

FOREX CLASS 10

CLASS WORK COVERAGE

To streamline our learning process, I've categorized the questions we'll tackle in class into four distinct groups:

1. **Classic:** *These questions are exactly as presented in your book, providing a familiar foundation.*
2. **Transformed:** *Here, we've converted book questions into multiple-choice format to enhance your analytical skills.*
3. **Adapted:** *These are similar to book questions but with altered numbers or names, presented as multiple-choice questions for varied practice.*
4. **Original:** *These are entirely new questions not found in your book, designed to challenge and expand your understanding.*

This structure will help us navigate through a range of problems, ensuring a comprehensive grasp of the material. Looking forward to our next session!

Q. No	Type	Book	Page No.	Q No.
1	Original	-	-	-
2	Original	-	-	-
3	Original	-	-	-
4	Original	-	-	-

Question 1:

Mr. Mammen, an Indian investor invests in a listed bond in USA. If the price of the bond at the beginning of the year is USD 100 and it is USD 103 at the end of the year. The coupon rate is 3% payable annually.

Find the return on investment in terms of home country currency if:

- i. USD is Flat.
- ii. USD appreciates during the year by 3%.
- iii. USD depreciates during the year by 3%.
- iv. Indian Rupee appreciates during the year by 5%.
- v. Will your answer differ if Mr. Mammen invests in the bond just before the interest payable.

Answer:**i. If USD is flat**

$$\begin{aligned} \text{Return} &= \frac{(\text{Price at end} - \text{Price at beginning}) + \text{Interest}}{\text{Price at beginning}} \\ &= \frac{(103 - 100) + 3}{100} = 0.06 \text{ say } 6\% \end{aligned}$$

ii. If USD appreciates by 3%

$$(1+0.06)(1+0.03) - 1 = 1.06 \times 1.03 - 1 = 0.0918 \text{ i.e. } 9.18\%$$

iii. If USD depreciates by 3%

$$(1+0.06)(1-0.03) - 1 = 1.06 \times 0.97 - 1 = 0.0282 \text{ i.e. } 2.82\%$$

iv. If Indian Rupee is appreciated by 5%

$$(1+0.06)(1-0.05) - 1 = 1.06 \times 0.95 - 1 = 0.007 \text{ i.e. } 0.7\%.$$

- v. No, our answer will not differ even if Mr. Mammen invests in bond just before the interest is payable.

Question 2:

Pangalactic Portfolio Financiers (PPF), an English investment advisor, owns a \$3,000,000 portfolio of U.S. stocks. The spot and one-month forward exchange rates are £0.625/\$ and £0.620/\$. Concern about dollar weakness against the British pound prompted PPF to protect 70% of the portfolio against currency risk. One month later (at the maturity of the forward contract) after PPF hedged its portfolio, the portfolio rose to \$3,045,000. Spot exchange rate moved to £0.649/\$.

- a. Had Pangalactic not hedged, what would have been the portfolio's one month rate of return? Do not annualize.
- b. What is Pangalactic's rate of return on the hedged portfolio during the one month period? Do not annualize.

Answer:

Class discussion.

Question 3:

Global World Asset Management (GWAM) has an Italian client who owns a \$2,500,000 portfolio of U.S. stocks. The current spot exchange rate between the euro and U.S. dollar is €0.85/\$. One-month forward exchange rate is €0.80/\$. The client's portfolio manager is concerned that the U.S. dollar is in a secular decline against the euro because of Trumpian Economics. She decides that the prudent thing to do is hedge the client's currency risk; therefore, she sells forward \$2,500,000 using a forward foreign exchange contract.

A month later the spot exchange rate is €0.75/\$. The market value of the portfolio is \$2,575,000. Calculate GWAM's profit/loss on the hedged portfolio?

Answer:

Class discussion.

Question 4:

A foreign institutional investor invested in units of a mutual fund in India for a period of one year. The following information is available regarding the investment and other economic variables:

Value of investment	USD1000 million
NAV at the time of investment	Rs.20.00
NAV at the end of investment horizon	Rs.23.00
Dividend received per unit after 6 months	Rs.2.50(it's not recurring)
Rs./\$ rate at the time of investment	84.50
Rs./\$ rate at the end of investment horizon	86.70
Reinvestment rate during the period	10% p.a.

You are required to:

- a. Calculate the return to FII.
- b. Calculate the return to an Indian investor who invested in the same fund for the same period.

Answer:

Class discussion.