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**Lecture - 9**  
**Understanding Merchant Rates**

Good morning. In this section nine, we will be discussing about merchant exchange rate. Merchant as you know exporter importer these are, they are the merchant. They have huge volume of transaction particularly, the export import remittances; huge volume of remittances are in the form of merchant rate. And this rate generally may be more than or nearly as comparable with the interbank rate, and definitely lower than the card rate or covered rate.

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**Merchant Rates**

- Exporters and Importers are the primary merchants and the rate they get from the Foreign Exchange Authorized Dealers are the Merchant Rates.
- In India the Merchant rates are market determined.
- Merchant rates are lower than the spot rates and many times it is even lower than inter-bank rates.
- At merchant rate high volume exports and imports transaction take place.
- Ads charge very low profit margin for merchant transaction



So, the merchant rates as you know exporter importers are the prime, primary merchant and the rate applicable to them are the authorized dealer, quote the exchange rate for them is the merchant rate. In India, the merchant rates are determined by market forces; after 92, 93 financial sector reform measure, the current account particularly the particularly the export import side are now market determined exchange rate. Hence the merchant rates are market determined in Indian context.

Merchant rates are lower than the spot rate definitely and somewhat around the inter-bank rate which is one of the lowest rate in the market. Merchant rate, at merchant rate

high volume export import transaction take place, because exporter importers, their volume of transaction may be millions of dollar, and they get a comparable rate generally favourable to them. So, authorized dealer those who are providing exchange rate to merchant they compete among each and the, each other to give what is called a low, lowest rate to the merchant. And authorized dealers charge very low profit for merchant transaction because the transaction is huge, any marginal level of profit can give them huge amount of profit. So, merchant rate, the lowest rate in the market applicable to exporter and importers, authorized dealers quote one of the lowest rate for the merchant transaction.

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### Types of Merchant Rates


- Telegraphic Transfer Rates (TT) and Bills Rates are two merchant rates.

**TT-Buying Rate:**

- Inward remittances
- TT, MT, DD
- Conversion of proceeds of instruments
- Cancellation of outward TT, MT, DD

**TT-Selling Rate:**

- Outward remittances
- TT, MT, DD
- Conversion of proceeds of instruments
- Cancellation of inward TT, MT, DD
- Import document received directly by the importer



The question is here, what are the merchant, what are the merchant rates in the, available in the market? In the Indian context, and also same to, same for all other countries; the types of merchant rates are telegraphic transfer rate, what you called TT rates, and bills rate; these are two primary merchant rate available to exporter importers. TT buying rate or telegraphic transfer rate, there are two types; one is called TT buying rate, another is called TT selling rate. Then question is your, what is the difference between TT buying rate? And what is TT selling rate? When as a customer, I go to a bank and ask to remit some money to a person in US, I purchase what is called TT selling, I sale a TT. When a exporter got export transaction in the form of foreign currency, I want to convert the foreign currency into domestic currency or then they he has to go to the bank, and ask for a rate; the rate applicable to the exporter is called TT buying rate. So, TT selling rate so,

TT selling rate is nothing but outward transaction, TT buying rate nothing but inward remittances.

Though there are different categories of rates on the TT buying rate what is called inward remittances; TT buying rate want to convert the foreign currency into domestic money you have to you have to buy a TT, the TT buying rate inward remittances applicable to them, telegraphic transfer, money transfer, demand draft, which are generally in denominated in foreign currency converted into Indian currency or domestic currency. So, these are we have to purchase what is called TT buying. Conversion of proceeds of instrument, many export oriented instruments are there, many foreign bills are there, those who are denominated in foreign currency converts into domestic currency through TT buying rate.

Similarly, if you want to cancel outward remittances, suppose you have booked a foreign DD, foreign currency DD, but you want to convert into Indian currency or cancel it the DD, then you have to purchase what is called a TT buying rate. So, TT buying rates applicable to inward remittances, foreign currency demand draft, foreign currency money transfer, conversion of proceeds of foreign currency denominated instrument, cancellation of outward remittances in the form of DD, TT, MT, all are applicable one rate called TT buying rate.

What are the TT selling rates? As I mentioned, TT selling rate nothing but you want to send foreign currency to outside that is from domestic economy, the foreign currencies are going outward, other country then you have to sale a TT. So, I want to send US dollar to any US citizen in USUS, then I have to convert the domestic rupee into US dollar, that time I have to sale a TT. So, TT selling rates are all outward remittances transaction which generally converted by paying domestic money into foreign currency called TT selling rate.

