Money and Banking
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Lecture - 19

We were talking of treasury bills, treasury bills are common method, common instrument for government to find finances to fund it is deficit. Government budget are often in a deficit may not be on a annual basis often, but periodical periodic deficit are there throughout the year, because the tax receipts and the income do not always come regularly say they come you know every 6 months or so.

So, how would government run it is business, it has a whole lot of expensive just not salaries and overheads, they have these dignitaries, delegates coming and you know huge amount of expenses, they send people of to foreign countries. Now, Treasury bill is common across all countries, but all countries do not have the same kind of treasury bills. In India initially, there used to be a regular treasury bill 91 day bill and ad hoc treasury, bill which was also 91 day and some bills were available on tap.

The tap 1, I found was primarily for the state governments, if they have surpluses they can go and buy that on tap, primarily for state governments. But, they have stopped both on tap and the ad hoc, because they were problem, they were having and they converted it in some kind of a console with the fixed interest rate like 4.68 or 4.64 percent or something (( )).

And when I open RBI site, I found yes the data is correct, I mean it confirms to what I have heard or what I have read. The regular ones that are available at 3 types, primarily 91 day 182 day 364 day, I will show the data to you later. The regular ones there are slight differences the 91 day usually a weekly tender it used to be now they have a weekly auction system and there are competitive and non competitive bidders.

The 182 day very interesting, it never specifies an amount, it is says we are selling 182 day, who is interested. The buyers the bidders come they bid usually, the banks and they also allow, if you accept that bidding rate, if you are also allow the non bidders to invest for the 182 day bill. The 91 days is more formal, they would announce an amount a date of auction, then they would come they bid and they buy, 182 day no specified amount is mentioned by government or RBI, an RBI is the principal underwriter all like this. So, I can interchangeably use RBI and government.

The good thing about not specifying an amount is there used to be an issue RBI used to have problem of devolvement, whenever an amount is announced and if the market players do not buy them, there is balance it used to fall on RBI's shoulder to purchase the residual amount. In case of not specifying a fix amount, there is no issue of devolvement anymore, because there is no fixed amount that has to be sold, whatever is sold, sold.

The same thing, I found with 364 day there used to be no issue of devolvement and there are competitive bidders and as well as some non competitive buyers, buying them. The final thing that I want to mention, which is just for historical reason, I may it is a fact it is it is not it is not it is not alive anymore this issue. They introduced for a few years about 2 3 years, a 14 day treasury bill 2 weeks primarily for the state government, if they have surpluses they can invest 14 day treasury bills. And this 14 day such a short time, the bills were not transferable, usually treasury bills are transferable remember. Treasury bills 91 day 182 day 364 day, I do not know whether I mention this treasury bills are transferable, you understand transferable.

You can sell it off in the second hand market to somebody else or the 14 day bill was such a short bill it was not transferable. They did that, because they say there are often little bit of surplus, that lying with state government and state government want to make some money on it and they do not know where to put it, for a very short period. So, state government were allowed, it is like the replacement of the bill on tap, which was earlier there, you come in invest 14 days over you and I happy. So, quickly this over, we would renew that, that kind of a business they started, for 14 days only 2 weeks all right.

We will like a call market loan, they notice money it is over. So, unhappy, if you have, if you want the keep the surplus for a longer time, we would renew that, they would keep on renewing it. And small amount, what I found the figure were like 300 crores, 400 crores something like that, hardly it was there not much money small surpluses like small savers money.

These bills were not transferable, they would expire after 14 days and they would set an interest rate, it was not really marketable, they will set an interest rate like more or less on tap thing on tap means, what the price has to be announced, it is continuously you can open the tap anytime. So, the they has to be a price, we will look at the price do I open the tap. Suppose it is a coca cola tap, price has to be mention, I can open the tap by coca cola the amount, I want and this is the price.

So, on tap like I saying it was replacing it, so they used to announce the price not market determine. And there is something written in my notes, which you would not understand, it is a similar to the price or the interest rate, that is the announce on w m a. W m a, I will talk about that in next topic, wma is a wage and means and advances, this is another source of funds for government from RBI, w m a wage and means advances, I have not talk about that, I will talk about that later.

