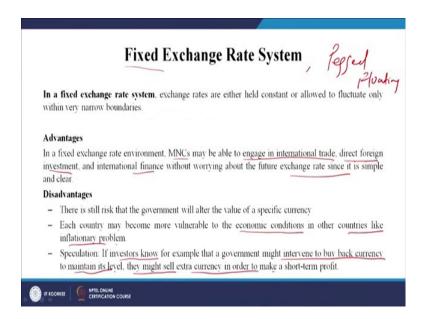
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## Lecture – 32 Exchange Rate Systems, Currency Convertibility, Types

Welcome friends to our course on International Business. So, in the last lecture we have we are discussing about foreign Exchange Rate Systems and in which we talked about three basically, exchange rate system; one being the fixed exchange rate right and then we talked about the which is another which is close to the fixed exchange again the called the pegged system and then the floating system right.

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So, generally you find some authors talking about fixed and floating rate system which is also correct. So, the pegged is more like the fixed exchange rate system. So, we discussed that in the fixed exchange rate as the name suggests the government tries to keep it constant right.

So, what it says? The exchange rates are either held constant or allowed to fluctuate only within very-very narrow boundaries right. So, what are the advantage of a fixed exchange rate system? As the name from the name you can understand it is very simple.

There in a fixed exchange rate environment, the corporations maybe able to engage in international trade direct foreign investment and international finance without worrying about the future exchange rate since, it is simple and very clear right. So, suppose I know that the it is a fixed exchange rate. So, in the future also I know it would be the same value. Suppose, Indian 1 dollar is equal to 70 rupees as of today let us say and then I if I go for a fixed exchange rate system for any transaction so; that means, we would do the business on basis of this 70 rupees and we are not worried about whether it changes or not right.

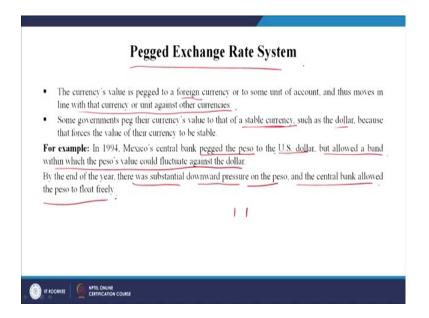
So, we would like to keep it constant right, but this is an if this is an advantage, because it is simple and clear, there is also a disadvantage right. So, what are the disadvantage? There is a risk that the government will alter the value of a specific currency right.

Some or other the time the government will try to change it, because looking at their perspective, their benefit, the kind of advantage they can get, they would like to change the value of the exchange rate the currency right. So, in such a condition it becomes difficult if you are following a fixed exchange rate system. Each country may become more vulnerable to the economic conditions in other countries like inflationary problem.

That means with the change in the economic condition in other places and correspondingly the country may become more vulnerable. So, it would like to change its you know, exchange rate right. So, in that condition also there is a disadvantage because you are fixed you cannot move right. The third biggest problem is that if investors know for example, that a government might intervene to buyback currency to maintain its level; because since the government wants to keep at a fixed rate it has it will buy back the currencies from the market right.

So, the investors what they will do? They might sell the extra currency in order to make a short term profit. So, speculators will be highly active and they would like to make the you know situation take advantage of the situation that the government may surely try to buy the extra currency from the market. So, they would like to make a business out of it and try to take advantage. So, these are the you know the adverse impacts of a fixed exchange rate system.

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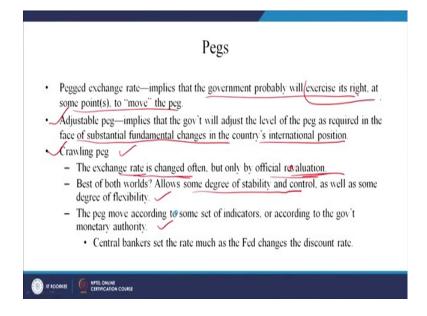


Then after that comes the pegged exchange rate right, which is called pegging basically pegs right. So, what is pegging? The currency's value is pegged to a foreign currency to a foreign currency or to some unit of account, and thus moves in line with that currency or unit against other currencies right. Let us see some governments peg their currency's value to that of a stable currency.

