

* Types of format

1] Base / Variable format / Mathematical format

$$\$ / ₹ = 68.55$$

$$1 \$ = 68.55 ₹$$

This Quotation of base / variable format is as per **ISO 4217** abbreviation for currencies.

It is an **ACI** conversion for foreign market.
[Financial Market Association]

It was made for ease of airline tickets & international trade.

2] Variable / Base format : Commodity format

It is based on commodity Pricing method **eg 100 ₹ / kg**

Here kg = Base & ₹ = Variable

* Important Points

1) Identify the format

i.e the respective base & variable currency before beginning the sum.

2) If there is confusing b/w rates then follow the below points.

- Find out INR (₹) Quotation in sum if any. If the INR Quotation is base/variable format then consider all the Quotation in that particular sum in same format (i.e. base/variable)
- If no rupee quote is mentioned in entire sum then connect the prices of currency mentioned in the sum with INR using "COMMON SENSE"

$1 \text{ £} = ₹ 100$
 $1 \text{ €} = ₹ 80$
 $1 \text{ \$} = ₹ 60$
 $1 \text{ ¥} = ₹ 0.50$

£
€
\$
¥

→ sequence

* Step to Solve Import / Export sum

1. Identify the currency format [i.e. B/V & V/B] & respective base & variable currency.
2. Identify the parties to transaction [i.e. Importer & Exporter] & with the given amt of transaction identify the conversion risk to be faced by either of the party.

	Importer	Exporter
DC	Sell	Buy
FC	Buy	Sell
3. Identify the transaction from the perspective of risk bearer.

4 Calculate the respective payment or receipt.

* Important point.

- 1 Do not decide in advance whether to multiply & divide.
- 2 Put currency denomination at every place including final answer.
- 3 Put Coma after every 3 digits.
- 4 Rate / Quote in 4 decimals & amt in 2 decimals
- 5 "Always think from base currency".

* Bid and Ask Rate

- 1) Bid Rate :- It is a rate at which Banics buy Customers sell the base currency.
 - 2) Ask Rate :- It is a rate at which Banics sell & Customers buy the base currency.
- The bid & ask rate are Quoted from the point of View of Banks / traders.
- Ask rate is always better than bid rate
Eg loan rate > deposits

→ Always think from base currency.

* Rate Reading

While converting interbank quote into merchant quote follow the below Rule.

- 1] Replace pips / points from the extreme right hand side.
- 2] However if after replacement if
Ask Rate $\leq$ Bid rate then increase by 1 unit the number preceeding the replaced digits / pips. [बाजुवाल को 1 Unit से बढ़ानेका]

$$\text{Eg } 1.7250/40 = 1.7340$$

$$1.6525/25 = 1.6625$$

Strategic Financial Management

*

Direct Quote

Indirect Quote

1]

$$BC = FC$$

$$VC = DC$$

$$BC = DC$$

$$VC = FC$$

2]

Eg:- $1\$ = 50\text{₹}$ is direct Quote in India.

$1\$ = 50\text{₹}$ is indirect Quote in US

3]

Direct Quotes are expressed in India to the base of One Unit of foreign currency except for Japanese Yen (¥) whose related is expressed to the base of 100 Units.

Indirect Quotes are expressed in India to the base of 100 Units of domestic currency i.e. 100₹

$$\text{Eg } 1\$ = 50\text{₹}$$

$$1\text{¥} = 0.50\text{₹} \times$$

$$100\text{¥} = 50\text{₹}$$

$$\text{Eg } 100\text{₹} = 2\$$$

$$\text{instead of } 1\text{₹} = 0.02\$$$

4]

In US direct Quotes are termed as American Quotes

In US indirect Quotes are termed as European Quotes

$$\text{Eg } 1\text{£} = 1.50\$$$

$$\text{Eg. } 1\$ = 0.75\text{£}$$

Conclusion :-

Whenever we take $\text{₹}/\text{¥}$ as base currency it should be of 100 Units for either of them.

* Covering the Position

- Taking a Cover in financial markets
Eg. Forex means TAKING A COUNTER Position or trade.
- Here, If the dealer has bought a Particular currency in the same market or another market wherever it's more profitable.

Assumption :- [for full forex chapter]

- 1) Access to global market
- 2) No taxation
- 3) No Transaction charges.

* SPOT / FORWARD AND SWAP POINTS

- 1) When forward margin / swap margin are given in term where $\text{bid} < \text{ask}$ then add the swap points to the Spot rate.
- 2) When forward margin / swap points are given in terms where $\text{bid} > \text{ask}$ then less the swap points to the spot rate.
- 3) Addition or subtraction is always done from the extreme Right decimal points in the spot rate to calculate OFR. this is because the swap points

are present in pips.

- 4) In India, forward margin are Normally Presented in term of calendar month, assume 30 days in a month or 365 days in a year.

between bid & ask = Replace

between Spot & forward = add / Subtract

* Premium / Discount	Appreciation / Depreciation
1) It is calculated on the forward & spot rate on the base currency on the same date itself.	It is calculated on base currency however b/w Spot v/s spot [or fwd v/s fwd] on different dates
Eg 15/12/16 Spot 1\$ = 50 ₹ 3m fwd 1\$ = 55 ₹	Eg 15/12/16 Spot 1\$ = 50 ₹ 15/3/17 fwd 1\$ = 55 ₹
2) It is always annualised i.e interpolated for 1 year	It is always flat i.e absolute which is calculated for said period only.
$AFM = \frac{F - S}{S} \times 100 \times \frac{12}{n}$	$APP / DEP = \frac{End - Beg}{Beg} \times 100$

* Steps for Calculating Triangular Arbitrage.

