Money and Banking

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Lecture - 23

Almost all of money market is finished and I try to give you an idea about money market.

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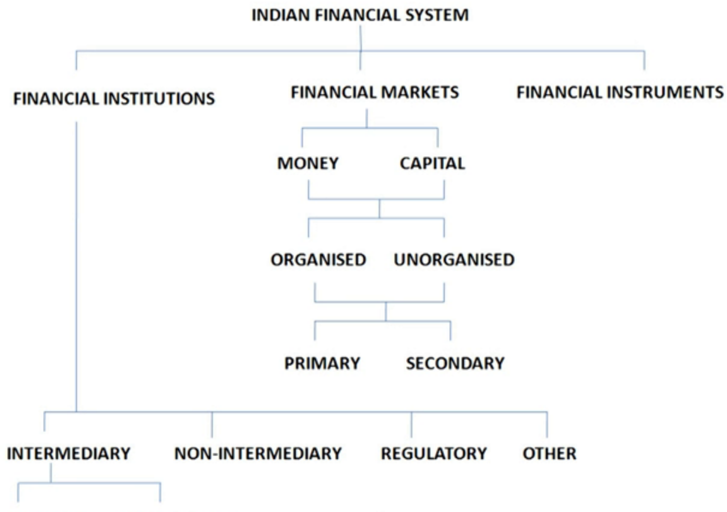

Figure III.1

I started out with the classification of financial market sectors. In the financial system, you have more capital market and money market, so I started out with both the things.

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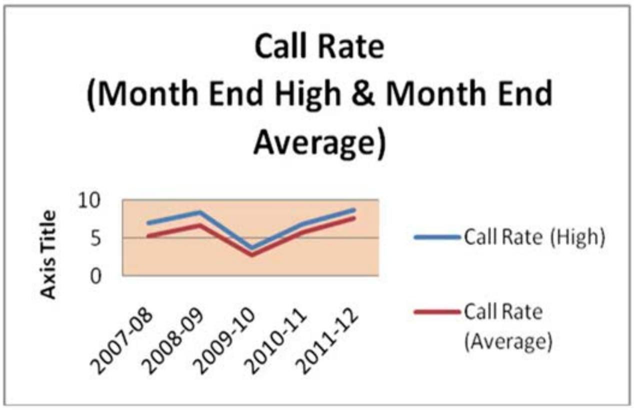

Figure III.2

This is the one that you have seen, now I have two kinds of averages here. Call market is a daily rate like stock market price. It fluctuates from morning daily afternoon till the call market close, just like stock market. You can have a hour to hour price data, who can have a daily data end of the day data, then you have a end of the month data all right. And every day there can be a low the lowest price, the lowest call rate and the highest, like the maximum and the minimum balance, thought they fluctuate. So, therefore, there can be a minimum value that day, there can be a maximum value that day, just like stock market. And this data, now the question is, how to construct an average without getting into too much of a complication. And I found these is not much of a change what I did was one was a month end high all right, and then a month and average of high and the low I have taken.

Now, you can see a very interesting thing the average is slightly lower because, when you average it you are not at the highest level every month, all right. Because, you are taking an average of a lowest value on particular day and the highest, end of the month the lowest value, what it was the last day working day and the highest value. So, what you find here is, there has been a deep not much of a change, and after that things have been going upwards. There has been a date 2007, 08 it was some number 2008, 09 are marginally increase call rate has gone by marginally. 2008, 09 is the tremor season year, recession set in the august all right. Then the first year of recession full year of recession, you saw very interesting thing in the call market in India.

What did you see there, a significant deep in the average rate. What does it mean? Call market [FL] call rate there is a significant day, after that RBI became very active in monitory policy and that monitory policy I told you was a high interest rate policy low liquidity policy set by market or by to the raise that been going up. But the deep theory says that the, when the recession became active in the western world, and it started influencing Indian economy and the Indian output growth rate etcetera, where going into a recession.

Recession means growth rate about to fall. When they were going down, there is a lot of liquidity in the Indian market bank were not required to borrow in relatives terms a lot of liquidity from another banks or from by the discount and financial house of Indian DFHI. They are they were not required to borrow lot of money. So, what you see is that the simple supply demand diagram will say, when the supply is more than demand, when there is excess supply the price are so, when there is excess liquidity and the demand is less for the liquidity, because banks already are sitting with the lot of cash. So, they are no problem a less problem to sold their CRR and all that to RBI. They were not borrowing much in relative returns.