Now, a stable currency is maybe dollar right, because that forces the value of their currency to be stable right. Let us take this example in 1994 Mexico, central bank pegged the peso to the US dollar, but allowed a band within which the peso's value could fluctuate against the dollar right.

That means, sometimes it becomes simple for the international business to peg your or; that means, to fix your currency against another strong currency right. So, any stable currency as the dollar or the euro right, anything right. So, but in order to keep some flexibility some variation, to allow some variation a small ceiling is allowed right. By the end of the year, there was substantial downward pressure on the peso and the central bank allowed the peso to float freely, but because there was substantial pressure on the peso the Mexican government a central bank allowed the peso to float freely, because they found the fixed exchange rate without the pigging system was not working for them right.

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Now, what are pegs? Let us see. Pegged exchange rate implies that the government probably will exercise, it is right at some points to move the peg; that means, when you are fixing it against some stable currency pegging means that you can change the peg that you can fix you can change the position in some point of time right. So, the government according to its requirement can exercise its right to move the peg. Peg means just a point which can be fixed which can be moved right.

Now, what is this adjustable peg? Let us see. It implies that the government will adjust the level of the peg as required in the face of substantial fundamental changes in the country's international position.

Now, basically if we simply understand if to make it very simple. A peg is something where you are trying to compare or you know position yourself against another currency which you feel is more less volatile or more stable right.

In the crawling peg the exchange rate is changed very often. So, one is adjustable peg the other is crawling peg. So, here the exchange rate is changed very often, but only by official reevaluation right re-evaluation. The best of both worlds allow some degree of stability and control as well as some degree of flexibility the peg moves according to some set of indicators or according to the governments monetary authority.

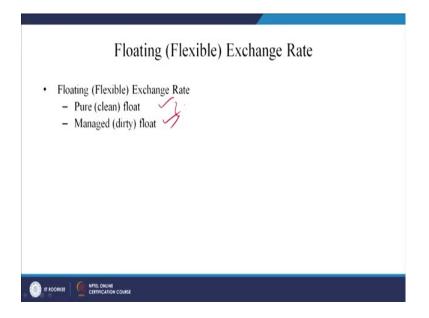
Now, I am you must be thinking why and what factors are affecting the movement of the peg right? So, how do they decide? See you have to just think very openly that whenever there is a you know international business happening alright. So, the countries stand might be the countries position might be in a positive or a negative position right, adverse position. So, according to its condition; its export condition; its import condition; it is you know it is debt; situation and all these taken together. It decides whether to move the peg accordingly change it or what is best?

Should it have a fixed exchange rate? Let us say 70 and it will not change or it should allow it for some changes right? Change the you know as per the you know other currency on which you are depending peg pegging your currency against the lesser the dollar.

So, should you shift slightly, but that cannot be too much right or you want to leave it onto the open market the market forces and which will be entirely decided upon the demand and supply. So, what you should do? So, in the last case when you saw, it was like for example, in this case the Mexican peso they finally, they moved from a peg to a pegging system or a fixed system you can say largely to a completely a floating system right.

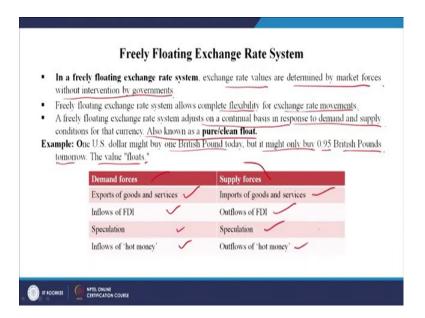
So, several all these have their own advantages and disadvantages, but today in a very volatile and a very dynamic world, fixed rate systems are found to be less efficient largely right. The central bankers set the rate much as the fed changes the discount rate.

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Now, floating exchange rate which is entirely depending on the market. So, the floating exchange rate are of two types; the pure float, the dirty float right. What they are? Let us see first.

