International Finance

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Lecture - 26
Cross-Listing of Shares: Depository Receipts

Today session 26 we will be discussing about cross listing of shares and depository receipt. Here, we will discuss how the financial sector liberalisation in India and many other developing country, along the domestic company to cross list their share in different exchanges all over the world. We will also discuss the process of development of GDR, that is global depository receipt, American depository receipt and also we will discuss how the cross listing has increased the valuation of the company, what way the company has got the benefit from the cross listing of shares. And we also discuss how the investor have try to expose or try to get the benefit of cross listing of share through to different kind of arbitrage opportunity.

Before going to discuss about cross listing of share, we should understand here the meaning of cross listing. Cross listing means the domestic company shares or equity is listed in the domestic company share markets, that is equity market of domestic company and also at the same time same shares are listed in other extra exchange in a different countries. Like the Infosys share listed in India NSE and also listed in NASDAQ. Similarly, ICICI bank share listed in NSE also listed in NYSE; that is New York stock exchange these are called cross listing of shares.

Cross listing of shares provide some opportunity, some challenges to companies and investors. We will discuss in detail about the cross listing of shares, at the same time we will also try to do some problem. How the cross listing of share has created arbitrage opportunity for investors.

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Source of Capital

- MNCs source raw materials and capital across the world wherever it is cheap.
- Greater interaction among financial markets has enabled companies to access global capital market.
- Increased globalization has also allowed smaller companies to raise capital in the international market.
- Companies are raising both debt and equity capital from the global market.
- Investors' appetite for foreign company shares have also increased significantly.
- Recent years cross listing of shares through *depository receipts* have become common practice.
- Cross listing indicates that a company lists its shares in foreign stock exchanges besides listing its shares in domestic exchanges. For example, investors from US can invest in Infosys equity shares as Infosys shares are listed in NASDAQ.

Before going to their, before going to discuss about cross listing of shares you should understand what are the sources of capital. When the MNC, multinational company are not only sourcing their raw materials or the product across the world, but source their capital across the world. They try to get the capital wherever it is cheap and cheap and less risk.

Similarly, over the years when the financial sector developed, whether it is possible for the MNC multinational company to go to migrate from one country to another country and source their capital. The greater interaction of among the financial market has enabled company to access global market, at the same time increased globalisation allow smaller company to raise capital in the international market also. The MNC earlier were it is they were doing it, now it is possible on the part of the small company to also source their capital from different countries. This is only possible because this the equity market or the financial sector all over the world has developed because of reform measure initiated by different countries.

Companies are raising both debt and equity capital from the global financial market, debt capital at the same time equity capital also there sourcing from different countries. Debt capital little bit less risky and less stringent than compared to equity capital which is which requires deferent kind of what is called stringent regulation for the disclosure norm and for listing purpose.

Similarly, investor appetite over the year has increased, investor are now inclined to take more risk, they inclined to take, invest in different companies share and also inclined to migrate from one country to another country for investing their resource, surplus resources. Recent years cross listing of share through depository receipt have become common practice. The depository receipts, underlying the depository there is equity shares and depository receipt act as a debt instrument. However, it gets the value from the valuation of the equity.

So, cross listing indicate that a company list its shares in foreign stock exchanges, besides listing its share in domestic exchanges. For example, as I mentioned earlier investor from U S can invest in Infosys equity share as Infosys share listed in NASDAQ. Similarly, investors can also invest ICICI bank share since ICICI bank share is listed in NYSE. So that is New York stock exchange. So, cross listing provides some kind of benefits not only for the investor, but also for the company. The company get good valuation for the for their own company at the same time they raise resources. Investor gets investment opportunity in good company. So cross listing is a win win game for both investors side and also for the company side.

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Source of Capital

- Depository receipts can be ADRs (American Depository Receipts) or GDRs (Global Depository Receipts) or for that matter any country specific depository receipts can be issued.
- GDRs are primarily issued and traded in London or Luxembourg stock exchanges.
- Depository receipts are negotiable receipts of securities issued by foreign companies but listed and traded in domestic stock exchanges denominated in the home currency of the domestic country.
- Each depository receipt has specific number of company's shares as underlying.
- In a DR, the company declares the dividend in its home currency. This dividend is converted to the home currency of the DR investor.

So when I mentioned here the companies because of the financial sector reform they are now in a position to source their capital from different countries. At the same time the financial sector reform measure has increased the risk appetite of the investor, they

wanted to now invest in different countries, different company by reducing their unsystematic risk or systematic risk both.

So, here you have to understand the source of capital when I mention here, the source is both debt and equity and both debt and equity are cross listed, cross listed in different exchanges and companies small or big company or are listing are raising resources by listing their debt and equity across different, across the globe in different market, wherever it is possible to raise resources. So, when and depository receipt, as I mentioned earlier depository receipt is a just kind it is a, it is in the form of a debt instrument where the domestic company, domestic company try to create a debt, debt instrument by keeping some kind of equity shares of the company. in the and issuing debt, debt type of receipt which will be listed and traded in across the globe.

When I mentioned here depository receipt you have to understand that there are two different kind of depository receipt. One is called ADR that is American depository receipt another is called GDR or global depository receipt. Both, both the global depositories and American only difference is here, in case of American depository receipt is listed in America that is U S A and global depository receipt can be listed in any country GDR's are primarily issued and traded in London and Luxemburg stock exchanges and these are instrument where where the underlying asset is equity on which the depository receipts are designed.

Depository receipts when I mentioned here are negotiable receipt of security issued by the foreign company, but listed and traded in domestic stock exchanges denominated in the home currency of domestic country. So depository receipts are negotiable instrument that is negotiable means it can be exchanged from one hand to another hand, with the right for selling it. That depository receipts are traded listed and traded in home currency of exchange where it is listed, and it is also the depository receipts are in the form of a specific company shares and shares are underlying instrument on which the depository receipts are designed. When in a DR or depository receipt the company declare the dividend in its home currency.

