

**Money and Banking**  
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**Lecture - 18**

We are talking about treasury bills, the life with treasury bills in India began with ad hoc treasury bills. And what happened was, there was an agreement, which initially was during the British days, RBI and the government, that government would keep money their money with RBI, the way we keep money with commercial banks in a deposit, in an account.

If that money goes down below some amount on working days and a particular amount on Friday, which is very important end of the week, immediately the governments would sell treasury bills called ad hoc treasury bills to RBI to get the money sufficient money to keep that minimum balance. We do not get this privilege from commercial banks, if our money goes down below minimum balance in our accounts saving accounts, commercial banks does not give us the freedom to borrow from commercial bank to bring up the level to the minimum desire level.

The governments gets extra privileges and RBI is essentially, central bank is the banker of the government. Now but this the frequency and the amount, with which ad hoc bills used to be sold by government of India, which is always running at a deficit became enormous. And RBI got fed up because most of the time RBI was supplying the money against those bills by printing notes, which is deficit finance, which is dangerous for a country.

And if RBI has a responsibility also to look after the monetary policy and the monetary economy, it cannot just keep on pumping money like, I have to look after the discipline of my child. At the same time, I keep on giving money and whatever he wants from me both cannot go together, I cannot discipline him. If on the one hand, I say I got to be discipline on the other hand, if keep on supplying cash and all those thing to him whenever whatever he wants, whether he goes to school or not, whenever he wants to play, whenever he wants to sleep so RBI was getting fed up.

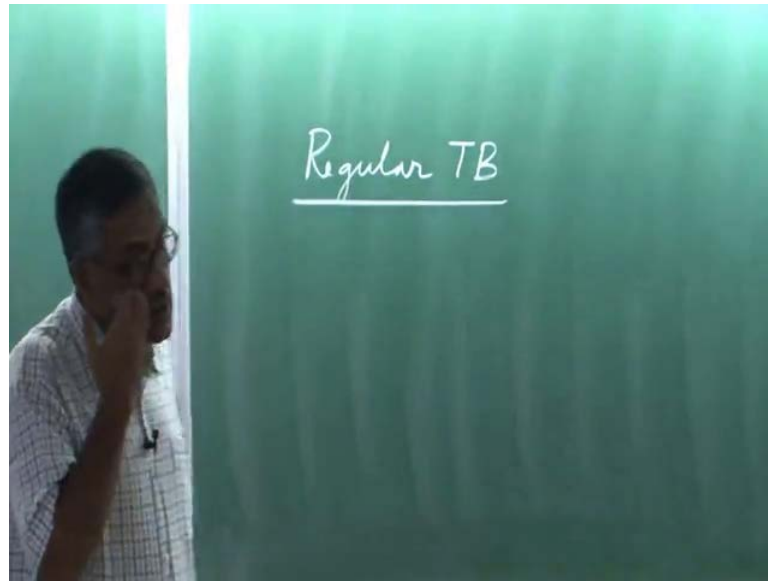
Finally, after 40 year or 50 years, in the 1990's, there was a agreement again RBI and the governments sat down, that we will what you call that, what you called that we will

forget this languages, phase out essentially phase out the ad hoc bills completely by 1997 and 98. And they decided that, this amount of ad hoc bills, maximum they would issue during this period and all they would return the money. But, they found within 2, 3 years that, the government is not listening to whatever the standard it has set for itself, how they should issue treasury bills.

So, they set out again and said stop that, what they did was, the ad hoc bills and there used to be a 91 day treasury bill on tap, which is the same thing it is always available. So, if you want to invest your surplus cash, the other as a house holder or as a firm or whatever, you can put the money there. We used to 91 day treasury bill, which the regular treasury bill on tap, which called and the ad hoc treasury bills, they were all converted into a console like thing with indefinite maturity, maturity was not specified.

And what with a interest payment of 4.68 I think, 4.6 percent per annum which is hardly anything. So, whoever invested in that keep on getting 4.6 percent only but we do not promise when we would retire them. Because, at the time of retired, government will have to pay the principle to those investors, which really does not have the cash. I do not know whether they have retire them or not, I really do not know still even after say, how many years, 15 years later. So, this small, small information would be somewhere, I do not really have the information so they review ad hoc treasury bills and 91 day treasury bill on tap. Now, let us come to the actual treasury bills, the core of the treasury bills that exist today, these are called regular treasury bills but I need to talk about that.

