

**Money and Banking**  
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**Lecture - 15**

I was talking about the first money market instrument called call money, the call market is a very short term market, but 3 kinds of money changes, hand change hand there, call money, notice money, term money. And I was talking about that, how this money market has now presently two interest rates, which are called call rates. One is the interbank call rate, other one is the DFHI call rate, the lending rate, and there is one more which many people do not know.

There is an unorganized banking sector in India, which exists which is in the existence for the last 150, 200 years maybe, and this in some in some pockets of India. There are some banks in Tamil Nadu, there are some such banks in Gujarat they also have a call rate they help each other out, but we do not have any I do not have any information on those call rates. Now, the thing is if you look at the call money data, you realize that you can have a daily data, at the end of the day what was the call rate you can have a monthly data, and you can have an average annual data.

Now, I have both monthly data and average annual data for you, I will show that to you, and is very interesting does not happen much these days. The call money definitely has significant fluctuations from month to month, it has now some people refer to that in economics as a variable having seasonal fluctuations. For instance if you go into the agricultural cropping pattern in India, you will see some seasonal fluctuations are there, which otherwise does not exist in some months.

Like, farmers spending on seeds and fertilizer definite lines are there, it surges in some months during the sowing season and post sowing season. And then the, it takes about 4 months, the rice to grow or the paddy or whatever to grow the crop, and then the harvest time, and then it dies off. The this seasonal pattern, you can observe, if you have only if only if you have monthly data, because then month wise if you plot numbers.

Then you will see some months showing exceptional behavior, now call money is it is said that call money has seasonal fluctuations and these fluctuations they have tried to identify some of the reasons. One that, there is a very, very short term fluctuation,

sometimes end of the week it is high because end of the week banks are supposed to show the CRR.

So, they do borrow in the call market a lot say Friday, then when the tax payments come, there are some advance tax payments which can be made in say mid of the year June then in December and finally, in March. Then the tax payment times the call money shows, some like the demand is more than supply, because companies are withdrawing cash from the banks and making the tax payments.

So, banks experience more than unusual withdrawal amounts, and there is a pressure on the call market advance tax payments. Then it is also said when government introduces a new bill a loan, because government wants money often the banks etcetera and non banks invest, because it is a very safe investment. And I do not know whether you know this or not banks are not supposed to invest in the capital market, banks cannot invest in the capital market.

Remember, because it is a risky market, securities market industrial securities market banks cannot invest by law, because you cannot fool around, you cannot play around, you cannot speculate with public money, people's money, which is there with you by investing in very risky markets like share markets. So, now, what do banks where do banks invest then to make some money, some income they often go for the gilt edged market the government market, the government built market is safe.

So, government now floats a bill crores and thousands of crores of rupees, it is borrowing alright banks etcetera non banks who have surplus cash go and invest there can be a shortening of liquidity in the call market. And the call rate would immediately shoot up alright, so this is another reason which has been said and then of course, depending upon the economic cycles within a year or across years, if the economy is doing well there will be a lot of cash getting deposited in the bank.

If the economy is not doing well a lot of cash is not getting deposited in the bank very simple, so with economic cycles call money can also go through a cycle alright, because call money is after all banks borrowing from other banks. Primarily, the banks will be flushed with funds if the economy is growing at 10 percent, bank is not flushed with funds if the economy is growing at a 6 percent the call market will show that.

And therefore, with these economic cycles we also know that the stock market goes through a cycle alright. So, if you say that there is a competing investment going on with banks, and also in the stock market. Then the stock market investment activities can also influence deposits in banks and therefore, also can influence the call markets who knows which way it will go. And another reason which is often cited is during, the festive season often called (( )), because people do in a country religious country like India.

[FL] whole night Lucknow (( )) T V (( )) whole night shops were open people were buying and buying and buying. This is not normal or huge amount of purchase goes on shops are open late shops are open even on Sundays. So, during these times festive season etcetera you can also feel that the call market is responding. It may not may not it may, so there can be a variety of factors which can influence the seasonal pattern of call rate, remember I will show you the data we will discuss the data later. Now, this is all I have for you about the call rate now I am going to another very important money market instrument.