So, the interest rate on w m a was often the interest rate on these 14 day bill, but hardly it was there, problem is hardly it was there. It was from the beginning of the financial 1998 and finally, 2001 may, which is 1998 2000 years it was there, only for 2 years this bill was there and they were discontinued from may. May is roughly a month more than and a month and a half more than 2 years 14 may it was discontinued.

So, it was it never gathered importance for for some reason, they found probably that the 91 day bill regular bill good enough, for these state governments. State governments do not really need that short term bills for the surpluses, if they want to part the surpluses, if they have some somewhere, they can they are happy to go for the 91 day bills. So, the 14 day short duration maturity bill was not required, it is gone is no longer there all right. So, this is about treasury bills. Now, I come to a very interesting short term money market instrument called repo. So, I will talk about the and let us see you understand this repo business or not, this is very this is different from the call market and often these 2 markets compete.

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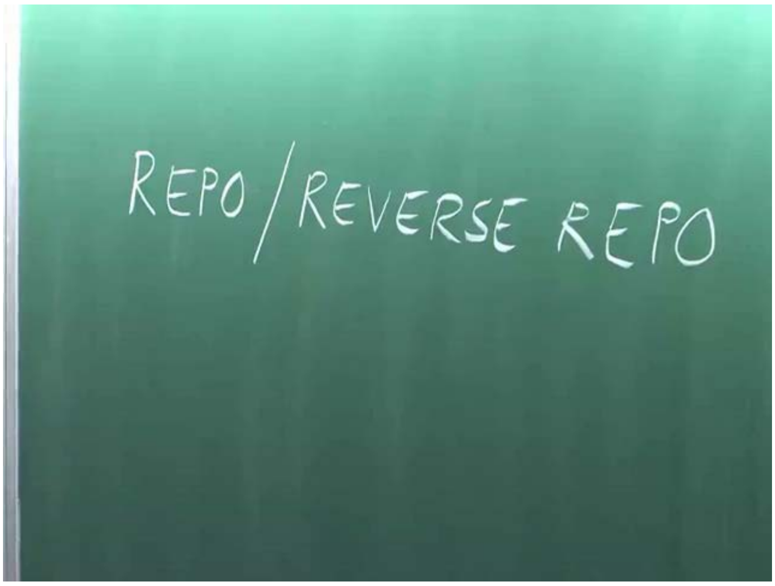

This is there are two types of items here instruments, one is called repo, the other one is called reverse repo, both are same thing repo and reverse repo repo and reverse repo. It depends upon from, which whose point of view look at it, it can be a repo, it can be called from another points point of view, it can be called a reverse repo. From RBI point of view it has a definite meaning, reverse repo from RBI is point of view RBI visa, we banking system when that transaction going on in reverse repo, it is absorption of money from the system absorption of money from the system reverse repo. So, reverse repo meant absorption of funds from the system, it has a policy issue. So, when RBI does reverse repo transaction with the banking system, it has a definite issue in mind, definite objective in mind, which is to absorb surpluses.

So, there is excess rainfall I need to drain, now to that water excess water, which is not require in the paddy fields. So, I need a drainage system. Now, there has not been rain like this year drought then they go for repo transaction, which is injection of funds into the system. There is a policy issue, but from the point of view an ordinary buyer and seller repo and reverse repo it depends, who is doing it, a sometimes it is it is the same thing, I will explain that.

