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Lecture - 30 Functions of Foreign Exchange Market, Interest Rates, Relative Inflation Rate

Welcome friends. In our course of International Business, now we have started this very important concept of foreign exchange the forex market. So, we discussed in the last lecture what is this foreign exchange.

We have heard of you know stock exchanges right. So, where stocks are exchanged people buy and sell shares. So, similarly the foreign exchange market is an internationally international financial market which is a 24 hour market and here the transaction between different currencies are happening are happening right.

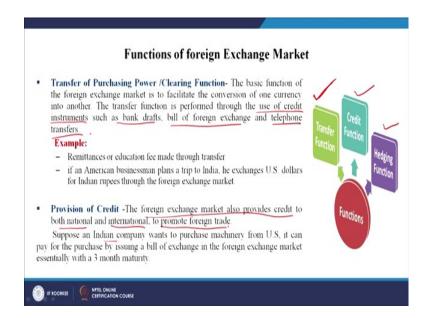
So, when somebody wants to buy you know buy dollars or it can buy Indian rupees or it buys euro or it by sterling whatever. So, yen. So, the major currencies. So, it can for making any transaction between 2 different countries you need a vehicle, you need a currency basically that is acceptable to the other partners.

So, in order to do that to make this business easy foreign exchange comes handy ok. So, in the last lecture we discussed about what are the who are the participants in this foreign exchange market. So, we talked about the central bank, the commercial banks, the corporations, the individuals you know the fund managers right, the fund agencies and you know all these different the brokers.

So, there are 6 basically people who are involved and how it is. So, how it is important that you need to be very careful in the foreign exchange market because here it is played on a very huge volumes right. In fact, if you remember I had said that we almost spent about the amount of transaction that happens is more than 6 trillion US dollars per day right. So, that is an enormous amount of money right.

So, any difference; that means, the large players who play on arbitrage and you know who work on hedging of funds and all, they work on very small fractions very small portions, but those amounts are very huge again because of the sheer size.

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So today we will continue with this lecture and we will first understand what are the functions of the foreign exchange market. So, the foreign exchange market basically has 3 functions. As you can see one is called the transfer function, the other is called the credit function and the third is called the hedging function.

So, the first function let us start is a very easy and which says the transfer of purchasing power or clearing function. The basic function of that foreign exchange market is to facilitate the conversion of one currency into another right. So, rupee to dollar, dollar to yen yen to sterling sterling to pound whatever. The transfer function is performed through the use of credit instruments such as bank drafts bill of foreign exchange and telephone transfers right.

Examples are for example, remittances or education fee made through transfers ok. If an American businessman plans a trip to India he exchanges US dollars for Indian rupees because if he wants to you know eat a dosa or a paratha in India he cannot pay in US dollars because nobody is going to take his US dollar.

Many people might not until and unless the hotel or restaurant is a very big one and they accept the dollars they are separate thing, but otherwise it is not possible. So, to make it is business trip sound or it is you know for to even to visit for any these are trip they need the Indian currency. So, all these exchanges is a first job that the foreign exchange market does. This is the first job. So, transfer function.

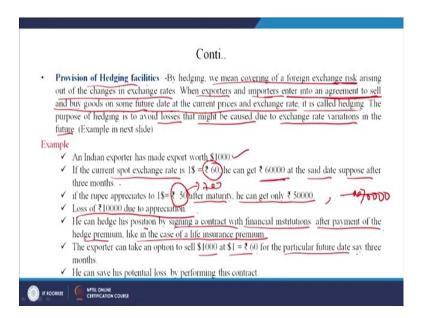
The second important function of the forex is that the foreign exchange market provides credit to both national and international players to promote foreign trade. Suppose an Indian company wants to purchase machinery from US right some capital intensive machinery from the US. It can pay for the purchase by issuing a bill of exchange right. In the foreign exchange market, essentially with the 3 month maturity.

So, that credit how would this credit be given. So, to give this credit there is a 3 month maturity period which is a given right. On basis of this, the foreign exchange market provides a credit at some maybe some benefits some small benefit right.

So, this credit facility the provision of credit facility helps the buyers to buy you know instruments or technology or anything which for which they do not have money immediately or even sometimes it is not wise to pay the money because they would try to take some time unnecessarily they have a they can get a 3 month period.