So, outward remittances, telegraphic transfer, money transfer, foreign currency denominates DD that is demand draft, conversion of proceeds of instrument that is any instrument in domestic money converted into a foreign currency, you have to sale a TT, cancellation of inward remittances, suppose, suppose you want to, you have any foreign domestic DD, TT, MT, you want to convert into foreign currency, then TT selling rate applicable. Import documents, you want to send, you want to have import something,

then you have to sale TT, TT selling, TT selling rate applicable to all outward transaction which are any, any foreign currency purchased by paying domestic currency.

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## Types of Merchant Rates

**Bill-Buying Rate:**

- Purchase of export bills
- Discount of export bills
- negotiation of export bills

**Bill-Selling Rate:**

- Transaction involving remittance for import bills



So, TT types of merchant rate applicable, we have also one of the type is bills, one is TT another is bills. The bills buying rate, and bills, bills selling rate also there; bills are export import proceeds. So, when bills buying rate mean purchase of export bill, export bill, bill TT is bill selling rate transaction, involving remittance of import bill. Suppose when you want to import something, then the import bills will be in the form of bills buying rate, you want to export something, the export bill you receive from the foreign partner, it will be converted into domestic currency, by discounting the export bill through the bills buying rate.

Similarly the bills buying rate is nothing but inward remittances, bill selling rate nothing but outward remittances. Foreign currency converted into domestic currency through bills buying rate; domestic currency converted into foreign currency through bill selling rate. Here bills are export import bill, and are any other kind of foreign, foreign currency denominated instruments.

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## Merchant Exchange Rates


- **Merchant Rate**
  - Select the appropriate Base Rate
  - Adjust the exchange margin
  - Round off to the FEDAI guidelines

**Example :**

What would be the TT-BUYING rate, if the spot rate in the Mumbai inter-bank market is US\$1 = Rs.53.5050 – 53.5060. The bank is having a policy of 0.0100 cushion margin and 0.080% profit margin.

**Answer:**

- TT buying rate is applicable to inward remittance. Hence, exporter would be less rupee per US\$. Hence, the applicable spot rate : US\$1 =Rs. 53.5050



So, once you know the different type of bills, different type of merchant rate that is TT buying, TT selling; bills buying, bills selling; now how you can use this rate in actual market transaction process. The transaction process here, we have up to the domestic authorized dealer, they have to quote merchant rate. Merchant rates may be export side, may be import side; merchant rate may be in the form of outward remittances, or in the form of inward remittances; the merchant rate may be in the form of bills side, or in the in the form of TT side, telegraphic transfer side. So, merchant rate, for calculation of merchant rate, there are three steps involved.

First type is here, the select the appropriate base rate, you have to select the appropriate base rate, which currency you are using, the base rate, in case of, whether it is a US dollar or in Indian rupee or any other foreign currency, you have to select the base rate. Then adjust the exchange margin, exchange margin here, because exchange cushion we call it cushion rate, cushion foreign currency, cushion generally in actual market transaction bank use some cushion rate, the cushion is applicable here because the spot rate to be adjusted for cushion side, cushion margin, Why the spot rate should be adjusted? Because we are using the spot rate to provide a merchant rate. Generally, the spot rate, merchant rates are lower than the spot rate. So, as the authorized dealer quote a foreign merchant rate, they adjust the spot rate, by deducting or adding something, as applicable to the spot rate. We will be discussing about, how to adjust the cushion rate with the spot rate.

Similarly, you have to round off the number, as per the FEDAI guideline. In case of India, the foreign exchange dealer association of India, that is FEDAI, they have the guideline for quoting the merchant rate. You have to abide by the guideline, as per the, as per requirement. So, now, suppose you want to calculate the, calculate the, what is called a TT buying, a TT selling rate, what we will do that? Let us start with the example. See the example here: What would be the TT buying rate, if the spot rate in the Mumbai interbank market is one dollar, 1 US dollar is 53.5050 53. 5060, that is offer rate and bid rate. The bank is having a policy of 0.01 cushion margin, and profit margin is 0.80 percentage. So, what we have given here? You have to, you have given here a spot rate for US dollar against Indian rupee, and we have a, we have the cushion rate, and we have the profit margin.

Now, we have to estimate the TT buying rate. So, when you mention TT buying rate means, it is inward remittances, because when a person buys a TT nothing but he has foreign currency, he want to convert the foreign currency into domestic money.