That this dividend is converted into home currency of the DR investor. Suppose Infosys depository receipts. That Infosys company are listed in India ,a listed and it has a cross listed in NASDAQ. So when Infosys declare a dividend it pay dividend in rupee, Indian

INR. However there is a organisation which take cares of the DR of the Infosys company takes the dividend in INR, convert it into U S dollar and pay to the U S dollar investor in dollar term. So, depository receipts there is a home country, home currency. That is the Infosys has no nothing to do with the appreciation, depreciation of dollar or rupee or a foreign exchange risk that is the depository receipt organisation or the DR. We will be discussing about the same thing, DR take care the risk of the foreign exchange foreign exchange.

Depository receipt as I mentioned it is a underlying assets or equity upon which that a depository receipt created and depository receipts are listed either in in a NASDAQ or NYSE or Luxemburg or London and traded and investor in abroad, they purchase the depository receipt and get the dividend, what is dividend in the form the in the form of their own currency. So, depository receipt is a source of income, source of what is called a negotiable instrument, a source of investment opportunity.

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Cross-Listing of Shares: Depository Receipts

- Lack of foreign exchange to expand business
- Low /negative rating of domestic economy.
- Lack of proper valuation of companies
- Low investor base
- Stringent guidelines for issues and listing
- Foreign currency risk
- Payment of dividend in forex
- Grievances of abroad investors

Since it is a negotiable it can be exchanged from one hand to another hand and the rights are continuing with the receivers. When I mentioned the cross listing of share, the depository receipts has number of benefits and also opportunity. The benefits and opportunity, why the company issue depository receipts we have to understand that. What are the benefits or opportunity the companies are getting by issuing GDR? When I mentioned the DR, it is a depository receipt here. Lack of foreign exchange to expand

business, prior to reform measure foreign companies were getting foreign currency, foreign currency by in the form of debt instrument.

However, the currency they are getting because it was affected because of the domestic country, domestic country risk because India prior to reform their rating sovereign rating was quite low. No abroad company were interested to provide foreign currency loan to the domestic company. However, domestic companies are good, but the sovereign rating reduces the overall position of the company. The foreign company get the, domestic companies were getting the benefits of the foreign exchange only when they the country liberalise the foreign exchange market.

The low or negative rating of the domestic company, domestic economy created problem for the company which are good and they are in the in in in in their own country. Then the companies were despite being good, fundamentals are good they are good company in the form of potential to expand their business. However because of the because of the domestic economy crisis or domestic economic problem, they are lack of sovereign rating they were not getting proper valuation of the company, for their company.

Low investor base. Domestic economy is like emerging market investor appetite is not good as compared to developed country. So low invest, low investor base also not possible for them to raise capital significantly from the domestic market. There are stringent guideline to go abroad and issue the shares. There are stringent guideline in the form of capital account convertibility, the guideline in the form of converting the balance sheet into abroad country balance sheet, their guideline in the form of absorbing the foreign stock exchange listing process.

So, these guidelines where very stringent and that was not possible on the part of domestic company to abide by the guideline and issue shares in domestic market. Then if the issue share also there is a foreign currency risk, the foreign currency risk because they have to pay dividend in the foreign currency and any fluctuation in the in exchange rate create foreign currency risk. Similarly, payment of dividend in Forex it was a quite difficult for them. They cannot pay foreign currency dividend because foreign currency if they are raising resources in foreign currency, if the outflow in the form of foreign currency it will create problem for them. Then also abroad investor supposed to know

about the company, abroad investor supposed to get grievances for abroad for their equity, for their any kind of problem.

So, abroad investor may not interested to invest the company because they do not know about the company. Similarly, the grievances in the of abroad investor getting it very difficult, resolving it also further difficult. These are the some kind of risk for domestic company to divert, the convert their equity into foreign currency equity and list directly in stock exchange. It is not possible for them domestic company to directly list in stock exchanges, there should become indirect way of listing the company's share and getting resources in foreign currency. This indirect way provide by provided by the DR or depository receipt.

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Cross-Listing of Shares: Depository Receipts

DRs: Depositary Receipt represents ownership of equity shares in a foreign company. These shares are issued against ordinary shares held in custody in the issuer's home market.

DR Ratio: Each depositary share issued represents a certain number of underlying shares held in custody in the issuer's home market.

DR Certificate: Resembling an ordinary share certificate, the DR certificate contains the general terms and conditions of the depositary receipt that apply to DR holders.

So, what is the depository receipt? We have to understand the mechanism of cross listing or depository receipt. There are some points salient features of depository receipts, that features are here. DR or depository receipt represent ownership of equity in foreign company, when a company, company issue DR which is nothing but depository receipt represent ownership equity shares in foreign company. These share are issued against ordinary share held in custody in the issuers company home market.

The Infosys issue DR, so underlying asset is Infosys company equity on against ordinary share of the Infosys company on it the DR are issued. There is a DR ratio because how many domestic company, how many equity of domestic company equivalent to one DR?

What is called DR ratio. DR ratio is nothing but each depository share issued represent a certain number of underlying shares, ordinary share held in custody in the issuers home market.