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In a freely floating exchange rate system, the exchange rate values are determined by the market forces without the intervention of the governments. In the fixed, what has happening? There was a complete rigidity, complete control over the by the government, the government fixed what? How should be the exchange rate in the peg? The

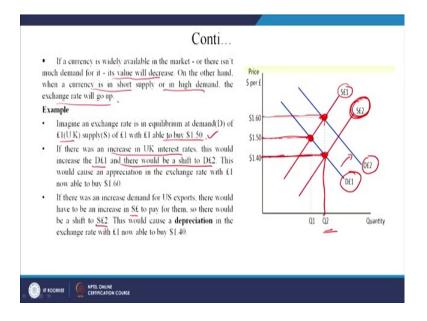
government allowed some flexibility in the free float. There is nothing everything is decided by the market. The free floating exchange rate system allows complete flexibility for exchange rate movements right.

A freely floating exchange rate system adjusts on a continual basis in respond to the demand and supply. This is also known as a pure or a clean float; that means, in simple terms it there is no intervention by the government or the banks or the central bank, it is entirely decided by the demand and supply that happens for that particular currency right.

1 Us dollar might buy 1 British pound today, but it might only buy 0.95 British pounds tomorrow, the value floats right, it changes. Now, the demand forces and the supply forces ok. So, the exports of goods and services; the imports of goods and services, the inflows of FDI; outflows of FDI; the speculation right, the speculation; the inflows of hot money or the outflows.

What is hot money? Hot money means when the interest rate for a particular location or a place or a country is high the money shifts, the capital shifts from one place to the other place where there is a higher interest rate. So, this flow of capital is called hot money right. So, these are the points which basically dictates how the floating happens of the exchange rate right.

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If a currency is widely available in the market, let us say or there is not much demand for it, it is value will decrease. Suppose, there is there is no demand there is less demand so, the value will decrease. On the other hand, when the currency is in short supply this excess demand so, the exchange rate will go up ok. Imagine an exchange rate which is in equilibrium at demand D of 1 pound of UK right and supply of 1 pound, with 1 pound able to buy 1.5. So, what it is saying? So, the demand and supply both are at equilibrium.

So, 1 dollar, 1 pound and there is a 1 pound 1 pound of demand 1 pound of supply right and with this 1 pound with this 1 pound what it says? You can buy 1.5 value of dollars right. So, 1 this is the equilibrium state demand is equal to supply, but at that point 1 pound can buy 1.5 dollars; that means, the pound is stronger than the dollar right. Now, case 1; if there was an increase in the interest rates, because this is a case of UK, this would increase the demand of the dollar and there would be a shift to the demand 2.

Now, let us see this is demand 1. So, when it was, when this was the demand right so, originally we said at 1 at this demand right and the quantity is this much. So, you see the supply is equal to demand right, this is the condition. So, what happened? So, this is the point; this is the point. So, demand is equal to supply. So, at 1.5 was the you can buy with 1 pound 1.5 US dollars right.

Now, when there has been an increase in the UK interest rates so, what will happen? The demand for or the demand will increase. Now, because of the change in demand there is a shift towards demand 2 right. Now, with this shift what has happened? There is a new supply that has come up right. So, this would cause an appreciation in the exchange rate with 1 pound; now, able to buy 1 pound now, able to buy 1.6 dollars right so that means what? That pound has become stronger to the dollar right.

Now, this was a case when the demand for the pound increased right. If there was an increase in demand for the US exports now, take a third case right. The third case says the demand for the US exports has increased. Now, there would have to be an increase in the you know supply of pounds to pay for them, because if you are exporting something. So, you have to pay right. So, to pay so, there would be a shift to now this SF 2 right.

So, this would cause a depreciation. Now, when this is shifting to this SF2 right. Now, what has happened? So, this is the point we are talking about. So, so what has happened? Now, with this demand for the US exports, increased demand for US exports, the

increase in the pound is there to pay for them. So, there would be a shift to SF2 right. SF 2 means supply of supply pound 2, this is basically right. So, situation supply to situation right.