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Understanding Merchant Rates

TT-buying - Inward Remittance

Mumbai inter-bank

Spot: US \$1 = 53.5050 - 53.5060

Applicable Rate US \$1 = 53.5050

Forex cushion deducted = 00.0100

~~53.4950~~

53: 4950

less profit Margin (0.080%) 00.0428

53.4922

So, here applicability rate is, TT buying rate. So, TT buying rate, as I mentioned, is applicable to inward remittance; TT buying rate is nothing but inward remittances. The exporter, here it is exporter, the exporter have got the export proceeds, the export process, export proceed here in the form of foreign currency, that is US dollar. Now we wanted to convert the US dollar into domestic money. The Mumbai interbank market,

Mumbai interbank market, Mumbai interbank market, the spot rate, spot rate is, spot rate per US dollar is equal to 53 53.5050 53.5060, that mean you want to purchase dollar, then you have to pay 53 .5060, you want to sell dollar, then authorized dealer will give you 53.5050.

Now, we are, what we are doing? We are estimating rate for TT buying. So, here, here the exporter having foreign currency, that is US dollar, so the applicable rate is, he wants to surrender the US dollar, to get rupee, so the authorized dealer give them, give them, authorized dealer will provide, lower amount of rupee. So, the applicable rate is here, applicable rate, applicable rate will be 1 US dollar will be 53.5050, now we got the applicable spot rate 5050.

Now, for estimating the TT buying, you have to adjust for cushion, and adjust for profit margin. So, now, the cushion is here, we will be deducted the cushion, because we want to give the money in the form of rupee, lower amount. So, the cushion is applicable here, 0.01. So, cushion, here cushion will be, foreign exchange, forex cushion will be deducted. What is the amount? Now that amount is here 00.0100, now this will be 05 this will be 4 this will be 4 9, so calculation is 4 9 which will be 53.4950. So, after adjustment of cushion, we got 53.4950.

Now, you have to, profit margin since you are surrendering rupee to the authorized dealer, surrendering rupee to the exporter, the profit margin need to be deducted. The profit margin, so less profit margin, less profit margin, how much? 0.080 percentage. The profit margin depends upon the individual authorized dealer. If the authorized dealer get huge amount of foreign currency, their profit margin they can reduce, but it depends upon the, it applicable to bank to bank. Each bank has there own policy of deciding the cushion margin, and deciding the profit margin.

After profit margin, you have to deduct the 0.080 percentage of 53.4950, 0.80 percentage of 53.4950 is nothing but 00 is coming 0.04428. So, now, the actual rate will be, after deducting this, actual rate will be 45 22 45 22. The actual rate now, the 45 53.4522; 53.4522 is the rate, the exporter get from the authorized dealer; that means, the authorized dealer, that is this is called TT buying rate, the authorized dealer is quoted for TT buying rate, how much? TT buying rate will be 53.4522; that means, that means, if the, if the exporter provide dollar to the, provide dollar to the authorized dealer, per

dollar, the authorized dealer will give 53.4522 amount of rupee. So, this is called TT buying. TT buying rate is applicable to inward remittances. So, authorized dealer, the exporter surrender the dollar and get a rate, for conversion of dollar into into Indian rupee, as TT buying rate, then TT buying rate the authorized dealer quote 53.4522.

You, you see the actual spot rates, spot rate is 53.5050; however, the exporter is getting 53.4522 that mean, the it is generally less than the spot rate. So, if the exporter buy a TT, that is a TT buying, for converting the export earning into domestic currency, at the Mumbai interbank market, if dollar is quoted 53 500 the exporter will get actually 53 4522, after adjustment of forex cushion that is cushion margin and profit margin for the authorized dealers. So, actual value will be 53.4522. So, this is called TT buying calculation.

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### TT –Selling Rate

**Example :**  
 What would be the TT-Selling rate, if the spot rate in the Mumbai inter-bank market is US\$1 = Rs.53.5050 – 53.5060. The bank is having a policy of 0.0200 cushion margin and 0.15% profit margin.

**Answer:**

- TT Selling rate is applicable to outward remittance. Hence, importer would be charge more rupee per US\$. Hence, the applicable spot rate : US\$1 =Rs. 53.5060

Appropriate Spot Rate:	Rs. <b>53.5060</b>
Add Cushion Margin (0.0200)	<u>00.0200</u>
	<b>53.5260</b>
Add Profit Margin (0.15%)	00.0803
<b>TT-Selling Rate</b>	<b><u>53.6063</u></b>



Now, let us move to another calculation called TT selling rate. TT selling rate, as I mentioned to you earlier, TT selling rate is applicable to outward remittances; that means, you want to send foreign currency to outsider, then you have to sell a TT in the bank. You have, suppose you want to send 100 dollar, 100 dollar to US, then you go to a bank and sell a TT, that time bank will quote you a TT selling rate. So, let us start with the example, then you understand what, what is the calculation process of TT selling rate.