Student: (( ))

Call rate is never fixed it is market determined, that was the 1980, because the call rate shot up to 30 percent and the banking association said this is nonsense. At 30 percent which bank would borrow and which bank would survive after borrowing. So, they put an upper limit on the call market rate, but then from the late 1980's they have decentralized it, it is market determined again, read bhole bhole's book. You will get all these points alright, now I come to commercial paper, it is market determined call rate commercial paper is a new instrument relatively new money market instrument in India.

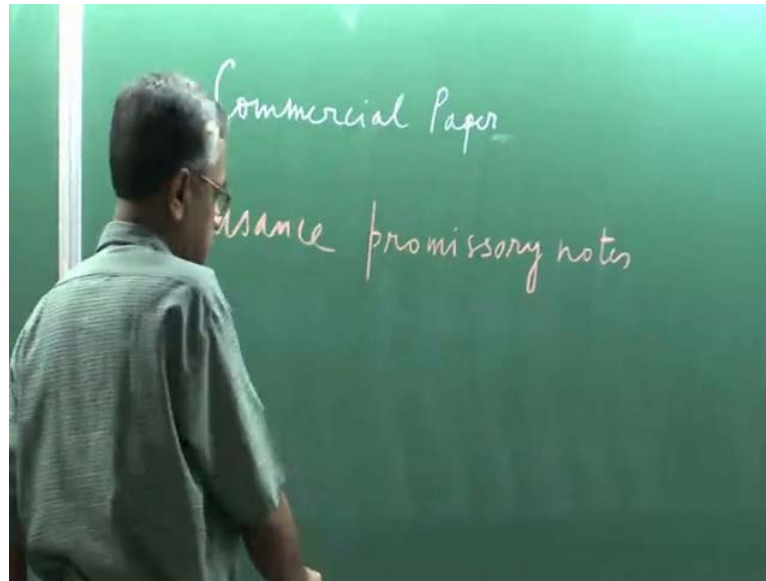
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Let me talk about that, commercial paper it is a new money market instrument relatively new, they are known in abbreviated terms, to the money market participants as C P. I used to know C P for a different for a different thing I used to know C P, C P is very famous to us who are from Calcutta. You know that, no communist party (( )) Calcutta police, all Calcutta police vans at the back had C P and an arrow.

Have you noticed that go to Calcutta and you will see that, so I used to know C P for a different reason, but here in the money market context C P means commercial paper. They use abbreviated terms all the time particularly, these days it is very fashionable to use abbreviated terms alright. Now, they were launched in India only in January 1990 imagine 20 years old only, call market is there since 60 this is from 1990 or maybe before that call market existed 1990, is very new very recent commercial papers. They are short term money market of course, money market instruments are all short term less than 1 year and there is a 3 word three word description of a C P.

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The 3 word description of a C P, which is also true for some other money market instruments, they are known as usance promissory notes. 3 word description of C P which, is common this kind of a language, in this kind of a subject usance promissory notes. What they mean is like I am trying to teach you law or something sounds like a usance means time; that means, it would mature over time and the time period is mentioned like a bond share is not a usance promissory note.

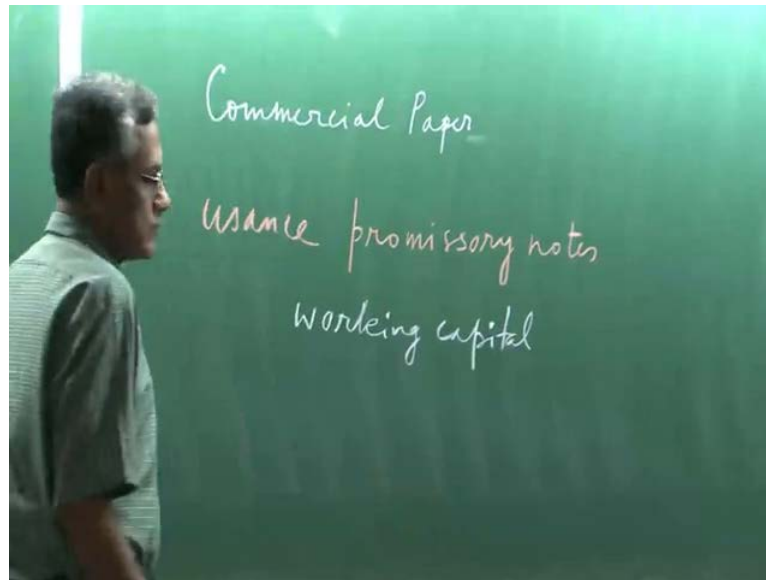
Note is anything which carries a promise to pay something, we usually use the word note for currency paper currency note which actually, if you read the paper currency it is written it promises to pay you something alright. So, note is now try to put note in any context wherever something like a bond paper is a note, because it promises to pay you something and promissory is of course, you understand which promises.