So Infosys share 1:2, in case of Infosys a DR a DR ICICI bank is 1:2. So two domestic company share is equivalent to one DR. This is called DR ratio. DR certificate, DR certificate is resembling an ordinary share certificate. Once that equity share gathers and converted into DR as per the DR ratio, that DR certificate issued by the issued by the depository institution and DR certificate is nothing but a negotiable instrument. It is a ordinary share certificate and contain general term and condition of what is, which is applicable to DR holder. DR holder get the certificate and get the normal what is called that guideline, how to sell it, how to purchase it, how to negotiate about the share the DR, how many share domestic share in domestic company shares are there with the DR and DR certificate resembles what is called a ordinary equity share certificate. When I mention here DR, DR ratio, DR certificate these are the terminology associated with the DR receipt.

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Cross-Listing of Shares: Depository Receipts

Trading: DRs can be listed on a major exchange. DRs may also be unlisted, and trade in the over-the-counter (OTC) markets, or be privately-placed with Qualified Institutional Buyers.

Settlement: DRs trade and settle in accordance with market practice in the markets in which they are traded.

Currency risk: Although DR denominations match the currency of the market in which they trade, currency risk associated with investments in foreign companies is not eliminated.

So, also how that trading takes place of DR? DR represent underlying assets. What is asset? Is an equity and number of equity, how many numbers of equity, ordinary shares of the company equivalent to one DR, it is a DR ratio and all DR's are listed and traded in abroad foreign stock exchange. So, trading process, DR can be listed on a major

exchange any exchange of the world, DR may also be utilized and traded trade in over the counter market, it is a OTC product or may be privately placed with a qualified institutional buyer. DR may be a privately placed shares, DR may be a listed company, listed share, DR may be a OTC product, over the counter product. How the settlement takes place? DR's are trade in and settled in accordance with the market practice and that DR settlement takes place as per the settlement of the stock exchanges. When DR's are sold their holder get the get the payments in the form of foreign currency, the DR's represent some kind of ordinary shares.

The ordinary share will be sold in the domestic market as per the market price. The the market price will be converted into domestic foreign currency and foreign currency will be given to the DR holder, which actually held actually be there in a foreign country. The currency risk, the currency we are converting GDR into domestic currency, domestic home currency and home currency again into foreign currency involve some kind of currency risk. The currency risk absorbed by the DR institution, what is called a representative company, which actually issue the DR certificate that take care of the foreign currency risk.

Although DR denomination match in match the currency of the market in which they trade. The currency risk associated with the investment in foreign company is not eliminated. The foreign company which actually represent the as a DR, DR issuing company they are absorb the foreign currency risk.

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Cross-Listing of Shares: Depository Receipts

- Creates, broadens or diversifies investor base to include investors in other capital markets.
- Enhances visibility and global presence among investors, consumers and customers.
- Increases liquidity by tapping new investors.
- Develops and increases research coverage of the company.
- Improves communication with shareholders globally.
- Enables price parity with global peers.
- Offers a new venue for raising equity capital.
- Facilitates merger and acquisition activity by creating a desirable stock-swap "acquisition currency."

When I mentioned the cross listing of depository receipt, what kind of benefit the company gets? The company creates, the company which issued the DR creates broadens and diversify the investor base to include investor in other capital market.

The domestic company get creates a different kind of investor, which is a which are foreigner in foreign investors. So their domestic equity listed in domestic market at the same time their ADR and GDR listed in abroad. So they get two different kind of investors that these two different investor create valuation for the company and generally abroad investor get the benefit, generally have the more appetite for risk, they create good valuation for the domestic company.

The DR also enhance the visibility and global presence of company because of the diversified investor base and also the customers and consumer customers of the company the the customer of the company also get benefit out of the valuation of the company. It develops what is called more liquidity, increase the liquidity of the company because new investor has come, the investor buy and sell their shares, so there will be more liquidity in the domestic equity of the company. Develops and increases coverage of the company because now share has been listed in abroad cross listed are cross listings are there.

So a researcher, the equity market researcher try to cover the company, try to create try to create more try to get more information about the company, the more information and

research coverage of the company will increase the valuation of the company. So, since the company is more market oriented, so the company will be more disciplined in natures because a company try to try to not to do such kind of activity such kind of such kind of policy measure which can effect negatively about the company.

So always after the cross listing company are more disciplined in nature and they try to try to communicate with the shareholders globally through different mass media communication and also through policy measures. So enables price parity of the global peers because they when they list in a cross, cross listed their share they try to increase the visibility of the company, try to perform with the peers of the abroad. So they will always try to do such kind of activity which increases the valuation of the company. Offers new avenue, new venue of for raising equity capital because now they are cross listed they, they can go for more dilution of the equity. They will get more good valuation for the company, further dilution of the equity they will get more equity capital, more premium for their own domestic shares.

Then, since their activity are abroad the abroad a stock exchange they are listed now it facilitate the merger acquisition activity, creating a desirable stock swap acquisition currency. Suppose, the company try to get good try to get some kind of merger or acquisition abroad company their valuation, since they are listed abroad they will get good kind of swap, swap conversion. The conversion of domestic company share into a abroad company share they will get a good swap, stock swap. The acquisition of currency or the valuation of the company increase the increase the merger acquisition process and the acquisition merger, acquisition process because of the cross listing they get good valuation of the own company shares.

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DR Issues: Costs & Risk

Costs of DR issue

- Companies have to pay for the, depository fee, listing fee, audit fee.
- Entry fee and annual fee to the exchange where DRs are listed.
- Companies have to prepare their annual report as per the GAAP of the foreign country.
- This cost can be substantial, specifically for an Indian company where the DR costs are denominated in USD.

Risk of DR Investment

- Exchange rate change affect the dividend repatriation
- Change in withholding tax in the foreign country
- ADRs/GDRs are inherently illiquid as the proportion of ADRs/GDrs are less compared to the total outstanding equity shares of any company.

