

FOREX CLASS 1

HOME WORK SUPPORT

COVERAGE

Question			Answer			Lecture Time
Q. No	Page no.	Book	Q. No	Page no.	Book	
2	66	CLASSWORK ANSWER BOOK	-	-	-	00:00:27 TO 00:12:25
Case Study 2	67	CLASSWORK ANSWER BOOK	-	-	-	00:12:26 TO 00:20:40
Case Study 3	50	HOMEWORK ANSWER BOOK	-	-	-	00:20:41 TO 00:25:46
1	2	CLASSWORK QUESTION BOOK	1	2	CLASSWORK ANSWER BOOK	00:25:47 TO 00:27:27

Question 2:

Jack is planning a trip to Europe and Asia with his family. He has \$10,000 in his savings account and wants to know how much he needs to borrow to pay for his expenses in each country.

The countries Jack is visiting and their estimated expenses in local currency are:

1. France: 5,000 EUR
2. Japan: 1,000,000 JPY
3. Thailand: 200,000 THB

The exchange rates Jack found for each currency are:

1. EUR/USD: 1.20
2. USD/JPY: 0.0093
3. USD/THB: 0.032

How much USD does Jack need to borrow today (keeping in mind that he already has \$10,000 in his savings account) to buy the currencies in the amount needed for his trip?

ANSWER:

To find out how much Jack needs to borrow, we need to first convert the expected expenses in each country into USD

1. France: $5000/1.2 = 4167\$$
2. Japan: $10,00,000 \times 0.0093 = 9300\$$
3. Thailand: $2,00,000 \times 0.032 = 6400\$$

Total estimated expenses (in dollars) = $4167 + 9300 + 6400 = \$19867$

Amount in savings account (in dollars) = \$10000
Amount to be borrowed (in dollars) = \$9867.

CASE STUDY 2

An Indian investor invests in the stock of Tesla for 1 year. The stock price of Tesla at the beginning of the year was \$500 per share. At the end of the year, the stock price of Tesla increased to \$600 per share. The exchange rate at the beginning of the year was INR 72 per USD, while the exchange rate at the end of the year was INR 75 per USD.

Question 1:

How many shares of Tesla were purchased initially?

Question 2:

How much was received in \$ terms by selling Tesla shares at the end of year?

Question 3:

How much was received in INR terms by selling Tesla shares at the end of year?

Question 4:

Calculate ROI for the investor and split the same into:

- a. Stock component
- b. Currency component
- c. Cross product

ANSWER:

1. Dollars available at the beginning of the year = $72,00,000/72 = \$1,00,000$
No of shares purchased = $1,00,000/500 = 200$ shares
2. Sale proceeds at the end of the year (in dollars) = $200 \times 600 = \$1,20,000$
3. Amount received at the end of the year (in rupees) = $1,20,000 \times 75 = ₹90,00,000$
4. Return on investment = $(90,00,000/72,00,000) - 1 = 25\%$
 - a. Return on stock component = $(600-500)/500 = 20\%$
 - b. Return on currency component = $(75-72)/72 = 4.167\%$Cross product = $(20\% \times 4.167\%) = 0.833\%$

Case Study 3

A US-based foreign portfolio investor (FPI) has invested in the Indian stock market with an investment of \$1 million on January 1, 2022. On December 31, 2022, the FPI wants to convert the Indian Rupees (INR) back to US Dollars (USD). The following information is available:

1. January 1, 2022: 1 USD = 72.5 INR
2. December 31, 2022: 1 USD = 75.0 INR
3. Nifty 50 Index return: 20%

Question 1:

How much INR does the FPI have on December 31, 2022, after considering the 20% return from the Nifty 50 Index?

ANSWER:

Rupees invested in India at the beginning of the year = $10,00,000 \times 72.5 = ₹ 7,25,00,000$ Return on Nifty = 20%

Value of investment at the end of the year (in rupees) = $7,25,00,000 \times 1.2 = ₹ 8,70,00,000$

Question 2:

How many USD does the FPI get after converting the INR back to USD on December 31, 2022?

ANSWER:

After converting this amount back in to dollars he will have $8,70,00,000 / 75 = \$11,60,000$ or \$1.16 million

Question 3:

How much has the FPI gained or lost due to the movement in currency and stock market performance?

ANSWER:

Return on investment = $11,60,000 / 10,00,000 = 16\%$

This return of 16% can be categorized in to

- a. Stock component: 20%
- b. Currency component: $(72.5 - 75) / 75 = -3.33\%$
- c. Cross product: 20% of $-3.33\% = -0.67\%$

Note: alternatively cross product can be directly included in currency component if the question does not ask for three components.

PART I: CURRENCY BASICS

Topic 1 WARM UP

Question 1:

Over the past month, the Swiss Franc (CHF) has depreciated 12 percent against pound sterling (GBP). How much has the pound sterling appreciated against the Swiss Franc?

- A. 12%
- B. Less than 12%
- C. More than 12%

(Source: FOD)

Answer

C is correct.

The appreciation of sterling against the Swiss franc is simply the inverse of the 12% depreciation of the Swiss franc against Sterling: $[1/(1 - 0.12)] - 1 = (1/0.88) - 1 = 0.1364$, or 13.64%.