FOREX

CLASS - 2

Page No. 14
Date 26 | 11 | 24

Appreciation / Depreciation of a Currency

- **Type I sum :-**

MCQ Ex: If $ ↓ by 10% against £, what is the expected appreciation of £ against $?

Soln:- $\frac{10}{90} \times 100 = 11.11\%$. (a)

MCQ

Q1. US$ ↑ by 10% against JPY.
% in JPY ↓ against USD ?

Soln:- $\frac{10}{110} \times 100 = 9.09\%$.

Q2. EUR ↓ by 20% against £.
% Δ in £ ↑ against EUR ?

Soln: $\frac{20}{80} \times 100 = 25\%$. (d)

Q3 CAD ↑ by 15% against INR.
% Δ in INR ↓ against CAD ?

Soln:→ $\frac{15}{115} \times 100 =$ a) 13.04%.

Q4. CHF ↓ by 25% against USD.
% Δ in USD ↑ against CHF?

Sol^n: $\frac{25}{75} \times 100 = 33.33\%$

Type II sum :- price currency ₹ / base currency $ → If base currency ka rate then x - factor se, If not then ÷ by → price currency

Ex: S_0 = ₹ 85.20 / $

Case I: Forecast: $ is expected to appreciated by 10% against ₹. Find expected S_0, $E(S_1)$.

Sol^n: $85.2 \times 1.1 = 93.72$

Case II: Forecast: ₹ is expected to depreciate by 10% against $. Find expected S_0 $E(S_1)$. ₹ ↓ 10%. $ ↑ (10 se jyada ayega)

Sol^n:- $E(S_1) = \frac{85.20}{0.9} = 94.67$ (85.2×1.1111) → 10 se jyada ane chahiye

Case III: ₹ Expected to appreciate by 10%.

$$E(S_1) = \frac{85.2}{1.1} = 77.45$$

Ex: S_0 = CHF 2.6720 / GBP

Forecast: CHF ↓ by 5%.

$$E(S_1) = \frac{2.6720}{.95} = 2.8126$$

Ex:- $S_0 = €\ 1.7620 / C\$$

forecast : C$ ↓ 10%.

$E(S_1) = 1.7620 \times .9$
$= 1.5858$

MCQ.

Q9. S_0 = ₹80 per USD. forecast : USD ↑ by 5% against ₹.

E(S).

Soln:- $80 \times 1.05 = 84$ (b)

Q10. S_0 = ₹74 per USD. forecast ₹ ↓ by 6% against USD.

Soln:- $\frac{E(S) \cdot 74}{.94} = 78.72$ (a)

Q11. S_0 = ₹88 per USD. Forecast : ₹ ↓ by 8% against USD.

Soln:- $\frac{E(S) = 88}{.92} = 95.65$

Q12. $S_0 = 1.12 €/GBP$.
Forecast : € ↓ by 10% against GBP.

Soln:- $E(S) = \frac{1.12}{.9} = 1.24$

Page No. 17
Date

Q13. S_0 = 1.30 USD per GBP. forecast USD ↑ by 10% against £. $E(S_1)$?

Soln: $\frac{1.3}{1.1}$ = 1.18 (b)

Q14. S_0 = 0.92 EUR per CHF. forecast: EUR ↑ by 5% against CHF. $E(S_1)$?

Soln: $\frac{0.92}{1.05}$ = 0.8762

Q15. S_0 = 1.10 AUD per NZD. forecast AUD ↓ by 5% against NZD. $E(S_1)$?

Soln: $\frac{1.10}{.95}$ = 1.16 (a).
= 1.1579.

Q16. S_0 = GBP 0.7450 per USD. forecast: USD ↓ by 7% against GBP. $E(S_1)$?

Soln: $E(S_1)$ = 0.745 × .93 = 0.6929

Q17. S_0 = CAD 1.2500 per USD. forecast: USD ↓ by 5% against CAD. $E(S_1)$?

Soln: $E(S_1)$ = 1.25 × .95
= 1.1875 (b).

Q8. S_0 = CHF 2.6970 per GBP. Forecast : GBP ↑ by 8% against CHF. $E(S_1)$?

Solⁿ:- 2.6970 × 1.08 = 2.9128 (c).

Q9. S_0 = JPY 150.75 per EUR. Forecast : EUR ↑ by 10% against JPY. $E(S_1)$?