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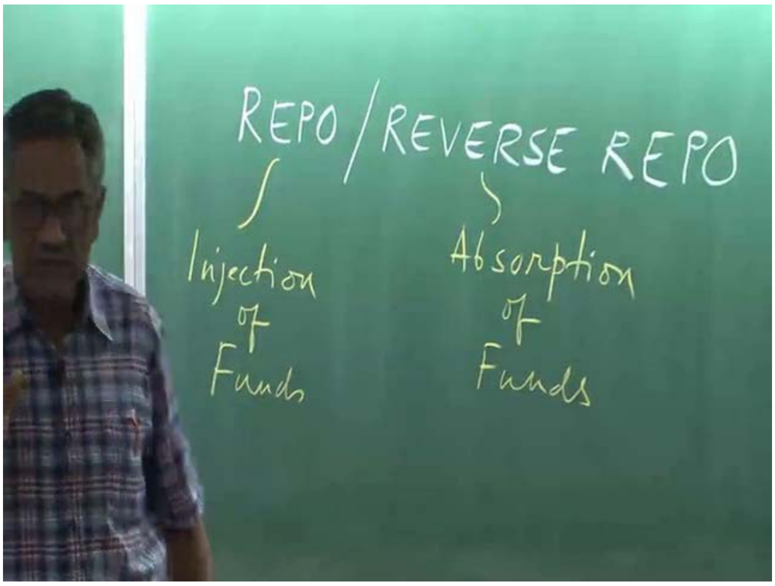

So, repo means, injection of funds and reverse repo means, absorption of funds, injection of funds and absorption of funds, this has a definite policy issue or matter involved here and that is why it has become very important. So, what RBI does is that, they controls the market. The call market is primary interbank call market, it cannot really control it, but the have a control on the bank, they can use CRR and repo, these are the 2 most active monitory policy instrument, that reserve bank of India has. It is not the same thing with the other countries, they may have repos etcetera, in other countries like U s or European countries, there is an instrument called bank rate, which is very important in U s, it is called the federal rate. So, the bank rate is important, I will talk about that in the next topic.

In our country the most important monitory policy instrument, instruments are 2, what I have understood, one is the CRR SLR hardly changes, which they use a lot and it will come on use on tv as news item on tv, whenever RBI announces a policy, it will be 2 things CRR and repo thing. You keep your eyes open you will see that. So, what reverse repo is doing absorption of funds, if there is excess rain fall drain out the water, which is in this case money and injection of funds is that there is a drought, there is a shortage of funds in the money market. So, pump in money, simple keep a balance. Now, let us go back to the voley kind of a discussion, professor volage book, what does it say, this you can read from voley also.

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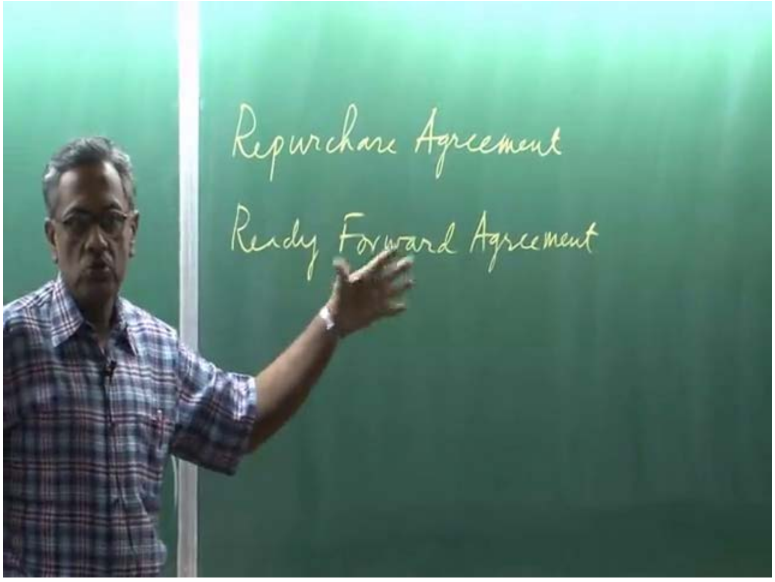

Repo means, what I have read from his book means, repurchase agreement repo repurchase agreement, this is the meaning of repo repurchase agreement, what does repo means, repurchase agreement. There is another expression that is found, which has been abbreviated repo in some countries, they caught that probably ready forward agreement ready forward agreement ready forward agreement repurchase agreement and ready forward agreement, repurchase agreement ready in short, they are called repo.