There are some kind of risk for the company. The risk are risk are also there, it is not that there will be only benefit out of the stock listing or cross listing of share in different, different stock exchanges. There are many issues are there, the costs are huge, the costs are more in form of what is called nominal or the pecuniary cost. May be in the form of also cost in the form of what is controlling aspect. The risk, the cost are involved here company have to pay depository fee because they are issuing depository certificate, they have to get they have to pay depository fee, listing fee, audit fee, they are the cost associated with the DR issue.

They also have to pay what is called entry fee and annual fee to exchange where DR are listed. The entry because they are listing in a other country share market, so they have to pay entry fee. They also pay annual fee for trading of their DR certificates. Company have to be paid their annual report as per the global gap that is a general agreement, general agreement they have to pay, they have to convert their balance sheet and prepare the balance sheet as per the stock exchange requirements, though foreign country stock exchange requirement. So that is audit fee or the converting the balance sheet into foreign company, foreign country balance sheet also involves some kind of cost.

This cost can be sustained specifically for an Indian company where DR cost are denominated in U S D because this cost will be substantial because why substantial because audit fee depository fee, listing fee, conversion of balance sheet fee, these are

the these have to company has to pay in foreign currency and these are substantial for a Indian company. Then there are many other issues, these are pecuniary issues i told you where involves of foreign currency. There are many non pecuniary issues also there which are also in the form of cost for the company. Exchange are since the company has to company repatriate the dividend the dividend repatriation though it is not involved in foreign currency.

However, less exchange rate risk also effect the company, change there may be some with holding taxes with the foreign country. Foreign country double taxes agreements are not there then company has to bear the withholding taxes. Their ADR, GDR’s are inherently illiquid as proportion of ADR GDR’s are less compared to the total outstanding equity shares of the company. So generally we are assuming that the ADR, GDR will be traded in foreign currency, foreign exchange market, foreign country exchange, but however ADR GDR’s we have seen over the period ADR, GDR’s are less liquid compared with the liquidity in domestic, domestic market.

There are since, foreign company foreign investors are purchasing the ADR, GDR the companies exposed to foreign currency volatility. The company may will be exposed to what is called some kind of some kind of market oriented valuation of the company. The company also exposed to what is called merger acquisition process, the company may be despite ADR, GDR’s do not have voting share. However, the company may be influenced by the investor in day to day decision making process in directly or indirectly.

So, these are some other cost of also involved which are non pecuniary in natures. So the company has a pecuniary, many pecuniary cost, the cost of a depository fee, cost of listing fee, cost of audit fee, cost of conversion of balance sheet fee, cost of foreign currency risk. There are non pecuniary receipt is a market oriented valuation of the company, merger more prone to merger acquisition. So, these are the non pecuniary activity associated with the DR issue.

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Mechanics of DRs

- Domestic Market Surrender Equity shares to Depository Company.
- Depository Company decide the DR ratio
- Issue DRs Certificate to Investors in USA
- Depository Company list the DRs in USA bond market.
- Dividend would be transferred to Depository Companies in Domestic Currency.
- Investors of DRs would get the Interest (Dividend) from the Depository Company in US$.

So, what are the mechanism of DR issue? When you discuss about DR, DR provide a cross listing of shares, domestic company share in abroad market, what is the mechanics of DR issue? Domestic market in the domestic market in the domestic market shares domestic shares are surrendered to depository company. There is a depository company the depository company the depository company get the domestic equity shares. The depository company decide the DR ratio after getting the domestic company domestic equity, the company they decide the DR ratio. That is how much how many domestic company equity will be equivalent to one DR certificate.

After converting the domestic equity into DR certificate the depository receipt company issue DR certificate to investor in U S. Suppose in U S the company is getting listed in U S, the U S investor purchase the DR certificate and these depository company list the DR in U S bond market, dividend would be transferred to depository company in domestic currency and the abroad investor gets after purchasing DR get the interest or dividend from the depository company in the form of U S dollar. So that the process is here, you have to understand the process here. Here two different systems are involved, here first thing you have to understand here Infosys company.

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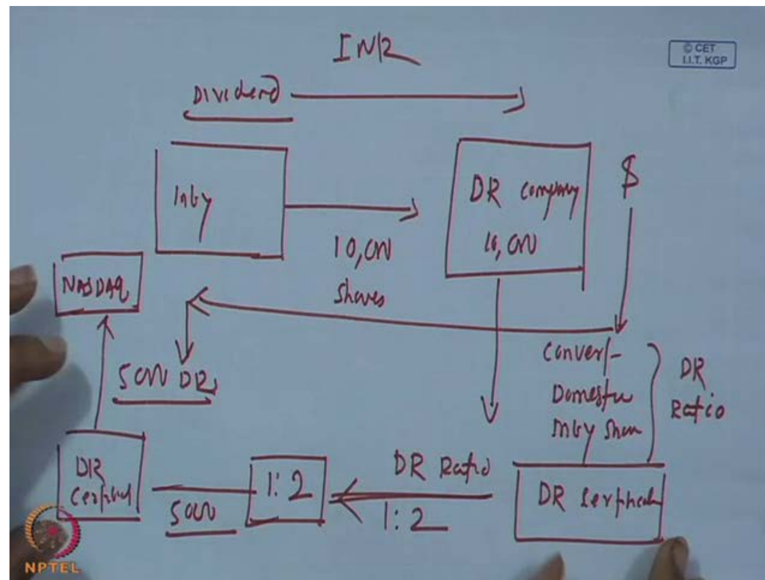

Suppose Infy, surrenders 10,000 Infosys shares, 10,000 Infosys shares through a DR depository receipt company, DR company. After DR company got 10000 shares of Infosys and DR company convert, convert the domestic Infy share into DR certificate. That DR certificate suppose they have to decide what is called DR ratio. DR ratio what is called how many domestic company share domestic equity share equivalent to one DR.