But, it is very interesting the call rate has been recession, they will go away we are still in the field of recession still, all right. Our growth rate has not picked up election coming for the current financial year 2012, 13 average growth rate will be even less than last year probably. They are not out of it, but because of type of monitory policy of the RBI liquidity over excess, excess cash in the excess rate was taken out and because of, which the call rate was again showing up. Simple thing set CRR value, if RBI raises the CRR value banks are required to give more cash and that cash is thousands of thousands of crore of rupees, just not a little bit of cash and that impress the market the short term money market.

And therefore, banks are start again borrowing, because you can see of 2009, 10 that it has been steadily going up 2010, 11 and 2011, 12 you see a very sharp increase its average value remember average value going to sharply increase, but it is definitely going up, all right banks are still borrowing. On 2009, 10 the first year 2008, 09 in the middle recession came in the western country. It took 6 months, 8 months to affect India. Significantly, and then, you found that the market was already having a lot of cash. The money market banks were having a lot of cash surplus cash. So, no problem in showing

CRR to RBI keeping that cash did, which is the prime factor in when you call or if, there is a recession people must be spending less, why because fear of future.

Let us say, I do not know why, but because of market reasons the call rate was down. So, there is a point to note here, that is why I show the data I have how many 25 years later earlier, I used to show 10, 15 years data low point going back 10, 15 years or what the point. Now, we need to show the data from free recession to current, because that is the important time period in our life economic life. All over the world, just not India all over the world they are doing.

Next, this is the call rate month end high monthly. Why do I have that, I told you in my lectures, that there is the seasonal factor involved. There is sudden seasons, when the call rate are always high several seasons, where call rates are down like end of the financial year call rates are increasing. Then the half yearly income tax payment tax payment, then the call rates go up, because companies borrow a lot of money withdraw from the account to pay the taxes.

And the festive seasons, then the agriculture harvest season or showing season sometimes into lot of cash transaction people say, what I doubt them very much will they effects the call market, because call market is so much something and so much of less of a rural. But, they are not factors hypothetically proposed, you can hypothesize something, you can purpose something, but then statistically they have to be determine, whether they are important one. I can think about x y z, but if the so, happen then only, y is important x and z are not. The whatever be the reason seasonal rate, you see all these years except the red line is showing a very sharp turn and that is not a seasonal factor, because of, which we read. Now, we look here very interesting. The recession in the year’s sector they did not hit Indian economy for a long time, it was affecting the western role.

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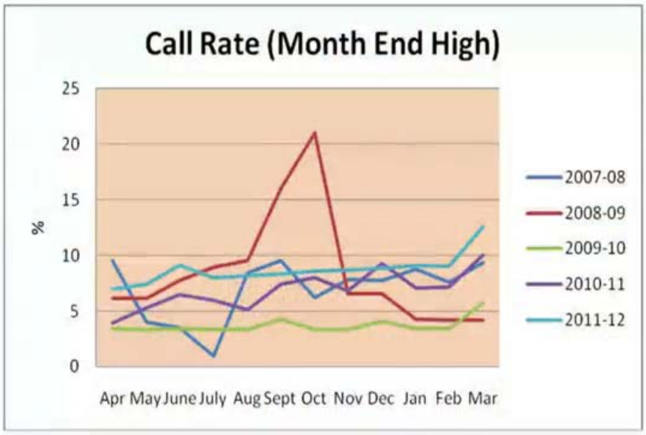

Figure III.3a

But the money markets are more connected financial markets worldwide are more connected. Look at the very significant factor here that in 2008, if you go month wise term 2007, 08 month wise. It is very interesting 2008, 09 month wise. If you go the year when recession set in, when was the month when in short up, you see the numbers you correspond to roughly after august end of July in August, September, October and then in November, it is doubt three months, it steadily went up came down very interesting.

Now, suppose you have no information, no TV, no internet nothing, no newspaper, no magazine forget the western world you watch here with the call market. Suddenly, you see on screen some months is going up, this is what, it is saying and you start wondering, why it is going up. Now, you can see something here. The recession people say, it is around August in the western countries. Now, why is it that, when the recession hit it is very significant and I even do not know, where the call market definite problems, because these 3 months no other year, there is the seasonal fluctuation in those months so much. Look at the other years, there they are uneven lines, but they are quite steady. Look at the blue line quite steady, the purple line less steady all right. The green line very steady.