How does it work, it works in the following way is a financial transaction going on within 2 parties all right, say RBI and a bank. So, one of these parties is selling a security say RBI is selling a security to the bank all right. When it sells the security, there is an agreement with the buyer, which is the bank that, I will repurchase it from you at a specify date, it is not going to be with you forever, 24 hours later, 2 weeks later, 1 month later, 2 months later, 3 months later.

I am selling the security to you. So, in return you giving me money, but remember this is a temporary transaction, you do not own it forever, we have an agreement here forward agreement, which will happen later forward means, in future it will happen that, I will repurchase it from you. When I repurchase of course, I will give you more than the cost price, when I when you sold it or when I bought it, because that will be your income all right.

I am selling a security, I need the cash from you RBI is saying to the bank suppose, I am selling the security, I need the cash from you with an agreement that, I will repay this money within 2 weeks with a interest, which is a repo rate, called rate, repo rate, c d rate, c p rate, whatever which is the interest rate. So, it has a transaction with an agreement when in future, we will be brought back, it will to reverse the process. Now, why would RBI sell the security, it wants to mop up the funds too much money is there with the banks, there is one the standard reasons all right.

So, this is absorption of funds this kind of a transaction, if RBI does that with banks, banks are lying with clients, banks are happy to give the money part of the money with RBI, because it is lying ideal too much money, they do not need it, they cannot give out as a loans, they do not have avenues to invest. So, banks are also happy to give that money, part of that money temporarily with RBI.

This is absorption of funds and this transaction, what I just explained is a reverse repo transaction, because reverse repo is saying absorption of funds from the system all right. Now, you take the case banks do not have money. So, banks are selling securities, now to RBI, but banks are saying and RBI is also telling them, I would buy it, I will give you the funds with an agreement, when you would return the money to me and get back with and take back your security.

Like I am keeping some valuable with you (( )) give me some cash, I am coming in 2 weeks time, I will return the money to you and take my motorcycle back, I need money. So, I keep the motorcycle with you. Same things banks now need cash. So, banks will park banks will park the securities, sell their securities temporarily to RBI, RBI will give them the cash. So, money is flowing into the economy, because banks are part of the economy, banks non banks whatever, whoever has can do repo transactions and then it can then later, buy it back and return the money to RBI.

This is the repo transaction, because in money temporarily flows into the system injection of funds money flows temporarily into the system and then it is withdrawn later all right. Now, you think that the repo transactions are only between the central bank and repo reverse, repo transaction only between the central bank in India and the banks no, is a competitive market. So, these repo transaction, reverse repo transaction are also there between banks between financial institutions.

Now, we would think, why would these that always that is be the surplus funds that is why, I go for an absorption reverse repo or there is a deficit money with me. So, (( )) shortage of the funds. So, I go for a repo transaction. So, funds are injected into the system all right. The thing is often these transactions, I am coming to that, not because of sort of your funds and surplus of funds.

Sometimes these transaction are also they are because securities are in essential part of a SLR, I will talk about that. And cash is always helpful for banks, because they have CRR. So, banks basically, require both cash and securities, suppose it has not invested in the past in securities, which they are suppose to show in SLR, but the problem is now time has come to declare the SLR amount to RBI, I do not have sufficient securities.

Temporarily for 2 weeks 1 month, I can buy some what else is securities, if I have money and show to RBI yes I have securities and then they dispose them off as soon as the period is over. So, often they has SLR CRR obligations, which drive repo transactions, that is the shortage of funds or surplus of funds. Now, therefore, the reverse repo as I told is essentially, a buyer purchase in a security from a seller with an agreement to sell it back. Buyer purchases a security from a seller with a agreement to the sell it back to the seller, in future at specified date at a higher price, repo transaction and reverse repo transaction.

But, remember the international definition of reverse repo is absorption of funds from the system and repo is injection of funds. Finally, now when I was looking of the data, in India for a long time, that definition they were using and the numbers, they were supplying to us for instance on their site on repo and reverse repo for a long time. I will tell you since when in India everything goes wrong in India, they were using just the opposite of the international definition, which I wrote on the board.