So, it is like a bond in some sense C P is like a bond and this is a usance promissory note alright, to do what well if you are in the corporate world you know C P very well. And here comes a very interesting thing I am adding to the existing definitions I have used, I told you earlier the corporate world has the following sources of finance. The word finance is relevant, it can go the share market, sell shares it can go to the bond market sell debentures, it can go the bank take credit, loan the old fashion business dealings.

Even the corporate world can do that in fact it does now it can go to the market and in addition to shares it can sell C P's to get not long term finance, but to get short term

finance. Here, you see that the corporate world which operates in the capital market has now, entered your money market by selling C P because it is short term. So, why do they need short term cash, the reason is the corporate world or the non corporate business world any world requires what is known as working capital.

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Now, what is working capital, what is working capital, when a company is run you know, how it is run the company has a production plan, it assembles the sufficient supply of inputs raw material including labor. Then it plans, how much output they will produce per day, given a target output maybe at the end of the month we need this amount of output. It arranges for the finances to do that fund that and then it starts selling that output and often that sell has a notorious feature, it is a sell kind of a with a future payment.

So, it is not that a retail market the way you go to a shop to buy a coke and you say (( )) bottle coke (( )) cash transaction is immediate. In the company business world often these transactions are deferred payments, the payment will come later, so the raw material supplier has the same problem. When they supply raw material to the company the payment may come later and the finished goods supplier, also sometimes have the same problem.

Where, you have sold the thing, but the money does not come, the problem with this is that your production is a continuous process, and your selling is also a continuous

process, but the payments are not continuous they are very discontinuous. So, now if you are producing something, you have to make certain payments regularly electricity bill, some taxes most importantly the wages of the workers. If you do not pay salary which is happening with kingfisher, they are in big trouble often they are threatening, strikes, lockouts alright.

And then also resignations the leave now skilled labor is very valuable thing, you just cannot leave and the company will still keep on running. Often in modern companies you require highly skilled labor, like airlines you require pilots, air hostesses maintenance staff they are all specialized, they have gone through training they have degrees, pilots have licenses also and you just cannot say, it is just not possible alright.

So, now, what happens you require a money sufficient cash in the company account bank account if not in house cash you require cash in the bank account, to make these payments. And these fellows these receivers of money would not wait, for you to get the payments two months later and then I will draw my salary. This is where working capital comes, it is not fixed capital investment that you are constructing a plant, where the return can take 10 years to come.

If the working capital starts the day you start, manufacturing construction of a plant forget about running the business. You have to pay the pay the suppose the building is coming up the wages of the workers are not paid after the building has been completed, they are paid on a daily basis. In fact, daily basis not even monthly here, there are a lot of daily wage workers, so IIT Kanpur requires working capital or the contractor requires working capital to make the payments.

So, here the normal thing is the working capital the traditional method has been companies, corporate companies or non corporate companies would arrange working capital requirements, through an extensive process with the banks. So, banks are famous for providing working capital, but often what happens there is an upper limit to the amount of working capital a company can withdraw or draw from a bank a short term loan.