So, suppose DR ratio fixed, then DR ratio decided by the DR ratio 1:2 means for every two domestic shares there will be one DR certificate. So after deciding the DR ratio, DR ratio is 1:2, two domestic company, two domestic shares of Infosys company equivalent to one DR certificate. Then issue what is called DR certificate. DR certificate, that is here DR certificate will be 5000. 5000 DR certificate. After DR certificate issued the DR will be listed in suppose in Infosys listed in NASDAQ, NASDAQ. NASDAQ stock exchange it will be listed and who will purchase, all 5000 DR depository receipt will be purchased by U S investor, U S investor after purchasing the shares that is underlying DR is equity.

So 5000 DR, the whenever Infosys issued the dividend, Infosys issued the dividend, Infosys issue dividend. So dividend suppose dividend will be transferred to DR in the form of INR. So, they are the DR company, depository receipt company convert these DR INR into U S dollar and U S dollar will be transferred to, then here the holder of the

Infosys share, Infosys DR they will get the here the foreign exchange, foreign exchange risk absorbed by the DR company. DR depository receipt company.

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Types of Depository Receipts

- DRs can be of two types: *Sponsored, Unsponsored* depending on whether the company actively involved in the issuance of the DRs or not.
- **Sponsored DRs**
- The DRs are issued by the active participation of the company. The issuing company and the depositories enter into "depository agreement" before the DRs are issued.
- The depository receives the dividend in the foreign company's home currency on behalf the DR investors and converts the dividend into the investors' home currency and make payment to DR holders.
- The depositories also arrange DR holders to exercise voting rights.
- For all practical purpose, the depository acts as the front of the DR issuing foreign company.

This is the mechanism of converting the domestic, domestic equity into DR certificate. There are many kinds of DR certificates you have to understand that. What is the DR? DR can be two types, what is called sponsored, unsponsored DR depending upon the company activity involved in issuing that DR. The company is to involve, company may involve may not involve in DR issue. If they involve or may not involve the involvement part of the company decide whether the DR is a sponsored DR or unsponsored DR.

In case of sponsored DR, DR's are issued by the active participation of the company. The company participate in the issuing of the DR. The issuing company and the depositories enter into a depository agreement before the DR's are issued. The depository company and the issuing company, the issuing of the company which actually issued that DR, they together a sign a agreement, what is called a depository agreement. The depository receipts, depository receive the dividend in the foreign foreign company's home currency on behalf of the DR investor and convert the dividend into investor home currency and make payment to the DR holder.

The domestic company actively involved in the issuing of DR, the DR institution which actually issued the DR certificate get the dividend from the domestic company in the form of domestic currency, convert into investor company investor, investor country

home currency and pay to the DR holder. The depositories also manage the DR holder to exercise voting right. So the depository institution gets the total voting of the DR holders and provide the in voting right voting right to the in domestic company which is there in India.

For all other practical purpose the depository acts as act as a front, in the front or front office for the DR issuing foreign company, the DR issuing foreign company. So here the sponsored DR the domestic company actively participate in the DR issue, they though they engage a DR company for issuing certificate, they also they try to manage that DR issue with the actively participating with the DR institution.

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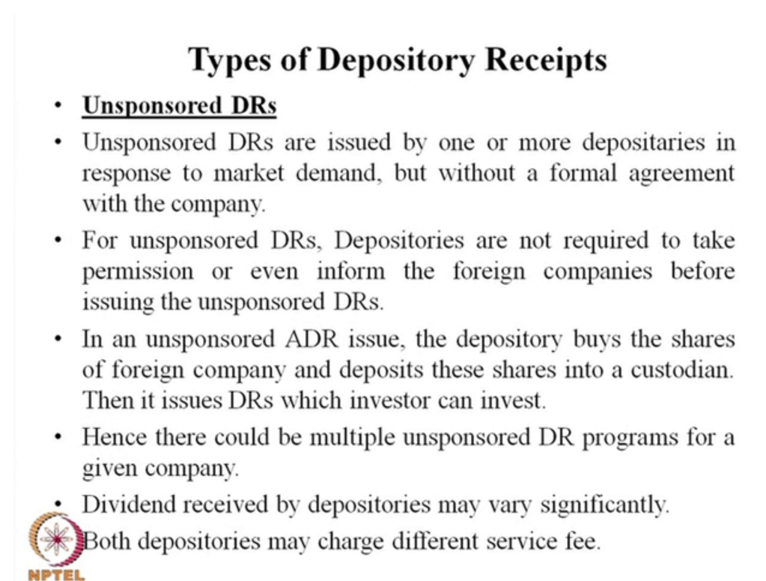

But in case of unsponsored DR, unsponsored DR the unsponsored DR's are issued by one or more depository institution. They there will be, the there may not be any formal agreement with the company. The company suppose Infosys issued DR, there may not be any formal agreement with the Infosys company. Many DR institution they convert their domestic company equity and in the form of DR issue, but here a unsponsored DR there may not be any agreement with the domestic company. The DR institution they them self purchase convert the domestic company equity and convert into a DR certificate. For unsponsored DR depositories are not required to take permission or even inform the foreign company before issuing unsponsored DR.

The unsponsored DR there is no formal agreement between the company against which share the DR’s are issued. The company may not know also, but the depositary institution create some kind of DR. So it is a unsponsored DR, there is no activity of the company against which share DR’s are issued. In a unsponsored ADR depository buys the shares of foreign company and deposits the share into a custodian. Then it issue the DR with the which investor can invest.

Since, there could be multiple unsponsored DR any company, any depository institution can create DR for any company. So dividend received by the depositor may be vary a significantly. Both depository both depository may charge different service fee, so there may not be any kind of and formal agreement with the company which company against which share the DR’s are issued. So in case of unsponsored DR, many DR will be there, many depository company will be there. However the formal agreement with the company against which shares ADR issued may not be there.