So, here the example is, what would be the TT selling rate, if the spot rate in the Mumbai interbank market is 1 dollar 53.5050 53.5060, the buying offer and bid rate. The bank is having a policy of 0.02 as cushion margin, and 0.15 percentage profit margin. So, profit margin and cushion margin given to you, the spot rate in the Mumbai interbank market per dollar against rupee given to you, you have to calculate or estimate what is the TT selling rate. TT selling rate is what? For calculation for the outward remittances; so, outward remittance, who needs, those who send foreign currency to outside. So, here the importer needs a TT selling rate, for converting the domestic money into US dollar. So, what you could do? You have to estimate, what is the applicable spot rate here. The Mumbai interbank market, quote the, quote the dollar.

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Mumbai Interbank

	Spot US\$1 = 53.5050 - <u>53.5060</u>
<u>TT-selling rate</u>	Applicable Spot rate: 53.5060
	Add cushion Margin 00.0200
	<u>53.5260</u>
<u>Rs. 53.6063</u>	Add profit Margin (0.15%)
	00.0803
	<u>53.6063</u>

So, here Mumbai interbank market, Mumbai interbank market, the spot rate is, 1 US dollar is equal to 53.5050 and 53.5060. So, what you are doing here? We are, we are, we are calculating the, estimating the rate for importers, who is the importer? Who purchase dollar, when you purchase dollar, the bank or the authorized dealer will charge you more. So, the applicable rate is here, applicable spot rate will be 53.5060, because you want, the importer TT selling, TT selling rate, who sell the TT? Those, the person who want to remit the foreign currency to outside. So, he surrenders domestic rupee, purchase foreign currency; when you want to purchase foreign currency, you have to surrender more domestic currency. So, the applicable rate here, 53.5050. So, applicable spot rate you got, now you have to adjust a cushion margin, the cushion margin, since the bank is

quoting, the conversion rate of dollar into domestic currency. So, they need to charge more to the importer.

So, the cushion margin, you have to add the cushion margin, add cushion margin, cushion margin is how, how much? Cushion margin is here, the bank policy 0.200. So, cushion margin here, you have to add the cushion margin 0.200, the cushion margin need to be adjusted. So, here the rate will be 53.53.5260. After adjustment of cushion margin, the bank has to charge more domestic, domestic money, because they want to quote for 1 dollar. So, importer will get a more rate, than the spot rate. So, cushion margin we are adding here 53.5260. Now you have to add profit margin, the authorized dealer would take a profit out of that, so transaction.

So, you have to add the profit margin, add profit margin, profit margin is here, how much? 0.0.1515 percentage, of what? 0.15 percentage of 53.5260, that is coming how much? That will be coming around 0.803. So, actual calculation will be, you have to add the profit margin, now it is coming 53.6063. This is the rate, for TT selling rate. So, the authorized dealer will quote, per dollar 53.6063. If the importer wanted to buy foreign currency or US dollar, he has to sell a TT, the TT selling rate, the authorized dealer will quote 53.6063.

So, now our TT selling rate is, TT selling rate, TT selling rate, TT selling rate will be per dollar 53.6063, 53.6063 TT selling rate. Here, here, what you understand here? We understand that, TT selling rate is applicable to outward transaction, where foreign currency need to be sent to outside, and it is applicable to importer, the importer generally import something by paying in foreign currency, when a importer go to a bank ask for dollar quote the bank will sell TT to them, the TT selling rate applicable here.

And TT selling rate, the applicable spot rate, will be higher that is the spot rate is nothing but the buying of foreign currency or purchase of dollar, that is higher 53.5050. Here, you have to add the cushion margin, cushion margin and after that, you get actual spot rate for the TT buying. And here the profit margin, the bank will add and the profit margin depends upon bank to bank; similarly cushion margin also depends upon bank to bank. So, here profit margin is 0.15 percentage of 53.5260, after adding the profit margin we got 53.6063, this is applicable to TT selling rate; and this, the importer need to pay to the authorized dealer to get 1 dollar. So, TT selling rate calculation is like this.