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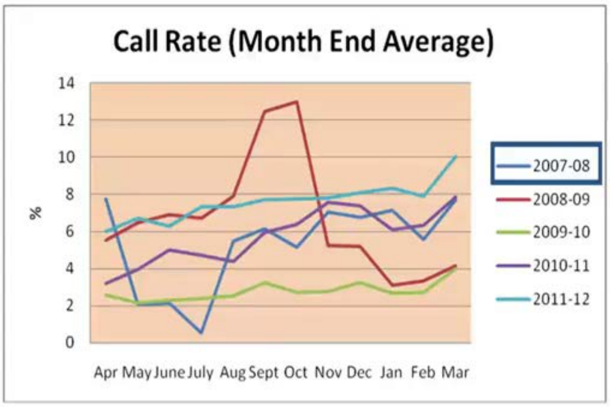

Figure 3b

The blue line is the the deep blue as a deep and then went up in July big deep went up. And after that it is not. So, bad the light blue is quite, all right except last year at the end of the year, they were have been going up a little. Light blue is about2011, 12this one last year last year last financial year. This is 12,13last financial that, at the end March because going up little bit. In fact, all lines are going up a little bit end of the year look end of the year I told you, that is a seasonal fluctuation.

All lines showing an upward segment, you see that, all lines here showing an up upward segment, at the end of the year except the red line. And the red line had a tremendous peak, which is called a spike and the spike lasted of a 2,3 months and that is the time, when the recession hit.

What could, it be the numbers of factors could be there, why the call market responded and they were having less liquidity. One, those are withdrawal of liquidity from the system, why would the withdrawal of the liquidity take place RBI did not do much.

Student: (( ))

[FL]

Student: (( ))

May be, they were moving shifting between assets, another thing could be, portfolio investment is an important source of liquidity in the Indian system. NRI funds coming into the stock market. So, when the stock market are hit quite possible between a shifting out from stop to other things both Indian and foreigners all right. Foreign investment, as well as Indian investment, that can drain a lot of liquidity, all right Ok. So, whatever be the reason, is very significant in this diagram that the, this is red spike is not a seasonal spike seasonal fluctuation are systematic and repeated.

If you have end of the March seasonal fluctuation is understandable and the end of the financial year you are trying to gear your books to making all source of dead payments including taxes like we do we clear out taxes as I So, the economy does ok. So, the so, there is too much of withdrawal and therefore, banks have to in order to sold there CRR, they may have to borrow somewhere.

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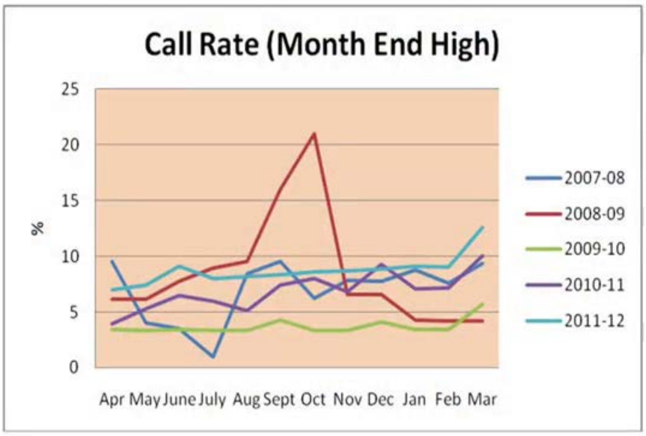

Figure III.3a

So, those whole things, if you find systematic month wise variation across the earth that seasonal fluctuation. But,1 year, it is going up, it is never a seasonal factor it is some other shock it is not the seasonal temporarily disturbance. And most interesting is now, the red line belongs to the 2008,09 and the months you see [laugh] July august September [FL] August, September, October in November, it is down again and in fact, after that its fell tremendously. So, there you go.

Student: (( ))

Exactly, many things can could have happened. In the call market, if you insulated from the rest of the world and you do not know, what is happening sitting in the room and watch in the market and here everything is fine. Suddenly, you wake my goodness, something is wrong like an earthquake that siesmo seismograph or whatever, it is called the instrument I forgot the name.