And therefore, often they would go to the market to borrow additional working capital and C P is a typical instrument, where these kind of short term funds are borrowed. Large amount I am due, but these 6 months I am in trouble. So, I borrow money for 6

months at an interest rate as low as possible, and 6 months later, when I get the money I repay it pay it back. So, C P's have essentially diversified, the short term borrowings of companies and remember C P's cannot be floated by the non corporate sector, it is the corporate sector financial instrument.

If the company has pvt ltd or pub ltd written after them. Then only they can do that the retail outlet or the restaurant cannot sell C P, so C P's are sold only by the corporate world corporate companies which have private limited or public limited written after their name alright. So, these are usance promissory notes, that is this money would be repaid at a future date at an interest you sell them, and you get the cash. Now, who can buy C P I am coming to that and when you sell C P's they are not usually secure you cannot sell C P by keeping some valuables as a mortgage.

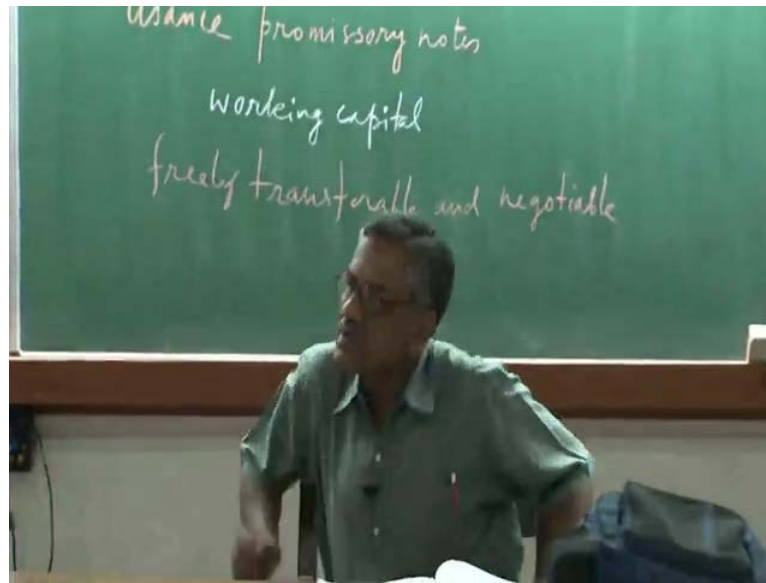
You sell C P's like any commercial bond therefore, the point that emerges, can all corporate companies sell C P's no. You require a license to sell C P also and these are the issues, I am coming to that they are usually in India what is happening. That the corporate world which is a software company or a manufacturing company are not only selling C P's, but also financial companies also sell C P's. They are also public limited or private limited some financial companies, they require short term funds they can also sell C P's.

And who can buy C P which is called who can invest in C P, anybody can buy C P. C P's can bought by an individual I can go and buy C P, another corporate company can buy C P, even non resident Indians can invest in say Tata is selling C P or Birla is selling C P or Larsen and turbo is selling C P. Non resident Indians the way they invest in share market they are very free to even invest in c p's.

So, anybody can invest in C P alright and these days all corporate companies can sell C P's, and the last point that I want to mention before I come to some guidelines. Who can sell C P, anybody not all corporate companies are allowed to sell C P's there are some guidelines and these guidelines are given by RBI because RBI is the boss of the monetary sector.