Now, come to the bills side. Before going to the bill side, you have to understand that what actually a foreign bills? Foreign bills here, may be in the form of export bill, may be in the form of import bill.

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### Bill Selling Rate

**Example :**  
 What would be the Bill-Selling rate, if the spot rate in the Mumbai inter-bank market is US\$1 = Rs.54.5050 – 54.5060. The bank is having a policy of 0.0200 cushion margin and 0.15% profit margin.

**Answer:**

- Bill selling rate is applicable for outward remittance for importers.

Appropriate Spot Rate	Rs. 54.5060
Add Cushion Margin (0.0200)	00.0200
	<b><u>54.5260</u></b>
Add Profit Margin (0.15%)	00.0818
<b>Bill-Selling Rate</b>	<b><u>54.6078</u></b>



So, in case of bills, when exporter export something, they export, the export against a bill; when the importer is outside the country, they send a, send bills against that bill, the importer the exporter in India send some goods, and that bill is nothing but a bills, a export bill. Similarly when a domestic importers are there, domestic importer import something, they send a against the import document, they get what is called import bills. So, here bills selling rate and bills buying rate applicable to exporter importer. So, in case of, bills selling rate, it is applicable to importer, because importer sells a bill in the, in, to the authorized dealer to get foreign currency. So, bill selling applicable to outward transaction. Similarly, bills buying is applicable to inward transaction; the inward transaction is applicable to import exporter. Before understand, to understand that bills selling, and bills buying rate, let us do some example.

Here, we are understanding, the process of, calculation of bill selling rate. The bill selling rate here, what would be the bill selling rate? If the spot rate in the Mumbai interbank market is 1 dollar is equal to 54.5050 54.5060; the bank is having a policy of 0.200 cushions margin; and 0.15 percent profit margin. So, what you are, what you are

estimating here? Bill selling rate; bill selling rate is applicable to whom? Importer. Importer sell a bills, to get foreign currency, against the foreign currency, they gets, they get import from other country. So, bill selling rate is applicable to importer.

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Mumbai Inter-bank

Spot : US \$1 = 54.5050 — 54.5060

Applicable Spot: 54.5060

Add cushion Margin: 00.0200 ✓

54.5260.

Add profit Margin  
(0.15%) 00.0918 ✓

54.6078

Now, when you calculate the bill selling rate, similarly just like TT selling rate, you have to estimate the applicable spot rate. So, here, in the Mumbai interbank market, Mumbai interbank market the spot rate, spot rate per US dollar is, per dollar is quoted as 54.5050 54.5060. So, bills, we are, what you are estimating? Bill selling rate, is applicable to whom? Importer. What importer needs? Importer needs foreign currency that is US dollar, that mean US dollar the importer has to purchase from the authorized dealer, when they want to purchase US dollar, they have to surrender more rupee. So, applicable spot rate here, applicable spot rate will be 54.5060. 54.5060 that is applicable spot rate.

So, now, you have to, what you have to do with the cushion margin? Cushion margin bank has to take, that mean you have to collect the cushion margin from the importer. So, you have to add the cushion margin, add cushion margin, cushion margin is how much? 0.020 0020 0.0200. Now, the rate will be now 54, after adding the cushion margin it will be 54.5260, now, after adding the cushion margin the rate is now 54. 5260. Then bank has to collect profit margin from the importer, so you have to add the profit margin, add profit margin, profit margin is how much? 0.15 percentage, of what? 5452 size 00.1215

percentage of 54.5260 is nothing but it is coming 0.0818. After adding this, we got 54.546078. 54.6078 is the bill selling rate.

Bill selling rate is applicable to importer, when a importer need dollar they sell a bills in the market, the authorized dealer purchase the bill, and they quote what is called bill selling rate. And then bill selling rate is applicable to importer, and here importer will get 1 dollar at the rate of bill selling rate which is nothing but 54.6078. Why, what you understand here? In case of bill selling rate, the importer purchase dollar and the authorized dealer will charge more, more rupee per dollar, this is applicable spot rate.

And you have to, you have to add the cushion margin, why cushion margin? The authorized dealer collect the cushion margin from the importer. So, you have to add the cushion margin here, after adding the cushion margin, we got, we got the applicable spot rate along with the cushion margin. Since, authorized dealer provide dollar to the importer, they need some transaction profit, the profit add, add the profit margin which is 0.15 percentage of 54.5260, that is coming this much, after adding this, we got the bill selling rate which is applicable to importer or outward remittances.