- 1) Compare the cross currency quotes of any 2 quotes with 3rd quote
[avoid inverting]
- 2) The cross rate i.e the synthetic rate should be used only for comparison
- 3) Identify whether arbitrage is possible or not by comparing synthetic quote (step 1) with 3rd quote
Arbitrage is possible if $IB > IA$
- 4) If nothing given assume 1 million capital of either of three currencies including vehicle currency.
The ans will be same irrespective of capital assumption.
- 5) Calculate arbitrage gain & gain will be always positive & same with any currency.

* IRP and PPP

IRP = Interest rate and PPP = Inflation Rate

1 Int rate for both the currency is compared & accordingly 2 major outcomes are observed

1) ^(country) Currency / with higher int rate will find that their currency discounted in forward.
& countries with lower int rate will find their currency at premium in forward.

2) The premium / discount is approx equal to the difference b/w the interest rate of both the currency.

$$AFM \cong I_V - I_B$$

* Step to calculate Covered Interest Rate Arbitrage

Step 1 Identify whether arbitrage is possible or not.

i] If $AFM \cong I_V - I_B$, then arbitrage not possible

ii] If $AFM > I_V - I_B$ then arbitrage possible

Borrow I_V

Invest I_B

iii) If $AFM < I_v - I_B$

Borrow - I_B

Invest - I_v

* Step 2 : Calculation Of Arbitrage gain

i] Borrow at one currency at respective borrowing rate for the relevant maturity. Maturity period is to be decided on the basis of given forward rate.

ii] Convert the borrowed currency into spot rate into another currency for invt to be done today

iii] Invt the converted currency at the respective deposit rate for the relevant maturity.

iv] Reconvert the invested currency on maturity [i.e principal + int] at the previously covered forward rate.

v] Repay the borrowing from reconverted currency & the diff should be the Arbitrage gain.

* Fisher Effect

$$[NT = RI + \text{Inflation}]$$

$$\text{Normal}_{\text{int}} = \text{Real}_{\text{int}} + \text{Inf}$$

* Risk Free Int Rate = Nominal Int Rate

Fisher effect states that over a longer period of time the real interest rate across the economy are equalised through arbitrage. Hence the real int. rate should be indifferent globally over a longer period of time.

* Types of Account [location of Bank matters]

1] NOSTRO A/c :- It means "OUR ACCOUNT WITH YOU" It is an account of domestic bank with foreign bank for foreign currency.

Eg SBI Mumbai has a/c with City Bank New York ^{FOR} USD

2] VOSTRO A/c : It means "YOUR ACCOUNT WITH US". It is an account of foreign bank with domestic bank for domestic currency.

Eg Bank of America New Jersey has an account with BOB new Delhi for INR.

NOTE:-

Nostro & Vostro a/c are used interchangeably & nostro a/c for one bank is vostro for another & Vice-Versa.

3. Loro a/c : It means "THEIR ACCOUNT WITH YOU"
It is an account of domestic bank with foreign bank on behalf of other domestic bank.

It is used when an account [Nostro or Vostro] is referred by the bank other than the account holding bank.

Eg. SBI Mumbai has Nostro-Vostro a/c with City bank NY referred by/used by Kapor bank.

- * For example a bank in India will have an USD account with Say CITI BANK at NEWYORK.

All the transactions in USD for that Indian bank will route through that bank only. The dealing room in India which undertake all foreign transactions maintain a Mirror account for the said NOSTRO account, for the main purpose of reconciliation [Similar to domestic BRS]

i) TT Purchased :

When an exporter / or anyone in India receive money by TT, the amount will be Credited to the NOSTRO account abroad. As the said amount

in USD is to be converted into INR and credited^{ed} to the exporter account, dealer will provide the conversion rate and this is reflected in mirror account, dealer will provide the conversion rate and this is reflected in mirror account in debit side as TT Purchased. Thus in reconciliation these two entries are knocked out.

2 Draft issued not presented for payment:

Here the draft means cheque drawn on the NOSTRO account issued by the Indian bank. For example a student approach the bank for payment of fees abroad; the concerned cheque will be issued after taking conversion rate from the dealer, who will enter this as credit in his mirror account. Normally such cheque take time for presentation at our NOSTRO bank. Till that time this will outstand in Mirror account and once the cheque is presented, NOSTRO gets debited and the item is reconciled.

3 Purchased cheques on foreign bank

Some time person in India may get a cheque in USD drawn on any bank in New York, which he has to deposit with his banker and the bank may give credit to his INR account immediately by purchasing the cheque. In this case also the dealer gives the rate and debit mirror account. Then the bank will send the same for collection and payment through their NOSTRO bank which takes some time for credit in

NOSTRO account.

4 Remitted by TT :

This is similar to draft issued explained above; instead of giving cheque on NOSTRO account; bank in India may remit directly to the beneficiary abroad by SWIFT transfer by giving instruction to NOSTRO banker. Here also dealer gives the rate and credit mirror account. Same day as per the instructions NOSTRO gets debited immediately.

* Leading v/s Lagging and LC

Here decision has to be made by the importer:
i] Whether to pay immediately at Spot rate by taking local bank's credit facility, i.e., Bank OD.

OR

ii] Taking exporter's [foreign co.] credit facility and booking forward rate for the same. Here if applicable LC is to be presented to the exporter's bank for the credit facility.

Important points :-

- 1) Compare all the options at a single time period in the future.
- 2) If no specification, compare all at the forward maturity given in the question.
- 3) A default assumption is that the importer has no money to pay till maturity.
- 4) LC is considered on principal amount only.
- 5) Commission charges on LC are paid upfront but borrowed from local bank till maturity.