[FL]

Student: (( ))

Instrument name of the instrument.

[FL]

It records continuous vibration of the under the surface, all right. The How do they predict. One is the question of predicting and then another is in the middle of the earthquake, it will definitely show the vibrations. One of the things they do, when they watch those lines, and it some people say some scientist are heard on TV, that this kind of a variation 2, 3 months back or 2, 3 weeks before the earthquake document indication of an coming earthquake forth forth coming earthquake.This things to happen in future.

And another variation, which is of course, recording the actual magnitude of the earthquake. When the earthquake is taking place. So, this is just like that that kind of a line. And I have seen all that paper, where it deposit, it shows mince vibration goes up. They are spikes, when the earthquake is taking place and from there the measure the magnitude of the Civil engineers know, this stuff probably quite clearly the civil engineer know this stuff.

Who am I talk about.

I am talking about in the general trying to compare things.

So, this diagram to me is interesting from that point of view.

That, these 3 very significant months, we know August, September, October in 2008. If, you open any channel TV channel, particular western channels, they are only talking about one thing. They are shocked, Things were really getting bad very quickly, all right.

Next, call rate month end average.

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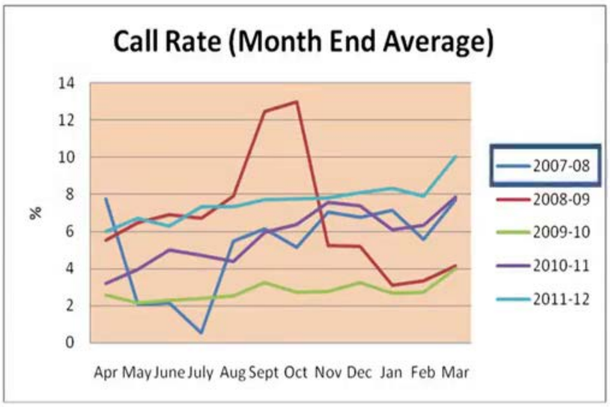

Figure 3b

Why do I have it here one was the month end high, I was using two kind of averages and one is the month end average. Month end average is the same except, there is a plateau like a thing, all right. One is month end high one value and then average value is a low and the above. So, what I am trying to tell you. Even if, you take the low value and the high value and construct an average all right.

They were all showing the red line is definitely showing a pattern, which is very different from any other line, there except, the blue line deep blue line, which has at downward swing in 1 month. Otherwise, you noticed lines there are above one. So, on an average to the call rates were high. So, you can conclude the liquidity on an average throughout the year was less compare to the liquidity in the previous year. You can come, you can make general statements like that.

But, that blue, deep blue has a deep the same thing and the red, which other months, yes it has going up around that time, which going up from July end August, September and October. Except, September and October, it was a small change of plateau and then it dipped amazingly dipped sharp fall like a goes up and drops. So, it is over liquidity shortage is over within 3 months, they affect no more liquidity shortage. It deep means, what it dipped below except, the green line, it bent on going down compare to any another year; that means economy, when it goes into recession, it is the other thing. It is no more shortage between [FL] that kind of a thing [FL] deposits are lying in banks people are not spending scare to spend. Do you understand, what I am saying. So, banks are flush with funds.

The economic activity has gone down. People are like gone into ilonation not doing much, they can this is very clear. So, this the two data and I wanted you to check actually, this is not myself I have already checked, whether these two averages equal or not they do not. If, you consider the low value and construct an average, the data is not significantly difference compare to just a month end high, which I used to do earlier.

All 5 years,6 years, that probably in this course here I spend the month and the average.This year I though, let me check out, I am not assume the low value. So, let me check the low value and find out [FL].