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### Bill Buying Rate

- **Example**
- What would be the Bill-BUYING rate, if the spot rate in the Mumbai inter-bank market is US\$1 = Rs.54.5050 – 54.5060. The bank is having a policy of 0.0100 cushion margin and 0.080% profit margin

**Answer:**

- Bill buying rate is applicable for inward remittance for exporters.

Appropriate Spot Rate	Rs.54.5050
Less Cushion Margin (0.0100)	00.0100
	<u>54.5150</u>
Less Profit Margin (0.080%)	00.0436
<b>Bill-Buying Rate</b>	<u><b>54.5586</b></u>



Let us come to the bills buying rate. The bills buying rate is applicable to whom? Because it is applicable to the exporter; exporter got the bill, by exporting the goods and services, and this, that bill, they will surrender to the authorized dealer, and authorized dealer discount the bill, purchase the bill, and convert the export earning into domestic

currency. So, bills buying rate is applicable to inward remittances. So, inward remittance is primarily for the exporter.

Exporter gets the dollar, and they convert the dollar into domestic currency, and how they will convert? They will, the export bill, they will give it to the authorized dealer, authorized dealer either purchase the bill, discount the bill, it is side bill directly they will purchase, if they are not a side bill, if it is a bill for two three months, then discount the bill and convert the export earning, in the, in the form of domestic currency. So, bills buying rate is applicable to, to export earning or inward remittances. To understand the bills buying rate calculation process, let us do an example.

The example is here: What would be the bills buying rate, if the spot rate in the Mumbai inter-bank market is, 1 dollar is 54.5050 54.5060 that is offer rate and bid rate. The bank is having a policy of 0.100 cushion margin, and 0.080 percentage profit margins. So, what you have to estimate here? Bills buying rate; applicable to whom? The exporter, export earning, they want to convert the export earning into domestic currency; so, domestic currency when they convert, they have to surrender the export earning to the bank ,and bank will quote per dollar how many rupee.

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Mumbai Inter-bank

Spot: 54.5050 — 54.5060

Applicable spot: 54.5050

Less Cushion Margin 00.0100

54.4950

Less profit Margin  
(0.15%) 00.0818

~~54.4133~~

54.4133

NPTEL

Here, in the Mumbai interbank market, in the Mumbai interbank market, what is the spot rate? In Mumbai interbank market the spot rate, the spot rate is here, 54.5050 and 54.5060. Now, here, you have to understand that, export earnings in the form of foreign

currency that is in the dollar. So, what the importer needs? They want to convert the dollar into Indian rupee. So, the authorized dealer will give less amount of Indian rupee. So, the applicable rates, spot rates will 54.5050.

So, here applicable spot rate, applicable spot rate is 54.5050. After this, the authorized dealer will collect export earning, that is as a cushion margin from the exporter. So, they want to deduct the cushion margin, from the applicable spot. So, here, less the cushion; deduct or less cushion margin, cushion margin is how much? 00.0100. So, now, what is the rate now? 54.5150. Less cushion margin; cushion margin is 54.4950. So, now, the cushion, after deducting the cushion margin, we have, to 54.4950.

Now, the authorized dealers need to get some profit, through this transaction, then you have to less profit margin, fewer profit margins; profit margin is here 0.15 percentage of 54.4950. So, you have to deduct the profit margin from here. So, how to deduct the profit margin? So, you calculate the profit margin of 54,0. 15 percentage; it is coming around, something around, 00.0803 something; and it will be something, how much coming 53.6049, and here, you have to add; you have to go to the excel sheet and calculate actual calculation process.

After getting that, less cushion margin 4950, you have to calculate 0.15 percent of this; 0.15 percent of this is coming around 54.4950, it is coming around 0.0818; and this, after deducting the 54 from there, you have to deduct 54.4 950 minus, it is coming 54.4133; what you have done here; same thing, in the interbank market. So, this is your TT, what is called a TT? We have got a TT bill selling rate. So, bill selling rate is applicable to outward, when the exporter get the export bill, and then convert it into Indian rupee, this is applicable to them. 54.4133 rupees.

What we have understood here? The bills buying rate, the bills buying rate is applicable to exporter or inward transaction, and bills buying rate inward remittances. So, in the spot rate, the exporter will get a less amount of rupee, they want to convert foreign currency in Indian rupee so they get less amount of rupee, thus applicable spot rate 54.5050. So, the bank or authorized dealer gets the cushion from the, cushion margin from the exporter. So, you have to deduct the cushion margin, after deducting the cushion margin, you got the applicable spot rate with adjusted cushion. In this process of transaction, the bank or the authorized dealer, supposed to get the profit; the profit

amount also you have to adjust, less deduct the profit margin; the profit margin 0.15 percentage, it is coming 0.818. And after deducting the profit margin we got the 54.5133 this is nothing but the TT bills, say buying rate; the bills buying rate is applicable to exporter, per dollar of export the bank will give 54.4133 rupee to the exporter. So, this is called bills buying rate.