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Level I, II, III and Privately Placed DRs

- **Level I:**
- Sponsored Level I Depositary Receipt program is the easiest ways to list DRs and it is the fastest growing segment among all sponsored DR programs all over the world.
- In a Level I DRs, the company cannot raise any fund by issuing new securities as DRs.
- Companies issuing Level I DRs do not have to abide by the listing requirements set by the regulatory body.
- These DRs normally trade in the OTC (Over-the-Counter) market.
- Level I DRS are subjecting to easy/no listing requirement. In fact, Level-I ADRs does not require the issuing company to recast its accounting statement as per US GAAP.

So, there is no activity on the part of the company against which the shares are the ADR or DR GDR’s are issued. So there are many kinds of levels of DR, level one, level two, level three and privately placed DR’s are there, depository receipts are there. In case of sponsored level one depository receipt program, is the easiest way to list the DR and it is the fastest growing segment among all sponsored DR programme all over the world.

Level one DR is a sponsored, level one DR generally all companies are issuing depository receipt on level one sponsored DR.

In a level d level one DR the company cannot raise any fund by issuing new security as DR. There is no further issuance of share is not a way of raising money, only a way of valuation of the company. That is the only reason the companies are issuing level one sponsored DR. Company issuing level one DR do not have to abide by the listing agreement, listing requirement of the regulatory body. These DR normally traded trade in OTC over the counter market and level one DR's are subject are subjecting to easy or no listing requirement. In fact level one ADR does not required the issuing company to recast its accounting statement as per the U S GAAP.

There is no requirement level one sponsored DR, sponsored DR is very easy way to raise list the company in abroad market or cross list the company in abroad market. There is no listing guidelines for that, there is no need of recasting the balance sheet into as per the U S GAAP arrangement and it is DR, level one DR's are over the counter and and these are traded as per the over the counter. So it is very easiest way to issue the shares.

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Level I, II, III and Privately Placed DRs

Level II and Level III Sponsored ADRs:

- Level II Depositary Receipts are exchange-listed securities but the issuing company cannot raise capital.
- In a Level III programs, the company can list its DRs in foreign stock exchanges as well as raise capital from the foreign investors.
- Both Level II and Level III DRs require the company to abide by all listing and reporting requirement.
- Level II DRs programs are easier than the Level III DR programs.

But level two and level three sponsored ADR sponsor ADR requires the exchange listed sales, they need to be listed in cross listed their share in the abroad market. In level three program the company can list a DR in foreign stock exchange as well as raise the money from the abroad. The both level two and level three are required for the company to

abide by the all listing or reporting guideline as per the requirement of the stock exchanges. Level two DR program are easier than the level three DR program. So, you have to understand level one is level one sponsored DR on the in the form of a what is called getting valuation for that company. Level two and level three sponsored a DR or GDR in the form of a raising capital and requirement of listing of the company in in foreign currency in foreign exchange, foreign country stock exchanges.

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Indian Companies : ADRs

Company Name	DR Listing Exchange	Level	Type	ADR/Domestic Share ratio	Issue Year
DR REDDYS LABORATORIES LTD	NYSE	LEVEL III	Sponsored	01:01	Apr-2001
GRASIM IND. LTD	OTC	LEVEL I	Sponsored	01:01	Jul-1999
HDFC BANK LTD	NYSE	LEVEL III	Sponsored	01:03	Jul-2001
ICICI BANK LTD	NYSE	LEVEL III	Sponsored	01:02	Mar-2000
INDIA HOSPITALITY CORP	OTC	LEVEL I	Sponsored	01:10	Aug-2010
INFOSYS TECH. LTD	NASDAQ	LEVEL II	Sponsored	01:01	Mar-1999
JK LAKSHMI CEMENT LTD	OTC	LEVEL I	Sponsored	01:01	Oct-1999
MAHANAGAR TELEPHONE NIGAM	NYSE	LEVEL II	Sponsored	01:02	Aug-2001
PATNI COMPUTER SYSTEMS LIMITED	NYSE	LEVEL III	Sponsored	01:02	Jul-2005
REDIFF.COM INDIA LTD	NASDAQ	LEVEL II	Sponsored	01:00.5	Jun-2000
SATYAM COMPUTER SERVICES LTD	NYSE	LEVEL III	Sponsored	01:02	May-2001
SIFY LTD	NASDAQ	LEVEL II	Sponsored	01:01	Oct-1999
SILVERLINE TECH LTD	OTC	LEVEL I	Sponsored	01:10	Jun-2000
SOUTHERN PETROCHEMICAL IND.	PORTAL	144A	Sponsored	01:05	Jan-1993
STERLITE INDUSTRIES INDIA LTD	NYSE	LEVEL III	Sponsored	01:01	Jun-2007
TATA COMMUNICATIONS LTD	NYSE	LEVEL II	Sponsored	01:02	Aug-2000
TATA MOTORS LTD	NYSE	LEVEL II	Sponsored	01:01	Sep-2004
WIPRO LTD	NYSE	LEVEL III	Sponsored	01:01	Oct-2000
W[illegible]S HOLDINGS LTD	NYSE	LEVEL III	Sponsored	01:01	Jul-2006

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Level two and level three are difficult, level one are easiest way to easiest way to covert the domestic equity into DR receipt. When you understand these level one level two level three DR process, there are many company you can see in Indian context issued the DR certificate you can see Dr Reddy's the listed in NYSE is a level three DR, sponsored DR and the a d the domestic share ratio, the DR ratio is 1:1 is listed in two thousand one.