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Table III.3
Commercial Paper (outstanding) – Major Issuers
Rs Crore
Source: RBI Annual Report

	Mar 06	Mar 07	Mar 08	Mar 09
Leasing & Finance	9400 74%	12594 70.5%	24925 76.5%	27183 61.5%
Manufacturing	1982 15.6%	2754 15.4%	5687 17.5%	12738 28.8%
Financial Institutions	1336 10.4%	2515 14.1%	1980 6%	4250 9.6%
Total	12818	17863	32692	44171

Now, this is an unfortunate story I have here, I have data year up to2009. Now, what is this diagram, I am not getting any data, RBI is not supplying in at all. I wanted to know, who purchase these commercial bills sorry sorry who issues commercial bill not purchase, which kind of companies are issuing commercial paper in India. It is a new market initial, it was very depressed from many years I will show that to you. And, it did not pick up at all companies looking for short term funds they were trying to sell commercial paper because of all source of RBI guide lines and restrictions, companies were having trouble.

One thing I told you, if the credit trading certificate its more than 3 months old RBI use to tell the company go and get it again [FL]. Its costly, it takes time to buy those health financial health relative certificates of the of the general certificates of the health of the company, how is it doing are union trading are financial issue are, have you ever seen a balance sheet or profit and loss account of company. You and I have to open that. You would not believe is so many variables are there like. If, you want to check the health of a person, if you go for a over say company in ship medical blood test, I have done.

The doctor keeps on writing [FL] it is about 3page long this number is this that number you do not you even heard of this test, but you want a company test report. It is just like that a company has so many variables, you just significant and industry economics people or management people do deal with it. So, there are two accounts, which deliver or supply those information. One is a profit and loss account, other one is a balance sheet. Now, anyway so, what you find here, what is significant here. Significance of this stable only up to2009 a 4 years, 6, 7, 8, 9.

End of the year, you see one thing, that the leasing and finance company is at largest amount of sale of commercial paper. Which are these in finance companies. They are not producing companies, they lease for finance. Suppose, when you are producing a good you required a machine. The machine is available a good quality of that machine is available abroad the for your company even your total volume of sales that machine is important, but everybody of sales and the cost of the machine is this proportion.

Now, how do you manage therefore, your production, you get it on lease for a somebody you rent it. The way I can rent say a TV, I can even rent furniture, I can rent abroad, it happens very often rent TV rent furniture. I do not know, while they can rent cloths also they can rent whole lot of things rent cars. Western people are very funny. They can rent cloths also they are second hand cloths. Once one family I met, when I was doing a phdand he said come with me come with me why do you spend. So, much,we were very close to each other, why do you spend so much on cloths, these are very expensive.

Say ordinary jeans say 50dollars, my goodness and this fellowswereso crazy. We earn in dollars there, as soon as they tell them a price in dollar they would say [FL] as if, they were mental calculator. So, Indian currencies550 rupees I am taking about 30years back my goodness, who spend 550rupees for stuff. So, they used to covert that back through the exchange rate in the Indian currency. So, I am just. So, what they used to do from the entire. So, what I am trying to say, leasing a finance company is that an essential ingredient from an economy because equipments. I did, I does that a lot I told you about what I can give. Now, since they cannot purchase it. If, so, costly they get it on rent. Now, these companies and finance companies are the same thing, they finance various they can personal life.

I want to buy a car, that will be a car finances automobile finance, I want to buy a household goods, they can be a finance, who would buy all the things for me and then I have to make an EMI payment to him to the company equal monthly installment. Just like a bank, but banks only do not do non banks do that these are non banks leasing and finance company. Now, you see the second most important set up group of companies selling CP sin India in 2009 a manufacture companies very interesting manufacture. Third, you have financial institutions these are big moments selling C p big profits. I do not know, who are they, I do not have any detail information. I tell you and I have been looking and looking I spend one evening 2 hours on the internet and RBI site looking for this data table to get correct here.

I did not get anything, if you find anything just most welcome and I would appreciate that, you know the supply that information tome. Now, lets the commercial paper the market, a little bit of time left let us do that.