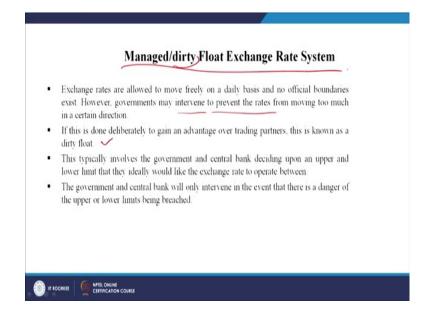
This would cause a depreciation in the exchange rate with 1 pound now, able to buy 1.4. Now, look at it what is happening. So, first case you are saying [FL] this is a case of 1.5, 1 dollar equal to 1 pound is equal to 1.5, fine. Now, with the demand now, what happened with an increase in the UK interest rate the demand shifted to this point right.

So, when the demand shifted what happened? Now, the US dollar became cheap; that means, the US dollar became cheap. So, at this point at this point you can see that the US dollar the demand quantity has grown so, the us dollar has become cheaper.

Now, when the second case happened when the supply, the supply has increased now what has happened? You need more of UK pound to pay for the US exports ok. So, in such a condition what has happened now this supply this has moved because you need more value so, the US dollars now value has gone up.

So, Now, the pounds value has come down with the coming down of the pound against the dollar. Now, the new rate is at 1.4. So, with the increase or decrease of the supply and demand, the value of one currency against the other stable currency or the other currency also changes. As you saw here, that at one point when it was in demand so the value became stronger and the dollar became weaker and the other time when the dollar was more in demand so, what happened? They had to now, they depreciated right. So, this is what happened in the entire situation.

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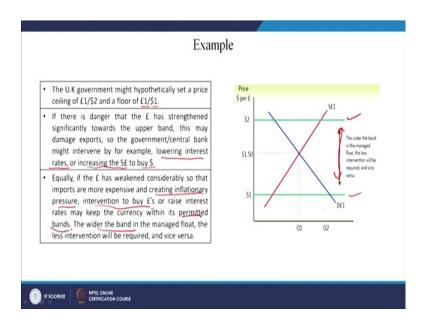
The second case in the that floating system is called managed or dirty float. Why it is called manage or dirty; because you are controlling. Now, let us see what it is exchange rates are allowed to move freely on a daily basis and no official boundaries exist ok; however, governments may intervene to prevent the rates from moving too much in a certain direction, too much skewness, too much skew towards one side is not good the government feels.

If this is done deliberately, sometimes the governments do it deliberately to gain an advantage over their trading partners. So, this is known as a dirty float. What it says? When the government tries to you know prevent intervene and prevent the rates from moving towards one direction, whatever it is in such a condition they want to take an advantage over the trading partners. This is called a dirty float or managed float.

This typically involves the government and the central bank deciding upon an upper and lower limit that they ideally would like the exchange rate to operate between. So, what they think? They would like to have a upper limit and a lower limit. I think in the next slide we have it. The government and central bank will only intervene in the event that there is a danger of the upper or lower limits being breached.

If there is a chance that it will breach the upper and lower limits then the for example, as we you know the government will intervene in there. Let us see this example, yes.

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The UK government hypothetically sets a price ceiling of 1 pound or 2 dollars and floor of 1 dollar and 1 pound right. So, so this is floor price and this is the ceiling.

If there is danger that the pound has strengthened and significantly move towards the upper band that is this side right, towards the upper band. This may damage the exports, why? Obviously, it will become costlier.

So, the government may intervene for example, lowering the interest rates. So, when they lower the interest rates. So, the value the pounds value will also come down. It will become less attractive. So, or increasing the pound to buy dollars right. So, this is one case, subsequently equally, if the pound has weakened let us say has become considerably weaker. So, that imports are more expensive. So, if your pounds are less now weakened so that means, imports will become costlier; obviously, we have discussed its several times.

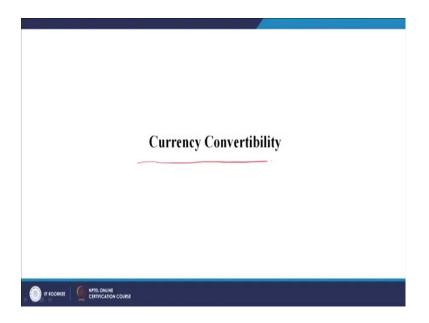
So, it creates an inflationary pressure on the domestic manufacturers and all. So, the intervention to buy the pounds or raise interest rates may keep the currency within permitted bands. This, the wider the band, this band this is called the band, you can see this right in the managed float the less intervention will be required.

