of 8% and face value \$1,000. Find the bond's issuing price.
 - b. A bond has a current yield of 9% and a yield to maturity of 10%. Is the bond selling above or below par value? Explain.

5. A three-asset portfolio has the following characteristics: (16%)

Asset	Expected Return	Standard Deviation	Weight	Correlation between Y return	Correlation between Z return
X	15%	22%	0.50	0.3	0.2
Y	10%	15%	0.40	1	0.4
Z	6%	10%	0.10	0.4	1

- a. What is the expected return on this portfolio?
- b. What is the standard deviation of the portfolio return?

6. Consider the following two mutually exclusive projects: (Your required return on investment is 15 percent).

(TOTAL 25 POINTS)

Year	Cash Flow (A)	Cash Flow (B)
0	-\$170,000	-\$18,000
1	10,000	10,000
2	25,000	6,000
3	25,000	10,000
4	380,000	8,000

- If you apply the payback criterion, which investment will you choose? **Why?**
- If you apply the discounted payback criterion, which investment will you choose? **Why?**
- If you apply the NPV criterion, which investment will you choose? **Why?**
- If you apply the IRR criterion, which investment will you choose? **Why?**
- Based on your answers in (a) through (d), which project will you finally choose? **Why?** (That is, what criterion is the best in this case? And **Why?**)