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I have given you a brief history regular treasury bills now, regular treasury bills, first let me talk about the 91 day bill, is very popular. 91 day bill has been there for a long time, which was on 2 types one on tap, one was on a weekly tender it used to be sold. Weekly tender my goodness not auction, huge amount of work for RBI because RBI is to manage that. Government wants to sell it, it announces and all the headache was on the underwriter call RBI, to announce it in news papers also sometimes, all the bids, decide it sell it, collect the money and I am coming to that, there is some issue here.

Until 1965, according to the professor voltage book, he did the research work because he was at IIT Bombay so he was in Bombay, he could go to RBI and get the data and information. Being in a big city like that, has an some advantage which we do not have here but fortunately there is the internet, I can get some RBI information sitting here. Until 1965, regular 91 day Treasury bill was sold to the public by weekly tenders or through weekly tenders.

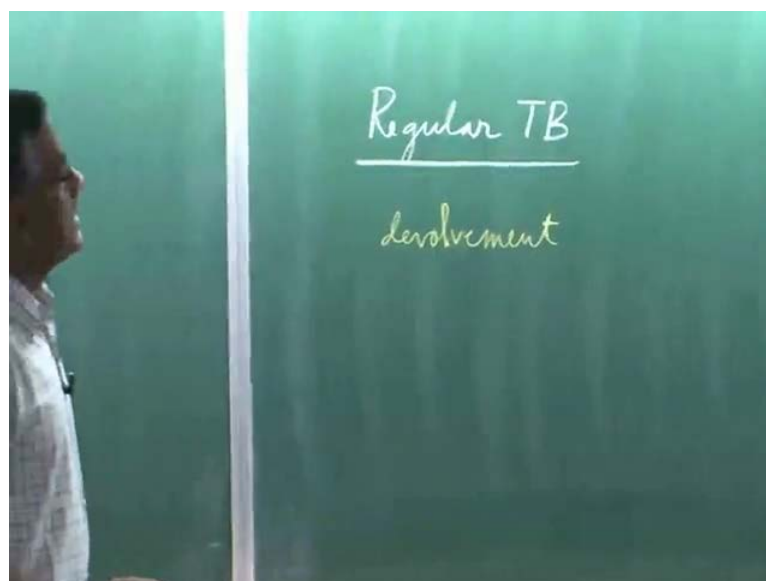
The announcement of tender will be made to the public through a press communiqué and the tender that quoted the lowest discount rate would be accepted, you know that how tenders work all right. The lowest cost, lowest bidder is given the job to do that but the problem is, even the lowest bidder and the amount they want to buy. And other people, if other bidder if you accept the lowest bid, you can also invest, is not you had a higher discount rate and also several you want to buy, your discount rate was rejected.

Because, it was it was high and the lowest discount rate was accepted so the treasury bills sold as discount bond in some sense. So, accept it means, only you can buy, no she bid higher level but she accept this discount rate, she can also invest all right. In fact, that is good for the government because government is asking for lot more money in those days, there are few buyers were there. Mainly, the buyers were banks and some non banks, not individuals, not foreign governments, not so much a little bit were there.

Now so what they would do is that, Jagdish's rate was lowest, it was accepted Jagdish bought something but there still some balance then they would invite other parties. Do you want to buy them, they said we will accept the rate, anyway we are surplus cash, what to do for 3 months, let the money go there, 91 day bill. Three months let the money be there with government, it has zero risk, it is a gilt edged market zero risk, may be the rate is low then what I was expecting let me put in money.

But, they used to one more issue I want to tell you suppose, the amount was  $x$ ,  $x$  minus  $y$  is now remaining, which  $y$  has been bought by him all right say, 100000 crores, he bought 60000 crores. Now, you people bought 20000 crores, what 20000 crores still remains which governments wanted. Why who would take who would buy them, nobody is buying it. But suppose, there is no buyer, who investor I mean buyer of the bill of the investors. Suppose, there are no investors, this is to put also RBI into trouble, let me warn you, let me tell you about this right now.

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This is known as the devolvment issue, devolvment, devolvment d e v o l v e m e n t devolvment, this devolvment issue is to be another headache for RBI, the balance RBI will to have to pick up. Less offer trouble than ad hoc bills because it is continuously RBI now, you have a public coming into the picture, tender, auction whatever, regular bills. But, if there is a balance which nobody is buying like (( )), there is a bulk balance that you could not collect from anybody bank (( )).