So, that trade off has to be seen now which is how much beneficial and the company can take it stance. But, whatever the provision of credit is an important function of the forex market right.

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The third is the provision of hedging facilities. Now, I explained the last lecture that hedging means we mean covering of a foreign exchange risk right arising out of the changes in exchange rates.

Now, suppose you have purchased something and because you know after purchasing suddenly the price the you know that the value of the currency, but that has been used the dollar has changed. Now, because of this change you might make a loss right you have to pay more now right.

So, in this case the when you have to pay a more dollars that is a loss. So, such a loss in a small business is still ok. But when you are talking about millions and millions of transactions and of you know millions of millions of rupees or money in that condition even a small fraction even 1 percent change can make a tremendous impact right.

So, when exporters and importers to enter into an agreement to sell and buy goods on some future date at the current price and the exchange rate it is called hedging. So what happens here? The exporter and importer have entered into an agreement to sell and buy the goods on some future date at the current price and exchange rate.

So, the rate would be maintained. The purpose of hedging is to avoid losses that might be caused due to the exchange rate variations in the future let us see. An Indian exporter has made export worth 1,000 dollars right. So, he has made an export worth 1,000 dollars. In this time period, suddenly what has happened. The current spot exchange rate is 1 dollar is 60 rupees ok.

So, how much you would get? He has made a export of let us say handicrafts. So, he has he will get 60,000 rupees 60 * 1,000 at the set date suppose after 3 months ok. Now, if the rupee appreciates in between to 50 now 1 dollar has become rupee is 50. So, that means, the rupee has become stronger right.

So, after a maturity he will only get now how much? Now 50 into 1,000. So, 50,000. So, that means, there is a loss of 10,000 due to the appreciation right. So, that is why it is said many a times when the value of the when the currency appreciates it is bad for exports right and it is good for imports right.

So, now he can hedge his position by signing a contract with the financial institution after payment of the hedge premium. So, he pays a hedge premium. There is a premium which is they calculate right and makes us contract like in the case of a life insurance premium.

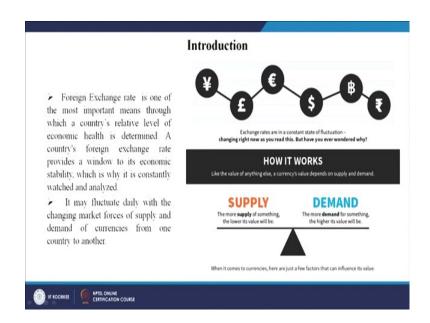
So, as in a life insurance premium you say I will pay monthly 250 rupees for let us say 10 years and if even in something happens to me in between so my family gets this much of money right. The exporter can take an option to sell 1,000 dollar at rupee 60 for the particular future day say three months. He can save his potential loss by performing this contract, but this is one side of the story right. But, the other side could have been that the money has depreciated right and instead of 50 it would have become 70 let us say.

Now, what would have happen had it become 70. So, 1 dollar is 70. So, now, the exporter would have got let us say had it depreciated he would have got 1,000 dollars into 70 rupees. So, that means, in a secondary case where it has not appreciated, but depreciated the person would have got maybe 70,000 rupees right. So, that is a benefit to the exporter right. But, in the international market the foreign exchange market is such a huge market. So, controlling such markets is merely impossible right.

So it is better to play safe. So, how do you play safe? To by having a contract that whatever is the price today 60 rupees whether it may appreciate tomorrow or it may depreciate tomorrow I am not interested.

I want to get the only 60 rupees worth of my product right. So, at least is the rupees 60 is safe. In case had it depreciated you would have got 70,000. Had it appreciated he would have got 50,000. Now, he is getting neither a loss nor a profit at least the worth of his product. Now, what factors are affecting the exchange rate right?

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So, foreign exchange rate is one of the most important means through which a country's relative level of economic health is determined right. Obviously, because all the transactions and businesses are done through this foreign exchange right. A country's foreign exchange rate provides a window to its economic stability which is why it is constantly watched and analyzed.