So, what it basically says is whenever the government has to decide this band right so, in a the system so, they have to understand according to the strength or position of their currency, they try to fix this band and if you are constantly changing this band then it is very difficult right.

So the so, what is suggestive is generally to keep a sufficient thickness of the band so that you know the there is not too much of intervention from the government is required or desired ok. So, this is what it says right. Till now, we have understood the three types of fixed you know the exchange rate systems, the fixed exchange; so where we said it is constant, the pegged; where you try to move slightly against the stable currency.

So, you peg against the stable currency and you try to slightly move it right, then you said about the floating which is completely free to float, but still there is also a case when it is naturally flowing, floating which is a good case and the other is called a pure or clean or the other is a one where the government intervenes in order to take advantage of the trading partner. So, that was called a dirty or a managed floating system.

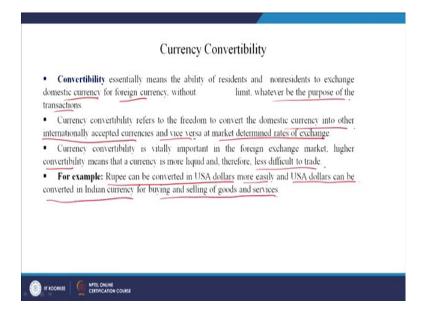
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Now, from there we move into another aspect or very important issue which is called the currency convertibility. Now, what is convertibility? Currency, we have understood. What is convertibility? To convert the currency from one form to the other, let us say to like exchange rate you are here talking about how frequently or how easily can you convert the rupees into dollars for example, right suppose, I want 5000 dollars can I get it easily or should I need approval for that?

So, when I am in a situation suppose every day you are transacting and you are making some business. So, in such conditions you will need more of frequently the you know dollars or the euros or whatever it is. So, for that is your country allowing you to freely go and convert and make your business or it wants you to express you to take permission for that? Why it is done? What is the impact of this? We will see in this part right.

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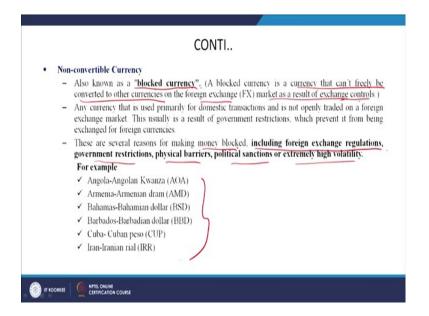


So, convertibility essentially means the ability of residents and nonresidents to exchange domestic currency for foreign currency without limit whatever be the purpose of the transactions. The purpose could be anything, but only this is the case of full convertibility understand or the definition of convertibility currency. Convertibility refers to the freedom to convert the domestic currency into other international accepted currencies and vice versa at market demand rates of exchange ok.

So, this is vital and this is important in the foreign exchange market. Higher convertibility means that a currency is more liquid right, it can be easily converted and therefore, less difficult to trade. But suppose your currency is not convertible or very is partially convertible then; that means, it is not that simple to transact right, but then the government also has its own plans and thoughts right. It cannot make it always fully convertible. Why it cannot and what is the advantage? That we will see.

For example, the rupee can be converted into US dollars right more easily and US dollars can be converted into Indian currency for buying and selling of goods and services, this is simple convertibility.

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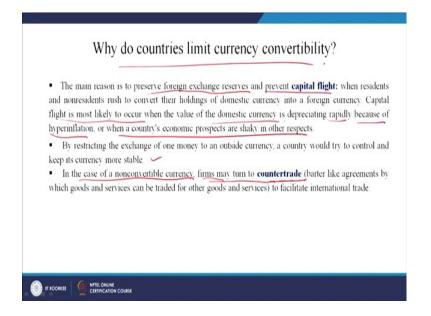


What is non convertibility? Also known as blocked currency. What it means? Currency that cannot freely be converted to other currencies on the foreign exchange, market is as a result of some exchange controls is called blocked currency or non convertible.