Similarly, Grasim, HDFC bank, ICICI bank, India hospital these are the Infosys company all these company have over the year raised the convert their domestic equity into DR and also some of them raised shares, some of them raised the capital from the market, some of them only listed their share in cross listed their shares for valuation purpose. So we have some extent some guidelines have been abide by the this company while issuing in converting their domestic equity into DR, DR type of depository receipt.

Here you can see all the company I have gathered the data from the India, Indian stat. You can see go through that and see how the company over the year issue level one,

level two, level three, sponsored, unsponsored DR type. All are sponsored DR there is no unsponsored DR is really available in Indian context. All are sponsored DR and they have issued the convert their domestic equity primarily to raise capital and also some of them also has gone for only the cross listing to get the good benefit of valuation purpose.

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Indian Companies :GDRs

Company Name	DR Listing Exchange	Level	Type	GDR/Domestic Share ratio	Issue Year
ABL BIO-TECHNOLOGIES LTD	LUXEMBOURG	REGS	Sponsored	01:05	Jun-08
ACCENTIA TECHNOLOGIES LTD	SINGAPORE	REGS	Sponsored	01:01	Feb-08
ADITYA BIRLA NUVO	PORTAL	144A	Sponsored	01:01	Jan-94
AFTEK INFOSYS LTD	LUXEMBOURG	REGS	Sponsored	01:03	Jan-2003
AMTEK AUTO LTD	LONDON	REGS	Sponsored	01:02	Nov-2004
APOLLO HOSPITALS ENTERPRISE LTD	PORTAL	144A	Sponsored	01:01	Jul-2005
ASAHI INFRASTRUCTURE & PROJECTS LTD	LUXEMBOURG	REGS	Sponsored	1:100	Apr-2009
BAG FILMS & MEDIA LTD	LUXEMBOURG	REGS	Sponsored	01:10	Feb-2010
BAJAJ AUTO LTD	LONDON	REGS	Sponsored	01:01	Aug-2008
BAJAJ FINSERV LTD	LONDON	REGS	Sponsored	01:01	Aug-2008

So, if you see there are some Indian companies GDR issue, over the year how they have issued the GDR type some companies have also there.

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Arbitrage and Fungibility

- Domestic equity, denominated in Indian Rupee and DRs in foreign currency, trade in different markets, it gives rise to arbitrage opportunity.
- Any price differential in DRs value and corresponding value of Indian equity in domestic market leads to arbitrage.
- If the arbitrage is significant and beyond the transaction cost of converting DRs to domestic equity or the *vice versa* investors would enjoy the arbitrage.
- Prior of 2009, Govt. of India only allowed DRs to be converted to underlying shares and not the other way around –"one way fungibility". This led to significant arbitrage. But since 2009, "two way fungibility" has been permitted and thus, arbitrage is hardly available.

Here you can see the concept what is called arbitrage opportunity and fungibility. In the prior to nineteen and a what is called understanding the arbitrage opportunity in DR issue, we have to understand the process of arbitrage here. The process of arbitrage you have to as I mentioned earlier, DR's are depository certificate in the form of a debt instrument. By however the underlying DR's are domestic equity.

So, all DR's get their value from the share market equity value set of the company in domestic market. So, it may happen there DR which are cross listed in abroad and the domestic equity which are listed in domestic market may have two different kind of valuation. The two different kind of valuation may give raise to arbitrage opportunity. So, but arbitrage opportunity initially it was available to in foreign, foreign investor and because of the fungibility reason.

However, after some years when government of India and the SEBI liberalised the fungibility guideline, it is a available both, both to the domestic investor and foreign investor. Before going to the arbitrage opportunity you have to understand domestic equity, denominated in Indian rupee and DR's are in foreign currency. So trade in different market gives rise to arbitrage opportunity. The domestic equity in domestic company in listed in domestic market and their valuation they get as per the valuation of the investor of domestic market. DR's, no doubt the underlying is domestic equity, but it is denominated in foreign currency and listed in a foreign market and investors also different, investors are foreigners.

So, investor perception changes there will be valuation of the company also changes. At the same time foreign currency fluctuation, fluctuations are there, the valuation also affected because of this reason. Any price differential in DR and corresponding value of Indian equity in domestic market leads to arbitrage opportunity. If the arbitrage is significant in beyond the transaction cost of converting DR into domestic equity and vice versa, investor would enjoy the arbitrage.

Prior to two thousand nine the government of India only allowed the DR to be converted into domestic equity, for underlying domestic share and not the other way round. So, one way fungibility was there and because of one way fungibility the foreigners were getting the benefit of the arbitrage opportunity. After two thousand nine government of India realised this and the two way fungibility they have created, so two way fungibility means

the domestic market domestic market, domestic investor can purchase ADR, GDR, at the same time abroad market the DR can also purchase the foreigner, foreign investor can also purchase and sell domestic company ADR, domestic company equity.

So two way fungibility reduce the arbitrage opportunity. These are because of because now two way fungibility is there any valuation change, any valuation change suppose Infosys share more price in domestic market, then the Infosys share listed in NASDAQ investor will purchase DR and convert into equity and domestic equity of Infosys and get the value. Suppose DR is highly priced then domestic equity then Indian investor will purchase DR and convert it into domestic equity and get the benefit.

So two way fungibility has reduced the opportunity of arbitrage and valuation of investor perception over the period reduced significantly and there are may be a rare possibilities are there, there will be some arbitrage beyond the transaction cost. Because to understand the arbitrage opportunity, let us do a arbitrage problem in ICICI bank equity shares.

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Problem

ICICI Bank's ADR is listed in NYSE with a share ratio of 1:2. As on Feb 12, 2013 at NSE its share price was hovering around Rs.1140.95 while at NYSE its ADR was hovering around US$43.71. ADR and domestic equity transaction cost is US$0.25. Is there any arbitrage opportunity between ADR and domestic equity of ICICI Bank, if US$1: Rs.53.82?