So, there are people who are constantly watching and analyzing it because a small change can have a big effect right. For example, imagine a country like China which is highly export oriented. Now, if the Chinese currency yuan appreciates what will happen to the exporters. So, entirely the if China is let us say exporting 100 billion dollars worth of goods and the yuan appreciates by let us say 10 percent.

So, that means, on 100 billion it on 10 percent is simply 10 billion. So, there would be a loss of 10 billion. This is only a mathematical calculation 10 billion just because there has been a currency change right. So, it may. So, you can understand how important this thing is. It may fluctuate daily with the changing market forces of supply and demand of currencies from one country to another.

So, that you cannot have a control. The entire world is connected right. So, I am buying from oil from Iran I am selling now I am making some products out of it and I am selling those products to let us say Cambodia, I am selling this products to Australia.

Now, the Australia is using this products the Australian companies and they are making something. So, the whole world is like chained. So, they are all tied up right. So, it is like something like one chain somewhere will have an influence and some other place also right. So, it the.

So, it has to be very one has to be very careful in understanding the supply and demand principle in the foreign exchange market right. So, for example, how much demand of the dollar is there today right? Is the dollars demand going is increasing or it is remaining same or is it decreasing.

Suppose let us say the dollars value or importance will decrease with time; that means, what. Less countries will trade with the dollar with the you know, but the US dollar right. So if they trade less with the US dollar the need for US dollar will be less. So, if the need

for the US dollar will be less the importance of the US dollar goes down automatically the US you know position of power with also get affected right.

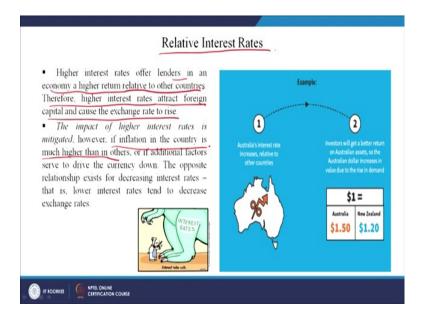
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Factors some of the factors that affect the exchange rate are for example, relative interest rates, the inflation rate, the income level of your country or the people right, the intervention of the government as you know sometimes the RBI intervenes to control the money market right, the political stability and performance.

Now, you know the exchange rate for a place which is highly volatile and highly you know is always into war and civil rights and all and to in comparison to another country which is highly a peaceful country would be different. Country's current account deficits, government debt and speculation. So, you can see. So, these are the different you know the variables or the factors that affect the fact the exchange rates ok.

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So, let us see let us go one by one. So, the first is the relative interest rate. Now, what it is saying? Australia's interest rate increases related to other countries. So, the interest rate that Australia has is increasing right. Investors will get a better return on Australian assets.

So, the Australian dollar increases in value to the rise in demand. Now, if you understand now because the interest rate has increased, so the Australian bank let us say is paying more. So, the people would like to invest more in Australia because by investing they are getting more interest rates right.

So, what he says higher interest rates offer lenders in an economy a higher return related to other countries. Therefore, higher interest rates attract foreign capital and cause the exchange rate to rise. Now, this has happened also with India very recently right.

So, the Indian government recently what has happened some of the foreign players they took away their money right and they fled off. So, this has resulted in a not only the change in the exchange rate, but also it affected the stock market the stock exchange very badly right. So, this has happened because of not only one reason, but many. One of them being the political stair reasons also right.

The impact of higher interest rates is mitigated or lowered, however if inflation in the country is much higher than in others right. Now, what it says suppose x the government

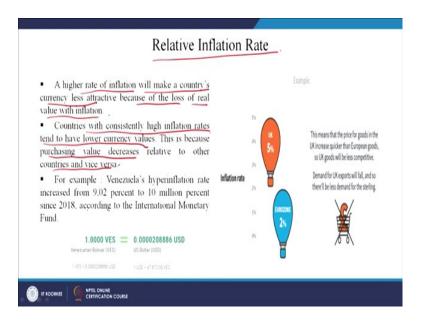
is paying the banks are paying higher interest rates. Now so, to pay if they are paying higher interest rates.

So, people if I put in my money let us say I will get higher interest rates. So, more money I will earn at the end of the year, but the point is this is this will be nullified alright. This will be a lowered if the inflation in the country's much higher than others. If the inflation is higher; that means, the cost of purchasing my basic commodities or goods is also higher.