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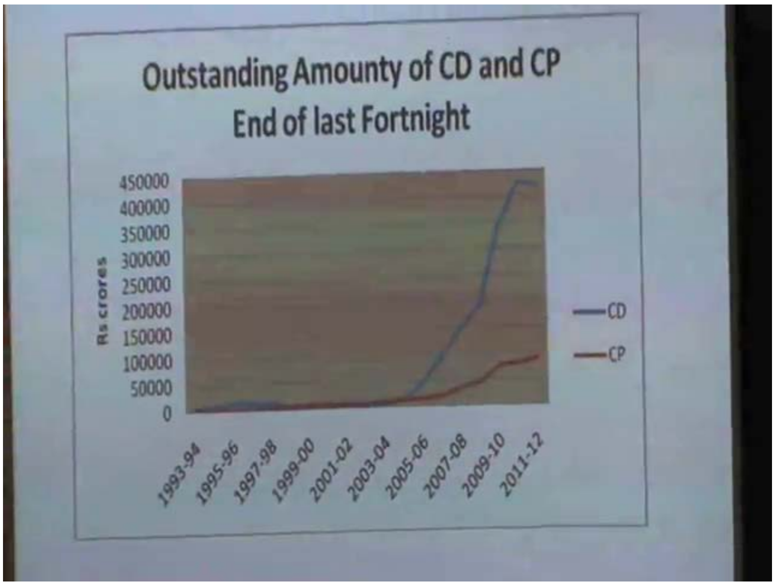

Now, can you believe the differencing the CD and CP market no CD has been there before CP. So, there is a little bit of blue line. From the late eightiescp has been there. CP market and also c d market is literally non existence even in the new millennium there is about 2004, 05. Suddenly, after 2004, 05Ido not know, what happen this require a research, you see the CD market just took off. One [FL]like you walking in the plain land suddenly there is a bubble [FL] blue line a C p [FL] it is like a snail [FL] slope is I am not saying its 90degree, but slope is very high all right.

It is dramatic, it is called dramatic change in the markets. That CP market is somewhat stable I mean, it has been improve in improving steadily at 30 degree angle or whatever it is. But, that fellow there is unbelievable over 60 degree angle, you just sort a c d market who said CP. Banks and some non banks. The banks and non banks are doing very good business in India, but still, they are selling CP to borrow money. I nearly cannot explain all these and 2005 [FL], then gone up goes up and last year there is a little bit of plateau it has gone there. Anyway that is the total amount in the volume. It is from the volume from the of c d and C p.

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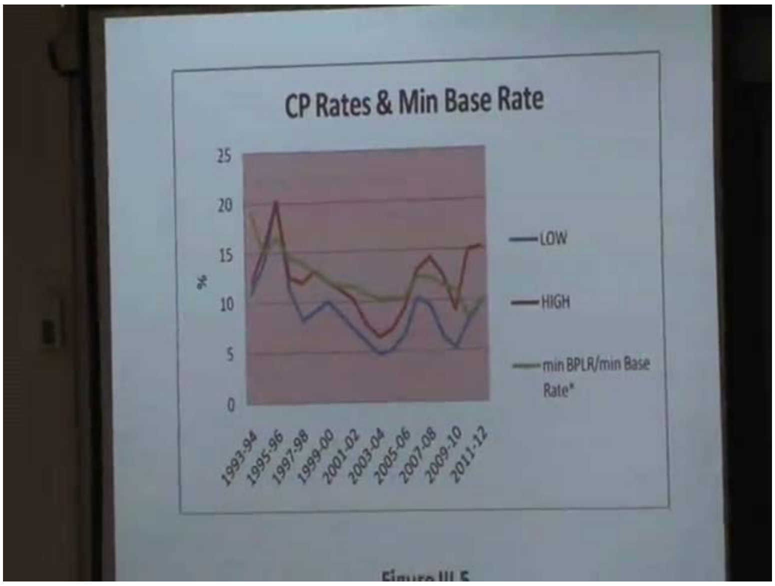

Next C p rates I am coming to C p rates and minimum base rate. What is the minimum base rate. Minimum base rate is earlier, it used to be known as benchmark fine landing rate. RBI has changed the term bench mark landing rate. RBI is changed the term last 2 years or so too minimum base rate. That is the rate below, which you should not charge on your loans it tells the bank, when you giving out loans the minimum rate, you have to charge is this you can go above the minimum baseline or it used to be known as earlier text and documents they were no lines benchmark prime lending rate. Benchmark b prime landing range BPLR is known as BPLR.

If, you open RBI documents or government documents, you will see this abbreviation of with respect to money market. This is RBI guideline they are regulated in this ways, but it has a guideline, it is been active for a long time. They used to have both a low and a high value set for the banks all right in some years earlier used to have a fixed value also. Now, this is the minimum base rate that is something.