Any currency that is used primarily for domestic transactions and is not openly traded on a foreign exchange market, this usually is a result of government restrictions which prevent it from being exchanged for foreign currencies there are several reasons for making money blocked.

Why does the government block it? Including foreign exchange regulations, government restrictions, physical barriers, political sanctions or extreme high volatility, these are some of the you know, these are only few examples of some of the currencies, which are blocked currencies; that means, they are not convertible right. You cannot easily transact with them ok.

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So, why do countries limit currency convertibility? That is a question which comes to your mind and my mind right. The main reason is to preserve the foreign exchange reserves and prevent capital flight. So, what does it say; if you do not make a limitation on that or you do not curb it or not control it, there is a possibility that the foreign players will take away their money and they would run away from here right.

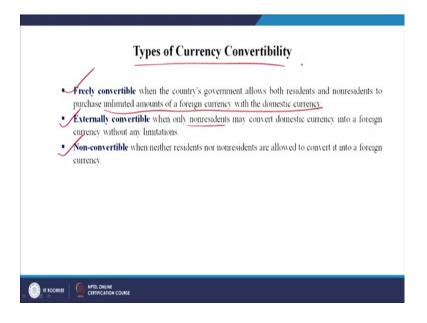
So, when residents and non residents rush to convert their holdings of domestic currency into a foreign currency, capital flight is most likely to occur when the value of the domestic currency is depreciating rapidly, because of hyperinflation or when a country's economic prospects are shaky.

So, when the country's economic condition is bad. So, the people would like to take their money and run away right. So, in such a situation the government wants to control. So, that free flight is not allowed right by restricting the exchange of one money to an outside currency, a country would try to control and keep its currency more stable right.

So, hypothetically or theoretically if you look at it you might feel that why should anybody be making it, but every country has its own compulsion too right. It is not like you know you know the condition of USA is same to India right or USA is same to Africa, because every country has its own demographics, has its own you know income; earning, possibilities, its freedom, its you know culture, everything is different.

So, when you want to do something you have to look at your country's perspective. In the case of a non convertible currency as you saw, the firms might turn to counter trade. So, what they can do in suppose there is a non convertible currency as you saw here right some of these, the firms who want to maybe you know do some transaction they can do a counter trade. A barter like agreement by which good and services can be traded to facilitate international trade, because easy convertibility is not there. So, you can only go through a barter system.

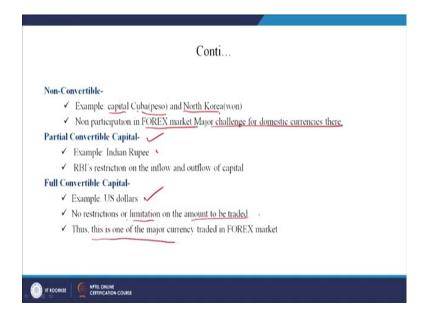
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So, these are some of the types of currency convertibility; freely convertible, externally convertible, non convertible. So, what does it mean? Let us see. When the country's government allows both residents and non residents to purchase unlimited amounts of foreign currency within the domestic currency with the domestic currency is called freely convertible; that means, you are you can freely convert it right.

Externally convertible means when only the non residents may convert domestic currency into a foreign currency without any limitations right. So, the residents are not allowed, only the non residents. Non convertible means when neither residents nor non residents are allowed to convert it into a foreign currency. So, these are the three cases let us see.

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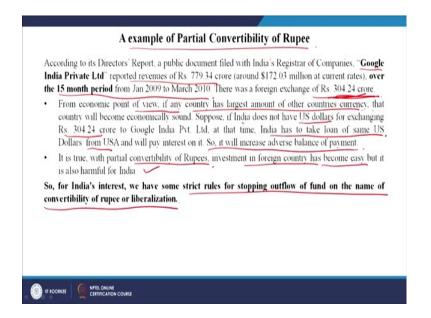
Non convertible example you see, capital Cuba which has peso and North Korea. So, they do not there is they do not allow any resident or non resident to exchange their currencies right. Non participation in FOREX market a major challenge for domestic currencies there. So, somebody who is into the non convertible system so, participation in a FOREX market is a challenge right, partial convertibility example India, RBIs restriction on the inflow and outflow of capital.