Finally, who would do it, the head of the family father, this also remained a headache so regular bills were not without a headache for RBI, they had some headache for RBI but not that much compare to the ad hoc bills. Now for a while, these bills were around that in 1965, which I already told you, they were made available on tap. So that, the devolvment issue is less, they did that on tap so you do not have to call weekly auction or weekly tenders weekly tenders those days.

But, it will available on tap so whoever wants to buy but I do not think that, there were many buyers. 1993 that means, the reforms period started, they converted that from tender to auction so auction, auction day announced, they are all invited so they would all come and start bidding in a room all right. Auction system was introduced and it is of course, market determine because everybody has a right to do whatever they want to do. Then look at the amount RBI selling that is, government is requiring, they decide how much to buy and what price.

Price is usually the interest rate, the discount rate , they would date of auction would be notified and the main bidders. When auction started, I think earlier it was the same thing who has the cash in India, some non banks one or two and banks, and those days mini banks were on the losing side, they were running at a loss. Public sector banks also, just not government banks, public sector banks were also running at loss but anyway it used to be banks, 1993 also thing was very bad.

I remember, I used to read up news paper about annual report on, how many banks are running at a loss and what is the total amount of loss. It is unbelievable public sector banks, complete mismanagement, inefficient management, whole structure now they have improved a lot. So, it used to be business page in the news page there used to be the, they still a business page in the newspaper, major newspapers. And we get all so far

information, if you keep your eye open but you are economic students, you will pick up current issues topic information a lot there.

I used to keep the clippings, because I started preparing course along those lines and those those clipping I used to prepare my notes also because internet was not there so much, 95 windows has just come. Do not think life was 2012 life, it is very different life, we were learning the computer used the word processor a little bit hardly, an email just started, websites hardly existed in India, hardly existed. So, the RBI announces the data of auction notify the amount from time to time, commercial banks are the only competitive bidders.

But, state governments, state pension funds, pension funds there are organization called pension funds, they collect a lot of money. Every year people were earning, putting a fraction of the salary into that kitty and someone who manages that, usually state government and central government has manages for them. State pension funds and provident funds, like I am putting my money, it goes to government, government has a responsibility to manage them.

They were not allowed to bid, very interesting not allowed to bid but if there is a balance which bank did not pick up, if you accept that rate, you can take it. You can invest, state governments, pension funds, provident funds organization well, you can invest because there are also surplus cash. I would had a non banks yet here but do you understand what I am saying so whatever the cut off was the discount rate, you can purchase them and invest them all right.

Now, one thing often happened suppose, an  $x$  amount is to be collected but through sell of 91 day regular bill, banks have picked up  $x$  minus say,  $y$ . So,  $z$  remains,  $x$  minus  $y$  remains and there are three, four groups that are sitting there, RBI often did what is known as allotment quota allotment. Not first come first serve, whoever is willing to invest at that rate and suppose, 5 investors are sitting there all right they were not bidders, if they except the rate, they can buy, they can put in money.

And RBI often did was, they ask them what is the amount they want, if they found there is a huge variance, not similar and also the total is some amount so they would make a may be five equal parts or whatever. So, RBI decided also the quota for them this is how,

they are allotted the treasury bills. Even after that, the non competitive bidders or non competitive participants, pension funds, state governments, etcetera put in money.

Even after that in 1993 onwards, there are used to be some amount remaining residue say, RBI devolvement would be there all right. I am finding RBI devolvement is still it was there till about according to my data sheet I will show you later, till 2001 and 2, 2001 to financial year, RBI devolvement was there after that it has become 0. That means, the entire issue is mobbed up by the market, the competitive bidders and non competitive participants, RBI is not having any devolvement after 2012.

After 2012, RBI devolvement was an issue, RBI does not wanted but it used to fallen on his head like (( )), that kind of a thing is involved, nobody is doing it, you have to do it. Very good now, that is the 91 day bill, I will give you lot of some data, it is very interesting to look up some data. Now, I have come to the controversial one, this is called 182 day bill, 182 day I gave you this titles this names yesterday or something, 182 day bill was introduced in much before reforms started, this is during the Rajiv Gandhi era, 1986 November.