Now, the minimum base rate, if you are taking a loan suppose you are a company. Why do I have the green line here, it has the reason, why I have it here I have it here, because suppose, you are a company and you want some sort term cash you go to a bank and the bank provide you the working cash. That the working cash interest rate cannot be less than this. So, if you go to the bank and ask for cash this is the interest rate that you will have to pay. The question is the company, if you has C p market open you can go to the

C p market and withdraw cash particularly profitable for the company. If you go to the C p market provided the C p rate at some stage somewhere is less or at least equal to the mention of private.

Otherwise, why take the hassle of you know, go to the formalities the credit ratings floor CPs announced them that also has cost fixed cost and then you sell the CP and there is mature 6 months later,8 months later you pay the interest. It is the market, determine interest rate the reason is, that is a substitute for your working capital and you get in the bank. So, what I have here is a minimum benchmark prime or benchmark minimum benchmark prime, then you paid on, which is known as minimum base rate here. And what you see here, is very interesting except a few years.

No, in most years what you see here is that, there high has crossed that the low has not crossed that except in 94,95 right in the beginning right in the beginning. Right in the beginning the red and the blue line. What is the blue line blue line is the low C pin a particular year year end value. I think I is the high CP value year end. And what you see here is that, the blue one and red in 94, 95 crossed the green line. The for some reason, there was a too much pressure from the C p market and the green line was also quite high meaning the, I am here some interest rate were also very high.

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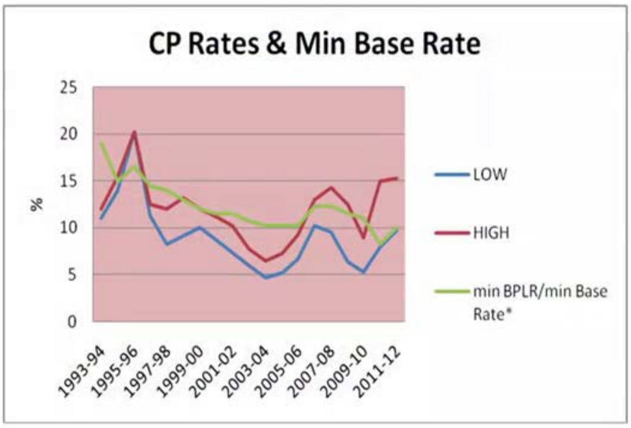

Figure III.5

So, company were trying now C p market the C p market did not develop much those day I told you. So, not much of fun were available in the C p market investors taking no CP and the interest rate giving the demand the supply was less. So, the interest rate were high the price were high both the low and the high crossed. Other than, what you see here that, the companies goes to the CP market to borrow although the red line has crossed the green line, which is the high value of CP in some years that crossed. So, generally the red line is either nearly equal to the green line or less than that and the blue line is definitely less than that.

So, there is an advantage, when the C p rate is down to go to the C p market and borrow short term funds come instead of going to the banks and pay the interest rate, which is usually higher then what you getting at the C p market. The reason, why have the three lines is that the RBIs guideline to the commercial banks as to work the minimum base rates and also the high and the low CP price.

Is it all right, The what you see in the current years after 2003, 04and 04,05they have been going up and down up and down. Now, last year, what they has been doing last 2 years 10,11 and 11,12they were all going up. Last 2 years 10, 11, which is not written there and 11,12 they are all going up. Meaning what liquidity in the C p market is somewhat less not better. Then imagine somebody C pall right They had, whereas RBI guidelines have been minimum benchmark let rate gone down. It has come down look the green line is coming down RBI guideline requested to green line, its coming down, you can see dipping RBI is trying to relax some monitory instruments.

These are all monitory instruments between market relax, why because the real economic Indian in the recession and RBI is find the compensate for the guide monitory policy by releasing lowering the minimum rate, at which banks can give up loans. That's a lower rate banks are free. Otherwise, they are like the restriction father has given me the restriction the earliest to the war, who can play will be in summer months 6o clock. Now, I have to wait till 6 and I go to war at 6. So, miss out of some fun, but now, the restriction is relax5 o clock. So, what may early and I see more friends today.

So, this minimum rate restriction minimum level the banks have to give out loan. This is coming down reason is to give a pulls to the real economy. Green line dipping is very significant and the significance of the relationship between the green and the red on one hand and the green, Is the two important issues to be noted all right in the C p rate here all right.