Here you can see ICICI bank ADR is listed in NYSE and the DR's ratio is 1:2. As on February 12, two thousand thirteen the NSE market ICICI bank share price hovering around 1140.95 rupees while at the at the ADR while at the NYSE the ADR's of ICICI bank is hovering around 43.71 U S dollar.

The ADR and domestic equity transaction cost is 0.25 U S dollar. If there any arbitrage opportunity between ADR and domestic equity of ICICI bank, if the dollar rate is as on February 12, 53.82 rupees. Here you have to understand that ICICI bank domestic market.

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ICICI bank domestic equity, here you have to understand the date is February 12, 2013 and U S dollar rate is 53., 53.82 INR. This is the guideline for U S, domestic price one ICICI bank share is 1140.95 rupees and ADR of ICICI bank listed in NYSE, New York stock exchange and hovering around hovering around ADR price is U S dollar 43.71 and

DR ratio, DR ratio that is depository ratio that is 1 ADR, ADR 1 equal to 2 ICICI, ICICI bank domestic share, 2 ICICI bank domestic shares.

Now 1140 rupees and conversion rate, the conversion fee, transaction cost conversion rate or conversion fee is U S dollar 0.25. If you convert you have to pay a transaction cost of 25.25 U S dollar. Now is there an arbitrage opportunity, given the exchange rate 53.82. What you supposed to do? Now, first you assuming that there is a arbitrage opportunity. What you will do? Now two equity shares of two equity shares of ICICI bank is equivalent to 1 ADR, 1 ADR is running at 43.71.

So, 43.71 you have to convert this ADR 43.71 into 1 dollar price is, 53.82 then it is equivalent to, if you see that I convert it ICICI bank equity price. So two domestic equities have you have to convert exchange rate 53, so 1 ADR which equivalent to INR. If you multiply this, so it is coming around 2352.47, 2352.47. Now so 1 ADR is equivalent to 2352.47.

Now, two domestic equity equal to 1 ADR, equal to 1 ADR, so question is two domestic equity price will be how much? One price is 1140.95, two will be two will be how much, into two. So it will be in domestic market, domestic market two equity shares of ICICI bank, two equity shares of ICICI bank equivalent to how much, one it will be if you multiply 2 into 2 into 1140.95 is equal to, it is coming 2281.90, 2281.90,but this 2 a two equity equity shares of ICICI bank equivalent to 1 ADR but 1 ADR is equivalent to 23.52.

Now, you see there is a clear difference these two price. So, but difference is how much? Difference is difference is 2352.47 minus 2381.97, that difference is something around rupee equivalent transaction, the difference is something around 69.57. So if you purchase Indian market in India market you purchase ICICI bank share two ICICI bank convert into ADR and sell in NYSE market, New York market you get the benefit of 69.57, but that is equivalent of transaction cost, transaction cost is equivalent to how much?

Transaction cost is ninety five 0.25 dollar into 53.82. So transaction cost equivalent is 13 rupees, 13.45 rupees. Conversion, if you minus 13.45 in this is from this 69.52 till we are getting the benefit of arbitrage opportunity, but this arbitrage opportunity available only

for few second. So few second you have to the, investor have to more whistle to get the arbitrage opportunity.

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Answer

ADR Price in NYSE	US$ 43.71		
ICICI Bank Equity Price in NSE	Rs.1140.95		
Share Ratio : One ADR	Two Domestic Equity		
Exchange Rate : US$1	Rs.53.82		
One ADR price	Rs.2352.47		
Two Domestic Equity Price	Rs.2281.90		
Two domestic equity share is equal to one ADR			
Hence the arbirage price difference between ADR and domestic equity is Rs.69.57			
Transaction cost	US$0.25		
Rupee equivalent transaction cost	RS.13.455		
Arbitrage Profit	Rs.56.115		

You can see the answer here, here ADR price is 43.71. So, ICICI bank equity price is 1140 in domestic market. Share ratio is one ADR, one ADR at two domestic equity shares. So exchange rate is 53.82 rupees on 12 March, a 12 February. So one ADR price will be, if you multiply 53.82 into 43.71, so one a DR price in domestic money INR price, INR will be 2352.45.

However, two domestic equity price, if you multiply 1140 into 2 you will get 2281.90. So, that arbitrage opportunity is 69.57, that is price differential between these two, 69.57. If you convert domestic equity into ADR, then you will you have to pay a transaction cost of 0.25 U S dollar. So 0.25 U S dollar is equivalent to 13.455 Indian rupee, if you multiply 0.25 into 53.82.

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So now arbitrage profit is 69.57, 69.57 minus this 13.45, arbitrage opportunity is 56.15. The references, you can go through the references, these references I have mentioned here and some question.

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I have model question for you. What rules that depository play in the issuance of maintenance, issuance and maintenance of depository receipt. Here you have to mention the rule of the depository institution. Second question is, what are the main difference between sponsored and unsponsored depository receipt and why why all Indian ADR,

GDR's are sponsored? Sponsored unsponsored I, we have discussed sponsored and unsponsored ADR, GDR. Here you have to mention what is the rule of the, different rule of the company and in case of sponsored, the rule is more. In case of unsponsored there is unsponsored there is no rule of the domestic company. Third question what is two way fungibility and what are the benefit of having two way fungibility? Two way fungibility is fungibility is nothing but converting domestic share into ADR or GDR, at the same time converting the ADR, GDR into domestic share price. The two way fungibility reduce the arbitrage opportunity, you can we have discussed that you can discuss the same thing.

Thank you.