So, the amount of money that I am generating I am losing out on the other side by paying more money right in buying the goods right. So, if additional factors serve to drive the currency down what that is what it is saying.

The opposite relationship exists for decreasing interest rates that is lower interest rates tend to decrease the exchange rates right. So, what happens when there is a lower interest rate. So, people are not interested to put in money in your country right. So, the exchange rate or the value of your rupee will be will go down right.

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Similarly, the second important thing is the inflation rate. So, all these are connected, but then still we are trying to see it in a discrete fashion ok. A higher rate of inflation will make a country's currency less attractive. So, if the inflation is high; that means, as I said buying is costly.

So, the currency will become less attractive right because it is value has come down with less with more money you are able to buy less goods right because of the loss of the real value with the inflation. So, if with 100 rupees I was able to buy let us say 2 kg of potatoes right.

Now, with let us say let us take the case of onions. If 100 rupees I was earlier buying 2 kg 3 kg of onions today I am able to buy only 1 kg of onions. So, that is; that means, the because this has led to an inflation the in the inflationary price.

Now, this has and if it happens to more number of products then the cost of the things goes up right. Countries with consistently high inflation rates tend to have lower currency values right. This is because purchasing value decreases related to the other countries and vice versa.

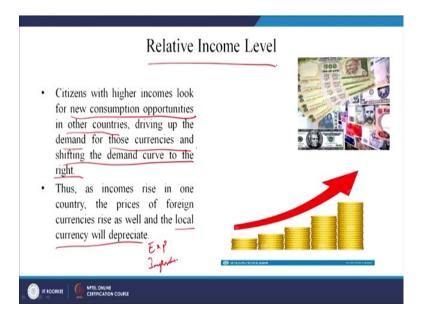
You see this example Venezuela's hyperinflation rate increased from 902 to 10 million percent since 2018 according to the International Monetary Fund. So, you know that Venezuela's currency completely was destroyed right this the economy was shattered right.

So, it went into an hyperinflation rate stage where you know you had to have you know loads of money even it happened in Zimbabwe where you they had they had to you know print currencies of 1 million worth each right notes of 1 million. So, in such higher inflation or hyperinflation states also it has a very negative effect on the exchange rate.

You see this example. This means that the price for goods in the UK increased quicker then European goods. So, UK goods will be less competitive demand for UK exports will fall and so there will be less demand for the sterling. This is the example we are trying to talk about inflation rate right.

So, euro and UK right. So, you can now connect maybe with the condition that if in the Brexit Britain is now trying to come out of the that group. So, will it have a good effect or a bad effect you. This is for you to think right and come out with some make of some logical conclusion. The third point is the relative income level.

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Now, citizens with higher incomes right look for new consumption opportunities wherein as the income increases people think of new consumption opportunities in other countries, driving up the demand for those currencies and shifting the demand curve to the right.

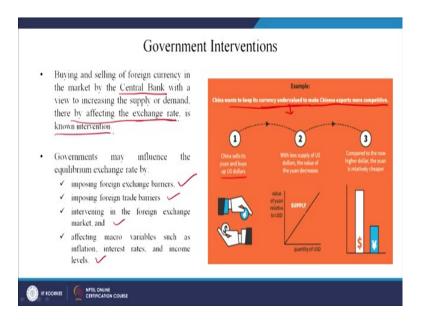
Now for example, the income of people in India increases right. So, as the demand as the income increases. So, the what they will do they will try to look for newer opportunities. Let us say the newer opportunities what they are looking for are some luxury items or products which are not available in India, but they are only available in some other countries like Italy or France.

Now, to buy those goods to buy those products maybe its perfume or car or leather bags or something they have to use the you know franc or you know sterling or whatever currency of the country is. So, that drive the demand for that currency now goes up right. So, thus as income rises in one country the prices of foreign currencies rise as well and the local currency will depreciate right. So, now, if the local currency will depreciate you see this is like a tug of war right.

So, if the local currency will depreciate what will happen now exports will gain right, but imports will lose an import you will lose because you will have to pay more right. So as a local currency will depreciate right. So, when you when the local currency depreciates exports will gain because people can buy at a lesser price more products, but imports

while doing imports you have to pay more dollars right. The government interventions the fourth point.