Solⁿ:- 150.75 × 1.1 = 165.83 (a)

ICAI Ambiguity in Type 2 sums in past Papers (Descriptive

Ex: Given S_0 = ₹82.50/$

₹ is expected to ↓ by 10%. Find $E(S_1)$

Correct ans
⇓
$\frac{82.5}{.9}$ = 91.67

Don't do this in the descriptive answer

Approx but incorrect ans (descriptive)
⇓
82.5 × 1.1 = 90.75
⇓
This is what ICAI has done in all Q's in the last 70 yrs.

MCQ mein... do the correct one → 91.67 if both option given

If 91.67 not given then chose 90.75

Page No. 19
Date

- Type 3 sums

Ex: S_0 = $ 1.3050 (₹)
$E(S_1)$ = $ 1.3210 (₹).

% Δ in ₹ = $\left(\frac{S_1}{S_0} - 1\right) \times 100$ (backwards / forwards)

$= \left(\frac{1.3210}{1.3050} - 1\right) \times 100$

$= 1.226\%$

% Δ in $ = $\left(\frac{S_0}{S_1} - 1\right) \times 100$

$= \left(\frac{1.3050}{1.3210} - 1\right) \times 100$

$= -1.2112\%$

i.e. a depreciation of 1.2112%.

Qs. S_0 = 84 per USD
$E(S_1)$ = 87 per USD. ∴ Exp ↑ of USD against INR?

Soln: $\left(\frac{87.5}{84.} - 1\right) \times 100 = 4.17\%$ (a).

Qs. S_0 = USD per GBP = 1.3450. $E(S_1)$ = GBP = 1.2970.
Expected ↑ of USD against GBP?

Soln:- $\left(\frac{1.3450}{1.2970} - 1\right) \times 100$

$= 3.70\%$ (d)

Q7. S_0 = EUR per USD = 0.8900. $E(S_1)$ = EUR per USD = 0.8450.
Expected ↑ of EUR against USD?

Soln:- $\left(\frac{0.89}{0.8450} - 1\right) \times 100$

$= 5.33\%$ (c)

Q8. S_0 = JPY per USD = 110.50. $E(S_1)$ = JPY per USD = 115
Exp ↑ of USD against JPY?

Soln:- Exp ↑ USD $= \left(\frac{115}{110.50} - 1\right) \times 100 = 4.07\%$ (a)

Ex: S_0 = AUD 0.8220/CAD
$E(S_1)$ = AUD 0.8390/CAD

% dep of AUD $= \left(\frac{0.8220}{0.8390} - 1\right) \times 100$

$= -2.026\%$ i.e. dep.

V.V. Imp

Conversion using bid - ask rates

FX MKT

RBI → Regulator ⟶ To ensure liquidity, RBI made the fx mkt into "OTC"

Indi co. export kiya Canada mai or C$ chaiye payment ki toh me chahta hu banklog khade rahe bechne ke liye. So RBI wants har time mkt me buyer/seller rahe

share mkt is not OTC

⇓

jinko RBI ke dwara license mila hai ← Authorised dealers (ADs).

⇓

Market makers

⇓ buying / selling

They quote bid - ask rates

40p kama rha hai SBI

SBI ₹/$ 84.50/84.90
⇓ bid rate ⇓ ~~ask~~

SBI se kharide @84.50 or ICICI se beche @84.55 still loss
khariDna SBI se chaiye bechna ICICI ko chaiye

ICICI bank ₹/$ 84.55/84.95

Advise: Please think from customers point of view.

Also, please focus on base currency.

Matlab

$ per € = 0.9250/0.9310

If customer wants to buy € ⇒ $0.9310 per €

If customer wants to sell € ⇒ $0.9250 per €

If customer wants to buy $ ⇒ $0.9250 per €

Sell €

If customer wants to sell $ ⇒ $0.9310 per €

Buy €

If 60,000 € convert into $

⇒ 60,000 X .9250 = $55,500

If 90,000 $ wants to buy?
how much €?

$= \frac{90,000}{.9250} = €97,297.29$

P.T.O

* $/€ = 0.9250/0.9310

Want to sell € 80,000. How many $ will I get?

= 80,000 × .9250
= $74000

Ex: AUD/CAD = 1.7320/1.7380

Want to sell AUD 1,40,000. How much CAD will get?

= 140,000 / 1.7380 = 80,552 CAD

Rule: Step 1 : Rate ko chuno
⇓
kaise
⇓
"BC" pe focus kaike
Agar customer "BC" buy karega, toh ask rate
Agar custome "BC" sell karega, toh bid rate

Step 2 : Now you have the amount to be converted & the rate to be used ....

So, either multiply or divide
- If amount given is "BC" .... multiply
- If amount given is "PC" .... divide