So, for a long time there data tables, what showed as reverse repo was actually, the numbers for repo and what they were showing as repo were, actually the numbers for reverse repo. When I started the looking at the numbers, I say my goodness it was, so different. Because, it was not making much sense, because these numbers have a trend has that patterned to show in India for instance reverse repo, these days is very common not repo so much.

So, I was thinking my goodness. So, different it was I was thinking of then I found suddenly there is a footnote and I I think I have in my notes, when it changed suddenly there was a footnote and saying sorry, we were using just the opposite definition to the international definition from today onwards. This transaction reverse repo would mean, what we used to call repo and repo would means, what we used to called reverse repo. The date was 29 October 2004. So, only recently 29 October 2004 finally, they corrected the definition. So, until then whoever did any work and study with the repo and the reverse repo data poly got brilliant results unusual results, but remember all, if they have not paid attention the numbers where, reporting for just the other variable. The repo column was showing data for the reverse repo column.

Now, if you want to find out you can RBI bullet in 29 October 2004, you will find a footnote there and a repo table all right. So, be careful when, you look at the tables (( )). Now, why where these, they have becoming important in all countries in India, I will talk about in India. I have already told you the number of few reasons let let me just list them, I have the reason listed here. One is the short fall in cash often drives backs to go for a repo transaction. If they have valuables, they they mortgage them get the cash temporarily and then they when they return the cash, they get back the valuables and the valuables in this case are securities.

And I will come to that, what kind of securities, they were all kind of securities c p, c d everything could be used, which is funds, shares, bonds, government bonds, papers short term treasury bills short money market instruments, they are securities also government dated securities, which have bonds long term once 5 year 3 year 8 year 10 year period all right. Often if banks have surplus funds, they will go for a repo transaction or something all right, lend it to somebody and earn something quickly you make some money. Then of course, securities are required for banks to obtain for SLR requirement. So, they would borrow security from somebody like, I tell you something, this looks very odd, if you do not mind, if I give an example like that.

Suppose, in real life and personnel life it does not happen, but in case of a bank or business life it can happen. You actually, a showing somebody else's security as your security and RBI is saying it is to do that, SLR requires some securities to be shown that you have invested. And here, you often borrow other people securities to show (( )), but actually, there were not your securities never invested them temporarily, you borrow them.

So, SLR CRR is one thing and of course, the one that I mentioned right in the beginning that data that I have. It is very interesting about RBI data, RBI publishes no market repo transaction data very a very unfortunate. Market transaction data means, where the repo transactions or the reverse repo transactions are going on between institutions in the market between banks and non banks, within banks like call market.

In case of call market, they have extensive data on interbank transaction and the call rate (( )), they do not have data on the RBI agent activities DFHI activities. In case of repo is just the opposite data, they are supplying, they do not have any data on market related transaction and looked and looked, what was the repo rate could not find and the amount the volume.

All data they have is the first point that I mentioned is monitory policy data with respect to monitory policy RBI interventions. So, whenever RBI is involved in repo transactions with the rest of the economy, we have banks mostly participate, non banks can also come in even cooperative banks participate. That data I have and on tv what you hear is these policy announcements, what the repo rate is going to be, etcetera, because they are use at monitory policy instrument. So, only a segment of the repo market data, I will show you, the other segment just like call market, I do not have is just not there on a RBI side, I do not know where, it can be found.

So, the definition of repo and reverse repo, reversed from 29 October 2004, there was an announcement, RBI bullet in has that announcement in the footnote, because it is very funny. There is no data on market report transactions, only the monitory policy issue, we can deal with the data, how RBI is conducting monitory policy, for macro students it is a great news. Because, RBI is macro economy policy like monitory policy, how it has been, if I look at the charts, we will know what RBI has been thinking. When it is decided to sell or go for repo transactions, when it decided to go for reverse repo transactions and these are often done like actions announcements are made by the RBI banks come. they decide how much of money will go for reverse repo and how much of money would go for repo or whatever, if it is a reverse repo that day, it will be reverse repo no repo and what the rate will be etcetera.