But, it is interesting that, the 182 bill was there, it was withdrawn, it was put back, this is how it went and I exactly do not know, why why it why it happened like that, 182 day bill. Now, the idea was to introduce the 182 day, to introduce some differentiation in the government bills market, short term money market, short term government bills market, to introduce some differentiation like we go you are going to go on pipe by a motorcycle.

Now, you can have only Bajaj motorcycles but if you have Bajaj, Kawasaki, Yamaha, etcetera, etcetera and these Italians companies whatever then you have a range of product to select from and the market also become more competitive. Because, everybody knows, if I do not make it attractive, customer will go to the other product so differentiation makes the market more competitive all right. Now, 182 day bill what I have read so far, was introduced to make the market more competitive, more attractive to investors.

Because, if you do not like 3 months it is too shorter investment, you go for a 6 month investment. For six month then you do not have worry, after 6 month when it matures, you get back the money from the government. You can think about what to do with the money, 3 months some so far some investors, it was too short a time. Suppose, people

are making money, simply they do their job is like a speculators job in the stock market, they keep on putting money in some kitty, earning something pulling it out or whatever, putting in somewhere else, this is all they do all their life.

Suppose, I am saying, that is all they do, they do not manufacture goods, they simply put money here, earn something, take it out, put money there, earn something take it out, they keep on doing that, like a speculator. So, I guess 91 day would be a big headache because it was some people it would attract if they say, if the market is not doing well depends upon the economic situation. If the market is not doing well then 91 days (( )) or one can look at this way, governments bills are safe market.

So, if the market is not doing well 91 day, we can still short 60 day, 6 months is good but some people some investor 91 days enough but the return is not very high. I am not finding absolute instrument to invest, for 3 months I will put money here or would what they call, I I park my money here, that is the language they use, p a r k like parking a car. Now so government thought how about introducing a 182 day bill where, investors do not want to worry buddy for 6 months, they want the thing is safe, investment is good investment, let it be there then we will think.

I often think like that, when I put my money, I do not think short term instruments, my goodness after 6 months I have to have a headache again, again look up the market, think about call the financial advisors, tell me where to put the money. If I put my money, I put away in some instrument where, I do not have to worry about for 5, 6 years or so to be honest with you, let it be there, whatever surplus I may have. So, they introduce that to differentiate the market, make it more attractive 182 day bill, way back in 1986 that means, it was Rajiv Gandhi's time 7 plan all right.

Now, what happen, it used to be sold through monthly auctions, not weekly, very different not weekly number 1. But later, it became so attractive, that they make fortnightly, very interesting from monthly to fortnightly so half a month all right. It became so attractive and also probably, there is government needs money (( )), 182 bill so tapping a market, segment of the market from money governments want to view.

Tapping a segment of the market for money, it does not have money so monthly is too few, I am not getting enough money make it fortnightly now, it is government's demands. This bills were issued at a market determine discount rate for a minimum



amount of 1 lakh and multiple of (100000). So, it was an expensive bill, treasury bills can be even 100 rupees all right 200 rupees you can buy, 1000 treasury bills.

But, these when I think treasury bill have a face value of 100 rupees but this minimum amount, minimum issue size my goodness 182 bill was 1 lakh so this is not meant for small savers, this is meant for big guys. Banks again, non banks who have sufficient cash to put money there and then multiples of 1 lakh, that is a huge amount usually all right. And I will talk about that these bills were so prestigious bills, they were used in SLR I have not talk about SLR, I will talk about SLR later.

They were used in SLR also, banks have to maintain at besides here are, there there were suppose to maintain also SLR. And SLR is just a entirely not cash, SLR is a basket of items where, there is some securities, cash, etcetera, these 182 day bill government allowed banks to use them in their SLR basket. So, banks were also tempted therefore, to put money in 182 day bills because banks knew my goodness now, every fortnightly or weekly I have to show the SLR. For SLR, cash in not enough, I have to show them certificates so you can see how government is trapping created a trap for banks.

So, banks were naturally force to invest in their in these 182 day bill because it is a convenient instrument for the SLR, a convenient item for the SLR, it worked both ways, that is it. So, essentially, what I am trying to say, these I have called captive market, in case of coal allocation, this is a debate going on TV, coal allocations scam, captive market. Governments is saying that, coal blocks were allocated for captive market use that means, there is a steel plant it requires coal, as a power plant it requires coal so it was allotted to them block wise, whatever they need at a low cost.

