

SES'S L.S.RAHEJA COLLEGE OF ARTS AND COMMERCE

Course: INTERNATIONAL FINANCE
Barai

Unit: 2 of semester 6

Prepared by: Asst. Prof. Mehul

TYBMS(FINANCE) INTERNATIONAL FINANCE SEM 6

CH 6. Interest Rate Arbitrage

From the following data decide on the best alternative for borrowing INR 5 million for a temporary period of six months on a risk – free basis.

Currency	Spot quote	Forward quote	Interest rates
INR			5.75-6.00% p.a.
USD/INR	48.8830-48.8860	49.2330-49.2360	4.25-4.5% p.a.
EUR/INR	65.2545-65.2575	65.5545-65.5575	4.75-5%p.a.
GDP/INR	90.4750-90.4780	90.6750-90.6780	5.25-5.5%p.a.

Net liability when borrowing in INR :

$$= (5000000(1+6/100*6/12))-5000000=INR150000$$

$$(P(1+RT))-P$$

Net liability when borrowing in USD :

$$= ((5000000/48.8830)*(1+4.5/100*6/12)*49.2360)-5000000 = INR 149419 \text{ (SB=SPOT BID)(FA= FORWARD ASK)}$$

$$((P/SB)*(1+RT)*FA) -P$$

Find Net liability when borrowing in EUR and GDP.

From the following data decide on the best alternative for Investing INR 5 million for a temporary period of six months on a risk – free basis.

Currency	Spot quote	Forward quote	Interest rates
INR			5.75-6.00% p.a.
USD/INR	48.8830-48.8860	49.2330-49.2360	4.25-4.5% p.a.
EUR/INR	65.2545-65.2575	65.5545-65.5575	4.75-5%p.a.
GDP/INR	90.4750-90.4780	90.6750-90.6780	5.25-5.5%p.a.

Net return when investing in INR :

$$= (5000000(1+5.75/100*6/12))-5000000=INR 143750$$

$$(P(1+RT))-P$$

Net return when investing in USD :

$$= ((5000000/48.8860)*(1+4.25/100*6/12)*49.2330)-5000000 = \text{INR}142495 \quad (\text{SA}=\text{SPOT ASK})(\text{FB}=\text{FORWARD BID}) \\ ((P/\text{SA})*(1+\text{RT})*\text{FB}) - P$$

Find Net return when investing in EUR and GDP.

chp 7 Currency & Interest Rate features

Sums on Interest Rate future

SPOT USD/SEK 6.4950

USD interest rate = 0.75%p.a.

SEK interest rate = 1.5% p.a.

Calculate three month forward rate USD/SEK rate.

$$F = S * \frac{(1 + \frac{R_v * n}{100 * 12})}{(1 + \frac{R_b * n}{100 * 12})}$$

$$= 6.4950 * \frac{(1 + \frac{1.5}{100} * 3/12)}{(1 + \frac{0.75}{100} * \frac{3}{12})}$$

$$= 6.5072 \text{ (3 month forward rate)}$$

Solve following sums :

1. 6 month forward EUR/CAD 1.3493
EUR interest rate = 1.25%p.a.
CAD interest rate = 1.75%p.a.
Calculate spot EUR/CAD rate.
2. Spot 1EUR = USD1.3115
60 days forward 1 EUR = 1.3104
USD interest rate = 0.50 % p.a.
Calculate EUR interest rate.
3. Spot CAD 1.00297 per USD
73 days forward CAD 1.0307 per USD
USD interest rate = 0.75 % p.a.
Calculate CAD interest rate.

LSRC/TUT-LESS/2020