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Buying and selling of foreign currency in the market by the central bank as the Reserve bank for example, in India with a view to increasing the supply or demand thereby affecting the increase the increase the exchange rate right is known as intervention.

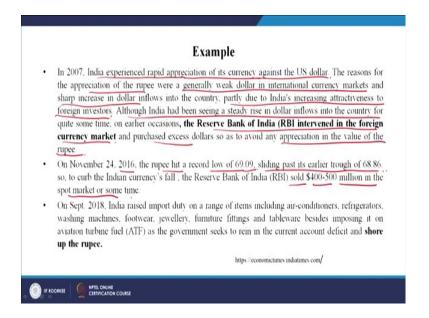
So, there has been a lot of debate on this how much should the central bank intervene. In fact, the central bank role is to intervene, but by intervening they affects the exchange rate. So, what to what degree should they intervene? How much intervention is correct at what point of time is always a debatable issue right.

So, the governments may influenced the equilibrium exchange rate by imposing foreign exchange barriers, imposing foreign trade barriers, intervening in the foreign exchange market and affecting macro variables such as inflation, interest rates and income levels. Let us look at this example.

China wants to keep it is currency undervalued to make Chinese exports more competitive right because as I said earlier also China is largely explore driven economy right. So, it would not it would like to keep it is currency undervalued so that people can buy more of Chinese products. China sells it is yuan and buys up US dollars right.

With less supply of US dollars the value of the yuan decreases. With less supply of US dollars the value of the yuan decreases. Compared to the now higher dollar the yuan is relatively cheaper. So, as you see value of yuan related to the USD and quantity. So, it says when you know this happens the government intervene sometimes. In fact, in China in Japan the currency was devalued so that it would help their exports right. So, that also has a very large impact on the exchange rate.

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You look at this example. In 2007, India experienced rapid appreciation of its currency against the US dollar in 2007. The reason for the appreciation where a generally weak dollar in the international currency market.

So, the dollar had become weak and sharp increase in dollar inflows into the country partly due to India's increasing attractiveness to the foreign investors right. So, the foreign investors found India to be an attractive market. They wanted to set up their own plants. They set up they wanted to have assets in India. They wanted to put money in the stock market.

Although India had been seeing a steady rise in dollar inflows into the country for quite some time, the RBI intervened in the foreign currency market and purchased the excess dollars so as to avoid any appreciation in the value of the rupee because if the RBI had not intervened; that means, what would have happened the rupee would have appreciated.

And had the rupee appreciated what would have happened. The exports would have got affected the. There would have been an adverse affect on the exports of Indian exports right. So, major Indian businesses which are lying depending on exports they would have seriously got affected right.

On November 24, 2016, the rupee hit a record low of 69.09. Now, it is 71 right, sliding past it is earlier trough of 68.86. So, to curb the Indian currencies fall now the currency was falling, the RBI sold 400 to 500 million in the spot market right in some time right. So, what happened?

What does the RBI do? The RBI is holding this dollars right the currency and at some time it would like to buy right or in some time other time it would like to sell off. So, here in this case when it was at a record low the and it was going up again it was going 69 70 towards.

So, that to curb the Indian currency is fall the so the Indian currency would not be looking week, the RBI sold of the you know sold 400 to 500 million dollars. So, by selling of the dollars it wanted to stop that fall off the Indian currency.

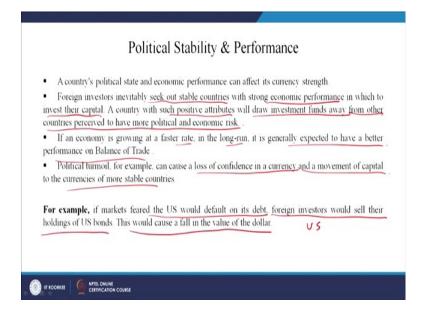
So, these points are very very interesting and they need to be very carefully understood. So, if once you understand them then it will be very clear to you how international transactions are happening and how each one is getting affected by the other right.

September 2018, India raised the import duty on a range of items including air conditioners, refrigerators, washing machines, footwear, jewellery, furniture fittings and tableware. Besides imposing it on aviation turbine fuel ATF as the government seeks to rein in the current account deficit and shore up the rupee.