So that, when they produce electricity or steel, the prices will be low, if the input prices are low, captive market not open markets sells. But, BJP and the opposition is saying, that is the way not to allot valuable natural resources, way to allot valuable natural resources is to auction them and find out them, the highest bidder. The second point that BJP and governments opposition is raising and governments is also taking out, government has agreed the two parties. The many of the receiver of the coal blocks are yet to mine the coal so what are they doing, sitting on it, why.

They got it that are low price but not using them so what I am trying to say here is that, you can see from here, 182 day bill can used in SLR, government is essentially creating a

captive market with the help of banks. So, banks will surplus, funds will automatically get channeled channelize into government treasuries and government needs funds. So, governments is essentially using the banks to fund the deficit very cleverly by selling the SLR because SLR they made it part sorry 182 day treasury bill they made it a part of SLR all right.

So, this is captive market, you understand that often, Tata first captive plant power plant I heard was the with respect to Tata Tesco India Jamshedpur cannot get power supply from Bihar, Bihar was one of the worst state in the world in the country. So, Tata had a captive power plant to run TISCO, TISCO doing it, it survives on that. At night, it supplies when the plant is not functioning at full steam, it supplies the excess power to the grid.

Day time, it supplies power to TISCO, Tata iron and steel factory all right so captive plants have very interesting issues. Now, this coal block thing is my understanding what is going on, I do not know you can listen to them means, this is what has happened, it is not exactly but it is something inefficiency. So, who benefitted etcetera then found anything but this going on the fight political fight. These bills were eligible for SLR and I forget to tell you, that does not mean 91 day bill were not eligible for SLR of course, 91 day bill was also eligible for SLR.

So, these treasury bills government is working cleverly now, since they have an SLR, they are using that SLR loot to sell and banks say 182 day 91 day (( )) very clever, extremely clever all right. Creating a captive market, your funds excess will automatically come to me now, unlike 91 day bills, since it is a large amount, it is very interesting Central Government does not like State Governments and State Government also do not have that much excess funds.

Some State Governments have surpluses usually they do not, they were not sold to state governments and provident fund, etcetera very interesting. This one was given to banks the reason may be, since because of the SLR and the economy was fattening, growing over time. You take the reason simple reason, as the economy is growing, bank deposits are also growing. You saw the numbers demand deposit, time deposits, on all that money supply numbers, which are also saying bank deposits are growing.

Now, therefore, the larger and larger amount have to be put in SLR and CRR because of that, government also need funds so government is giving these 182 bill day to the banks basically. The bidders, you bid among themselves, among yourself your community, there all fellow bankers for banks may be nationalize banks where, they were all bidding, along with the private banks also.

And they are mopping up the entire 182 day issue, state governments has said no no no, you go to the 91 day large amount and you do not have often large surpluses and I am helping out the banks and banks are helping me, do not come. So, it is very interesting these state government, provident funds, pension funds, they are not there in the market all right. And now, what they have is, just a note there, the banks and of course, this is very interesting that, the non competitive bidders in case of 182 day bill, has been very interesting.

Foreign banks because it is attractive to foreign banks, other financial institution in India LIC, UTI, GIC whoever and some primary dealers like DFHI some primary dealers like d f h i. DFHI is something I will talk about that, RBI is created this, NABARD they created after they created DFHI essentially to look after, it is a funny organization sits with a huge fat cash, it is a fat guy with lot of cash, he looks after the call market, etcetera, etcetera very important all right.

So, call market DFHI intervene, now what RBI is doing, RBI RBI is essentially decentralizing the functions. You say I do not have, I cannot take so much headache now, I am creating this institution, you take the headache. So, DFHI has become the right hand of RBI in the short term money market, NABARD has become the right hand of RBI in agriculture finance so it is keep it keeps on creating such institutions. So, RBI says you manage, if there is a major trouble then I will sit with you otherwise, you run your own show, own business.

Father is telling son, now you are grown up, you run your business, if there is a major problem you come to me, I cannot look after your business, my business and all that business are inherited, this is this is precisely, what is been happening. So, DFHI is now an important institution here, as an investor in 182 day bill, which is running autonomous is to show well as a com non competitive bidder like foreign banks, etcetera and other financial institutions, it also invest in 182 day bill.