So, for example, if you want to make any transaction any trade you need to have a control or a permission from the RBI. It is simple; that means, you need there is only a some amount is allowed, but beyond this limit you need to take permission that is as meaning as that. The third is full convertible now, example US dollars no restrictions or limitation on the amount to be traded. So, thus this is one of the major currency traded in the FOREX market.

So, India can never be until unless a currency is fully convertible it cannot be a major you know, player in the FOREX market, because automatically there is a control. So, the there is no free liquidity and it is not easily convertible.

So, the international transactions cannot be done of with all the time if permissions are required. So, for example, US dollar is a fully convertible and that is why one of the strongest economy ok, currencies.

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Now, look at this case; what is then example of a partial convertibility? Now, Google Private Limited reported revenues of this much right over a 15 month period from this time at this time period. So, there was a foreign exchange of rupees 304.24 right there was after some you know you know some money was paid in inside. So there was an foreign exchange amount which had to go out of 304.24 crore.

So, from an economic point of view if any country has a large amount of other currencies that country will become economically sound, fine. Suppose, if India does not have US dollars for exchanging this rupees 304.24 to Google, India limited. So, at that time India has to take loan of some same US dollars from maybe USA and with that they have to pay an interest on it right.

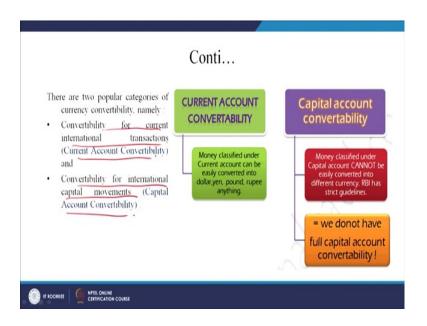
So, you take a loan and you pay an interest so; that means, the original cost of the value or the value of 304, is not now 304, it has gone up right. So, it will increase adverse balance of payment. It is true with partial convertibility of rupees investment in foreign country has become easy, but it is also harmful for India right.

So, for India's interests we have some restrict rules for stopping outflow of fund on the name of convertibility of rupee or liberalization, but this is debatable. What I am saying is you might not agree to that, because all the time partial convertibility, why we are saying in Indian case, because India's economic situation is different, India's

demographic is different. So, in such a condition extreme liquidity or a smooth flow of outflow of fund is not maybe good for Indian economy.

So, some control is required, so on this maybe the Indian government is still you know thinking on a partial convertibility and at least on the current accounts we have a partial convertibility right.

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So, there are two popular categories of currency convertibility; namely this for convertibility for current international transactions. So, current account convertibility, convertibility for international capital movements, capital account convertibility.

So, this is how it looks like; the Current Account Convertibility, so money classified under current account can be easily converted into dollar, yen, pound, rupee or anything and under capital account, money classified under capital account cannot be easily converted into different currency. RBI has very strict guidelines. We do not have full Capital Account Convertibility in India right.

So, we discussed today about the foreign exchange systems, we talked about the floating rate system and the pegged systems and then we discussed why it is essential. What I would like to say is we should never compare one economic condition with the other right directly. So, when you want to say let us say America has a full let us say goes for a

floating system, should India go for a floating system right, should if America goes for a full convertibility of rupee, should India go for it? It is nothing like that right.

We have to look at our domestic condition, our strength of our exporters, our manufacturers, our supply chain mechanism, our you know our human skill productivity level, everything. And then find out our educational level how much do people understand, our ethical value systems right and understanding all these things taken together only we can then decide what is best for the country right.

So, there is no one policy for any you know one for every country. Every country should make its own guidelines and policies accordingly right. So, that they can have a better situation right. So, this is all we have for today we will meet in the next lecture.

Thank you very much.