So, the Indian government right raise the import duty. So, it by raising the import duty, so what it did was it made the domestic players more competitive and the outside players or the external players less competitive right.

Although it is not advised it is always criticized by the WTO, but still sometimes looking at the local condition and the income level and the you know people's condition the government does it right. So, the government tried to help the rupee right. The next point is the political stability and performance.

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Now, a country's political state and economic performance can affect its currency strength right. So, as I said if there is a lot of violence, unrest, civil rights and all it affects the performance of the currency.

The foreign investors inevitably look seek out stable countries with strong economic performance in which to invest their capital because everybody is scared. Had if there a war if there war goes on inside the country, then how would we get back our money right. In fact, in some of our classes I have explained or maybe in the future I will explain how you know these things get affected when there is an violence or a disturbance in a country.

A country with such positive attributes will draw investment funds away from other countries perceived to have more political and economic risk. No wonder for some of the African nations some of the other nations which have always been into some kind of a war, turmoil they have been not able to attract investments right.

If an economy is growing at a faster rate in the long run it is generally expected to have a better performance on the balance of trade right. Political turmoil for example, can cause a loss of confidence in a currency and a movement of capital to the currencies of more stable countries.

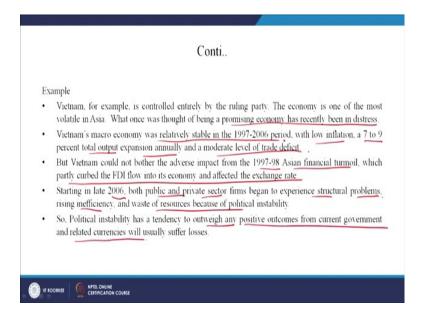
So, if tomorrow India has a lot of disturbance be it for any reason internal reason I just want just do not wanted to name anything, but for any reason there is a instability in our country, then the foreign investors would not be very much interested.

And I am not surprised today to the stock market there is a disequilibrium and the markets are not doing that great. Although at one point the nifty is growing the sensex is growing, but other side many shares are not doing well. So, many stocks are not doing well. So, the point is such kind of a loss of confidence can be a bad thing for any country. So, political stability is very very important.

If markets feared the US would default on it is debt, foreign investors would sell their holdings of the US bonds. This would cause a fall in the value of the dollar. So, this is the one of the greatest fights that is happening right which that is the common man is not much aware of that because US has a lot of debt right as is one of the highest is the countries with the highest debt, but and it knows very well that if the people will be losing confidence or they will be scared then they would run away and they would not put in their money.

But, and if the US dollar does not stay strong. In fact, then US power or hegemony or the you know point of the position of power they would lose it right the supremacy. So, there is a constant fight with the oil countries oil you know exporting countries and all of us and U.S is trying to have the shell oil and other things so that it can control this dollars you know value right. So, this fight of dollar is not linked only to the financial market, but it goes out to the you know to the real war also right sometimes.

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Let us take this example. Vietnam for example, is controlled entirely by the ruling party. The economy is one of the most volatile in Asia. What once was thought of being a promising economy has recently been in distress. Vietnam's macro economy was relatively stable in this period 97 to 2006 it is low inflation is 7 to 9 percent output expansion annually and a moderate level of trade deficit.

But Vietnam could not bother the adverse impact from the 1997 98 Asian financial turmoil which happened in the 97 98 time which partly curbed the FDI flow its economy into it is affected the exchange rate. Starting in late 2006 both public and private sector firms began to experience structural problems rising inefficiency and waste of resources because of political instability.

So, political instability has a tendency to outweigh any positive outcomes from current government and related currencies will usually suffer loss. What it means is simply the government may intervene to do lot of things you might do lot of good things, but the point is if there is an instability in a country.

For example, the there is no clear government and there is lot of disturbance, then the outside players would not show interest because they will be always afraid of the because of the stability or instability the country you know the value of their currency will fall right.

So, today what we have learnt is we have tried to understand what are the different factors that affect the foreign exchange and some of them being for example, the political stability instability and the you know inflation, the interest rates, the governments intervention etcetera. So, we will continue with this you know factors affecting the foreign exchange market in the next lecture.

So, thank you very much for the day. Have a nice day.