Now, having run from 1986 November finally, on 16 October 1992 when the reform started, 182 day bill was stopped from auctioning. I found suddenly, there is a huge gap no data and then I found footnote somewhere, it was stopped. Then you would not believe me, again in 26 May 1999 which is nearly 7 years, they were reintroduced, 26 May 1999 they were reintroduced. And then you what you know what happen, again on 14 May 2001, they were stopped (( )) 1999, 2001 May 14 they were stopped again.

I really do not know, I want thin answer for this at some point why they did that, no 91 day bill they never did that, on and off, on and off, it is running continuously, except on tap was closed at some point in 90's all right. The other tender this one came back, 1992 it was stopped, 1999 introduced, 2001 it was stopped and now, since 2005 April 6, 2005 April 6 I find that data there. So, last 10 years, last not 10 years 7 years, it is been running continuously now, why it happened I think, I think why it happened.

Because, when I looked at the 364 day treasury bill, I found some answers, it is like a archeologist you know, looking trying to unheard some some secret of the past. When I looked at the 364 day treasury bill, I found it was introduced in the April of 1992 and then I say, now I have an answer. The 182 day bill was doing very well now, the governments got more ambitious, they say let us try out even longer term bill, money market bill, not one 6 month 1 year.

This is précising the period from 1992 to 1999, they were not having 182 day but that got replaced by the 364 day bill, which is roughly 1 year. And they settled the market for 364 day, you can just imagine government has less addict, if it sells for a year because the repayment will come after 1 year all right. But, short term means, within the few months I have to return the money, 182 day within the 6 months I have to return the money, 364 day even better because I can (( )) time to return the money, this I think is the reason.

Because, the time it was withdrawn 182 day, 364 day was introduced and they tried it out for 7 years. For 2 years, they released the 182 day again to find out now, in the presence of 1991 already there, 364 now there, how is 182 day they were doing. For 2 years, they tried it, they stopped it again, again 3 years later they reintroduced. And now, the three bills are there in the market, this is the story, there is short footnote here, I will talk about that soon.

Before I close today, the 364 day when I read up 364 day you can read up the literature, you will find it is very similar to 182 day bill for instance, it is auctioned fortnightly, not weekly fortnightly all right. And these bills never had a specified amount to be sell, it is like available on tap, you buy whatever amount you want to buy. They would not just announced that, we are selling like the shop says, we now have marveled, which was not available.

It is not saying, only one marveled per head, it is not saying only we have one box of marmalades, we announce we are selling marmalades you guys come and buy whatever you want to do, there is no pressure on you, this is how they are selling. 182 day, 364 day auctioning, competitive bidders are there, RBI has no devolvement issue here, no responsibility whatsoever, even by definition no responsibility. 91 day (( )) if the amount is not specified, where is the devolvement issue coming.

Devolvement issue is coming when this is I have to sell, like an underwriter of a company shares and if the minimum does go through, we withdrew. So, in case of government, minimum did not go through withdrew means what, how would the government run, it would not survive it does not have cash. If minimum does not go through, you arrange for the funds devolvement so that was an addition headache for RBI.

Now, it is interesting now, in 91 day bill, there is no devolvement for long time now and these guys, these other bills, market market other bills of government bills, 364 day and it is interesting. So now, what has happened, there were initially 364 day did not have any non competitive bidder only banks, again they can use it for SLR so government is happy, banks are happy. Later around 1999, they introduced the non competitive bidders, state government, etcetera, the 182 day 364 day bill all right.

Non competitive bidders are participants, who do not bid for the discount rate, if you accept the market price, you can invest money. This is the story, I think this is why, 182 day was withdrawn, government then tried out or RBI, if 364 day even better for the government can work. When they found is working, they in phases introduced it back, put back the 182 day bill so today we have three kinds of bills, that is the data I will show you, regular bills 91 day, which is sold on a weekly basis and 182 and 364, which is sold on a fortnightly basis, without any specific the amount no devolvement.

So, things have improved a lot, RBI is much more relaxed today, it does not have the government financing headache so much on its head. Recently, it had because of the inflation and the recession because they did not know, what to do with the economy, lot of work, extra work. So, governor was often on TV, trying to educate the public and the people at large, as to what they are doing and what they are planning to do. Macroeconomic headache, not the headache of funding government budget, the headache of macroeconomic headache they had.