So, the discussion empirical discussion, we can have regarding this particular idea would be RBI monitory policy. But, the other part were banks how much banks were directly involved with each other in repo transactions, which is not nothing to do with monitory policy, it has to do with their having surplus funds, it has to do with their having not having funds not having securities for SLR that aspect, we will not be able to shade any light, because there is no information available on RBI side.

Whereas in case of coal market, the entire information is on the market call rate, interbank call rate, what it is called no information on DFHI call rate, very interesting (( )) all right. Now, as you can understand repo market is basically, utilizing the securities already, they have they have or they are borrowing securities from somebody. So, repo market is definitely a secondary market, repo market is not talking about investment in the security for the first time, if you have securities you sell them for money, if you do not have securities somebody else's bought it you buy them from them.

So, the entire repo market is a secondary money market remember that the entire repo market is a secondary money market, it has nothing, it is not a primary market at all. Treasury bills market I was mentioning that, there can be a secondary market, there are secondary markets, but the entire discussion or my discussion on treasury bills were about the primary market, when government is selling treasury bills, they are primary market. But, the repo one, if you look at it the entire market by definition is a secondary market not a primary market all right. So, essentially therefore, the objective is you can call what RBI calls and macro economy prefer to use.

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There is an issue therefore, the repo market a short liquidity management is the issue is a very short term market, it is call a short term liquidity managements. So, the repo market is essentially, objective is or the purpose is short term liquidity management, how do banks how do RBI manage liquidity in the short term. So, the entire issue a short term liquidity management with the secondary market, thus the entire thing of the repo market is this. In the eighties, it was very active when all government securities u t i units were traded in the repo market. In 1992 a scam broke out, when banks were found to have raised excessive funds through the repo, which they could not return. Harshad Metha case, when banks were found to found.

It was the Harshad Metha 94 was the Harshad Metha case. 99 India is full of scams every period, you will find. 1992 there was a scam that banks were over drawing funds from the repo market, which they could not return. Subsequently, what happen government got very conscious nervous, they did not allow all kinds of securities to be traded there anymore, they specified, which security you can use and I guess they have specify treasury bills etcetera, few government securities to be used, which has very safe all right, neither 91 day treasury bill 364 treasury bill etcetera. But, over time again, what happened is slowly, the repo market settles down the scam with it way and government slowly or RBI permitted all kinds of treasury bills commercial papers certificate of deposit to be used in the repo market, they opened it again.

So, there is a lack of confidence as soon as the scam was there, they became very tight about, what to be used in the repo market, they only allowed the government bills to be used then slowly, they relaxed again. And presently every kind of respectable knowing, I mean respectable and common securities are used in the repo market all right. As I told you repo market is a place to borrow money and also to borrow securities temporarily for the SLR. So, directly competes with the call market. And the repo maturity period what I have found, what I have understood, it can vary from 1 week to 6 months, 1 week to 6 months repo all right.

1 week 2 week 3 weeks 1 month or 6 months an there are also like call market over night repos within 24 hours, it would mature a very short term all right. And on a day to basis day to day basis the repo was renewed, over night repos all right. So, as I told you the repo transaction are very much particularly, the RBI section of the repo market, which is a very important issue, I am going to that monitory policy, because I take a macro economy perspective here, which very interesting.

The repo transactions are definitely concern with connected with part of the repo transactions are with the monitory policy of the state bank in our country. And you will see that it is connected with CRR, SLR, I have already talked about the the call market. So, it is connected with the money market and from the policy point of view, it is connected also with a very important traditional monitory policy instrument, which you find in the theoretical literature, which you find practice in all most all countries central banks monitory policy instrument. Repo is one, they are using bank credit is another one, which another country use a lot, we do not we use CRR, but we have one monitory policy instrument, which is we use them as well as other countries use them and it is one of the oldest monitory policy instrument is a traditional.