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### Merchant Forward Rates


- **Example**

An exporter may receive his export dues after two month. He requests his banker today to purchase the bill. The bank is having a policy of 0.0100 cushion margin and 0.080% profit margin for export bill purchase. What rate the bank would quote if the spot rate is as follows:

Mumbai Inter-Bank market: Spot : US\$1= Rs.53.5050 – 53.5060  
 Forward Point : 1-Month: 25/23                      2-Month: 50/40

**Answer:**

Appropriate Spot Rate	Rs. 54.5050
Forward Discount	00.0040
Forward Exchange Rate	<b>54.5010</b>
Less Cushion Margin (0.0100)	00.0100
	<b>54.4910</b>
Less Profit Margin (0.080%)	00.0436
<b>TT Buying Rate</b>	<b>54.4474</b>



Now, it may happen that the currency may be, what the exporter get; exporter may get the bill foreign currency transaction after one month or two month. So, in between they may ask, what is called discount the export bill. Discount the export bill, they go to the bank, and surrender the bill and get a rate there, but they have not realized the export earning, export earning they may realize after two three month. In this process, the forward exchange rate applicable; we have discussed earlier the forward rate calculation, similarly in case of merchant rate, there also be some forward rate, merchant forward rates are there. To understand the merchant forward rate, let us do a example.

The example is here: An exporter may receive his export due after two month. He has not received the export due, he got only the bills. By exporting the exported item, he got the bills, in the form of a foreign currency instrument, but he has not got the export earnings, export realization; export earning has not been realized, after two month he may get the dollar from the importer who is supposed to pay to him. So, after two months he is getting the due. He requests his banker today to purchase the bill.



Now he has gone to the bank and ask the bank, he request the bank to purchase this export bill and give me a quote for that. The bank is having a policy of 0.01 exchange cushion; and 0.080 profit margin, for export bill purchase. Any export bill bank want to purchase then that bank has to charge a profit margin of 0.80, in cushion margin of 0.010. And suppose this is the position of the bank and the inter-bank Mumbai market spot rate is per dollar is 53.5050 53.5060, and forward point of 1 month is 25 23, second month is 50 40; what rate the bank will quote to the exporter?

So, you have to understand the problem here; the problem is here, the exporter has a bill the export will be due after two month, actual realization export will take place after two month. But in the meantime, the exporter wants domestic currency, against his export bill. He has gone to the bank, and he asks, my export earning will be realized after two month, give me a quote. And in this process, the bank has a policy; the policy of, what is called cushion margin of 0.01 percentage and profit margin of 0.08 percentage.

And since in the Mumbai inter-bank market spot rate is given to us, this is the spot rate, and also the forward point, the forward premium, one month is this much, second month is this much, now you have to calculate, what is called a TT buying rate. Because is exporter earning inward remittances; inward remittances we have, what is called TT buying rate. You have to estimate the TT buying rate. Now how to do that? Let us start doing this problem.

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Forward discount	<u>50/40</u>
Applicable spot	53.5050
deduct the forward point	00.0050
	<u>53.5000</u>
deduct cushion	00.0100
	<u>53.4900</u>
Less profit Margin (0.15%)	
	<u><u>53.4900</u></u>

First you have to estimate, what is called applicable spot rate; in the Mumbai interbank market spot rate is quoting at 53.5050 and 53.5060. Now, this export bill will be realized after two month so, but this rate is a spot rate. So, you have to understand what is the two month exchange rate? The two month exchange rate, you have to calculate, then you have to add two month forward premium. So, second two month forward premium 54.5050, what does it mean? Rupee is appreciating. Second number is lower than the first number, remain rupee is appreciating, dollar is depreciating. So, forward premium need to be adjusted forward. Now, the forward discount will come; why discount? Because second number 40 and 50. So, rupee is depreciating, as we discussed earlier classes, the quote is like that in the market 50 40, then rupee is depreciating.

What is the value of rupee? Because here rupee is depreciating forward discount will be 40 50. Now see there is, inward remittances, exporter surrender the export earning; dollar is surrendering, taking rupee, the applicable spot is this. So, applicable spot, we got the applicable spot, applicable spot is 53.5050. Now, since it is a discount premium, dollar is now discount, a rupee is a premium currency because this number 40 is less than 50. So, rupee is appreciating, dollar is depreciating. You have to deduct, deduct the forward point 00.0050; now deduct this now we get 53 5000. This is the forward rate after two month. So, the spot rate is this; forward rate after two month is this.


Now, here you have to adjust the cushion margin; cushion is here, since a rupee, we are converting the inward transaction, cushion need to be deducted. That deduct cushion; cushion is how much? Cushion is 00.0100. Now adjust that cushion, that cushion is now 53.4900. Now profit margin, through this transaction bank has to get some profit, since you are quoting inward transaction, the dollar is coming to us, coming to the authorized dealer, so profit margin needs to be detected. Less profit margin that is 0.15 percentage, you have to deduct from here; 0.15 percentage of this, you have to deduct, whatever the rate we get, that is our two month TT selling rate; after two month, what will be the applicable TT selling rate that will be the rate here.

So, here forward transaction are adjusted because export bill will be realized after two month; after that, the deduct, cushion rate and profit margins are adjusted, to get the TT selling rate. Now come to here, we are ending that merchant rate calculation.

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### References

- International Financial Management, 3<sup>rd</sup> Edition, by Eun and Resnick, Irwin, 2004.
- Multinational Financial Management by Jeff Madura, Thomson Publications
- Multinational Financial Management, by Alan C. Shapiro, Wiley India, 8<sup>th</sup> Edition.




Now, references are here, you can through the references; and some questions I have prepared for a model answer for you.

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### Model Questions

- 1) Explain the features of various merchant rates.
- 2) What would be the TT-BUYING rate, if the spot rate in the London inter-bank market is Euro1 = US\$1.5050 – 1.5060. The bank is having a policy of 0.0001 cushion margin and 0.020% profit margin.
- 3) What would be the TT-Selling rate, if the spot rate in the London inter-bank market is Euro1 = US\$1.5050 – 1.5060. The bank is having a policy of 0.0010 cushion margin and 0.05% profit margin.
- 4) An exporter may receive his export dues after one month. He requests his banker today to purchase the bill. The bank is having a policy of 0.0100 cushion margin and 0.080% profit margin for export bill purchase. What rate the bank would quote if the spot rate is as follows:  
Mumbai Inter-Bank market: Spot : US\$1= Rs.53.5050 – 53.5060  
Forward Point : 1-Month: 20/25                      2-Month: 50/60



So, you have to explain the features of various merchant rate that we have discussed. various merchant rate are TT selling, TT buying; bills selling, bills buying; wherever the TT selling are applicable, wherever applicable TT buying rate, you have to describe that and what the adjustment process in calculation of foreign merchant rate. you have to mention that. I have given 3 problems to you.

The first problem is here, you have to estimate the TT buying rate Euro for the London interbank market. The euro is given to you; euro rate is 1 in place of dollar, against dollar. So, 1.5050 dollar 1.5060; and the bank having a policy of 0.0001 cushion margin and 0.020 percentage profit margin, you have to calculate TT buying. TT buying is applicable to inward transaction. So, that is, dollar has to be converted into euro, since the applicable spot is here 1.5050; and here, you have to minus the cushion margin, minus the profit margin, to get the TT buying rate.

In the second problem is TT selling rate, same question. Here applicable rate is, TT selling applicable to outward transaction that is for importer. So, here, the applicable euro spot rate is, one euro will be 1.5060. You have to add the cushion margin, add the profit margin and calculate the TT selling rate.

And forth question will be here related to your, what is called forward rate transaction. Here forward rate transaction, we have given the Mumbai inter-bank market quotation or spot, against the US dollar; and forward point is given to you, for one month two month. So, export due is after one month. So, it is inward transaction. So, applicable foreign currency is spot rate 53.5050. Here you have one month means, after one month foreign currency will come to us, you have to calculate the one month forward exchange rate; spot rate is 53.5050. So, here rupee is appreciating, you add 0.20, here 53.5050 you have to add the forward point, after that you have to deduct that cushion margin, deduct the profit margin, to get the TT selling rate as a forward transaction.

In this process, I am completing the merchant rate transaction. Next time we will be discussing about some exchange rate further that is a forward rate contract site. And the session ten will be on forward contract, and we will be discussing in detail about forward contract and their process of calculation.

Thank you.