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One and repo market directly competes with that too and that is called open market operation. Open market operations so on. Open market operations are directly done by the RBI or the central bank of any country. It is a traditional money market or monitory not money market a traditional monitory policy instrument of the central bank India also has it.

It is simple, it is simply does this, the deal with government securities short term or long term does not matter, they go into the market when, they sell them, they are absorbing funds from whoever banks non banks public, whatever that is called open market sell of securities. And another one is the reverse of it open market purchase of securities, when they buy the securities in return, they pump in money into the system. So, the repo transaction directly compete with the open market operations, except open market operations may be for a longer term, once they sell it, they do not go back to the market may be for 2 weeks 2 months 6 months or whatever 1 year.

Whereas repo market transactions are very short term money market, but they have a competition. So, therefore, to sum up these money market instruments have 2 dimensions, one the free play of the market, whatever the market thinks, they need what, they want to do either in the repo or in the call market or whatever or buying and selling of treasury bills.

The other dimension is the central banks monitory policy what central banks as the guardian of the money market wants to do. And they use the call market indirectly through DFHI, which is called a primary dealer is like a agent satellite of the RBI in case of RBI in case of repo market, they do it under l a f, I am going to talk about that soon. R b I transaction liquidity adjustment facility l a f, it is coming next topic very important topic, it is a monitory policy adjustment they do all right.

And of course, they have the traditional of the instruments in their hand, bank rate open market operations, unfortunately bank rate is not use as a monitory policy instrument in India, it is not active as it is active, in Europe in US in other countries. But, we use instra bank rate, we use CRR, which other countries are not using, interest they invented that instrument, there are not using it, if they had used, it they would not have had this financial crisis. Because, CRR forces the financial institution to park with there a portion of their cash with the central bank forces them.

So, if the banks are in trouble central banks all the use is that cash, what happen in the financial world or the western financial world, if the banks were in trouble or the non banks. There is no kind of security planning lying with the central bank, which they can use to help them out, big problem they got into. But, in India CRR is a very active monitory policy instrument, which is what, which is central bank is deciding something to do with the system.

One is the system playing it out, call market (( )) repo market (( )) buying and selling a bills whenever, they have surplus funds, a secondary markets when they do not have surplus funds sell them off all right, that is going on 1 business. Another one is the guardian sitting there looking at in trying to do something with it. There come the monitory policy instruments, there are traditionally, 212 monitory policy instruments were, there bank rate and open market operations.

In theoretical papers also, you would find them monitory economics paper. But, then the new ones came, CRR and repo. In India they are using CRR repo open market operation, the not the bank rate. In other countries bank rate is very important. And in other countries, I do not know where the central banks gets involved with repo transaction at all or not the entire repo transaction in other countries could very well be like the first world very well be market repo transaction since, which is within banks like the call market.

In India the repo market, which is announce on tv, which we study is the monitory policy part of it where, RBI the central bank is directly involved. Now, I will show you a slide how repos are action, I have a slide from RBI, I will show that to you, if I have how repo are auction for central government dated securities long term securities repos are auctioned. And then banks DFHI a financial institutions all come and bid and there are cut off set and you know they were and then repos are tender for repos are a minimum of 1 crore and multiples they are off, my goodness repo transactions there are multiple of 1 crore, each repo certificate (( )) huge amount of money transaction.

So, when they go for repo that means, there is surplus too much of a deficit some multiple 1 crore, what my notes are saying, we can look at the check the numbers repo amounts multiple of 1 crore. So, we will talk about that and somebody called l a f, I just mentioned this today and the next topic it will come, I will talk about l a f liquidity adjustment facility, I will talk about that next time. L a f is the policy that they introduce the beginning of the century and under l a f is the umbrella policies repo RBI s repo transaction as a very important item. So, I will talk about that in the next topic when, I talk about RBI directly what it does. So, it is all gearing up towards RBI s function. So, I take a very macro economy perspective in this course, which interest me to be honest with you, I do not take the micro issues of a banking system etcetera, what they do. So, up to today is alright.