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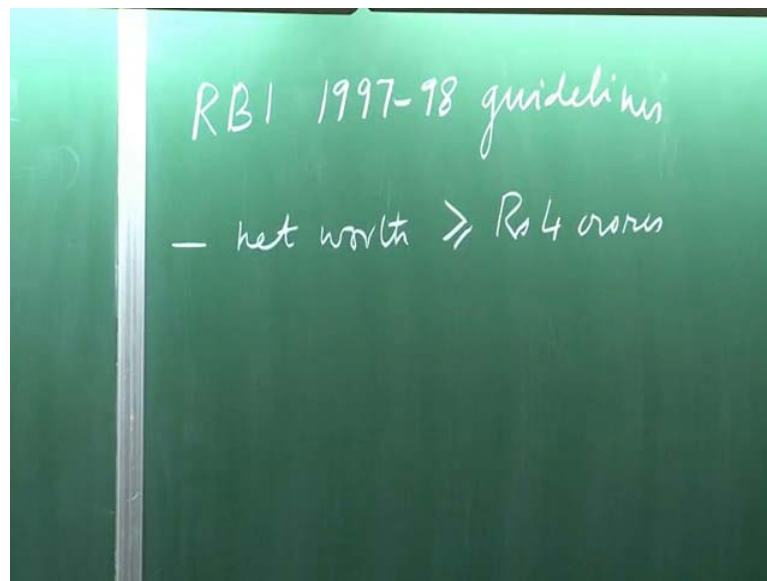
This is the last point I want to mention these are often languages used freely transferable, freely transferable and negotiable, freely transferable and negotiable. What does it mean, the instrument which are freely transferable often written in italics and negotiable; that means, very simple; that means, that they can develop second hand market, secondary market anytime. I brought the C P which is say 4 months old I will get back the money in 4 months, after one month I need cash now I can go and sell it in the secondary market.

So, they are freely transferable the ownership can transfer from me to you, and I can sell it to you and that rate at which I would sell the interest rate or whatever price alright is negotiable. We too can negotiate that, nobody stops me from having a market determine interest rate and the price or whatever of that instrument; that means, they can develop a secondary market is not that if I buy it I have to sit on it till it reaches maturity. And then I will get back my money and the interest income it is not like that all I can sell it, so you can develop a secondary market.

In fact, RBI wants C P to have a good secondary market it has not developed well, so I will I I will tell you some of the reasons why. Now, what I have said up to this point if it is and now let me go into the famous the economics survey 1997, 98 I found this, I have the economic survey with me 97 98. There are very specific RBI guidelines, which was spelled out and reported in economic survey and it took some it took some measures.

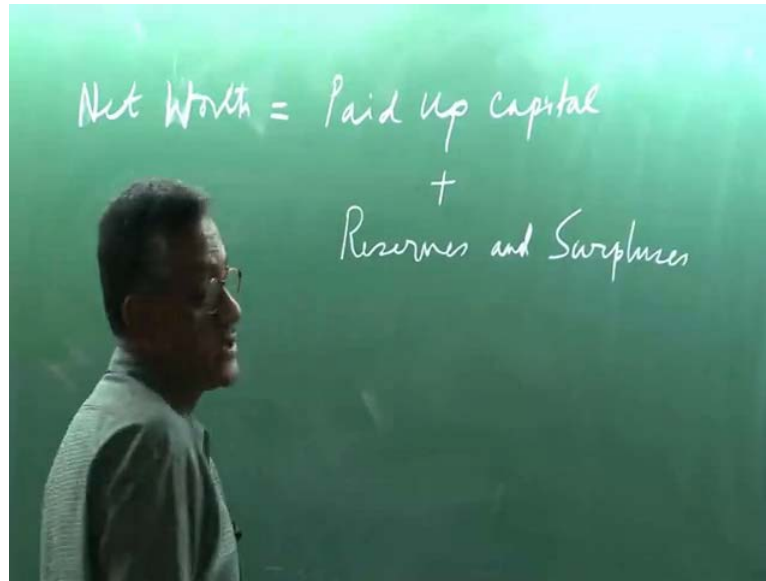
Reforms etcetera RBI with respect to the various money markets now let me tell you this guideline of 97, 98 then I would tell you what are the small changes that have taken place recently, because 97 98 is how much 15 years back, so 14 15 years back. So, let me tell you the main guidelines which were there with respect to the C P's market RBI guidelines and then I will tell you what small changes that have taken place. First of all it said that a company corporate world, corporate company trying to sell C P then the net worth of the company should not be less than 4 crores.

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I should to explain this RBI 1997, 98 guidelines, 1 net worth greater than equal to rupees 4 crores rupees 4 crores, now what is net worth, these are financial variables. That you may learn if you take a management course or something or a finance course or whatever net worth of a company can be calculated using simple arithmetic. What it accentually means is when a company is floated, it announce how much of paid up capital equity capital it will have, net worth how much of paid up capital it will have or it has if it has already floated and collected.

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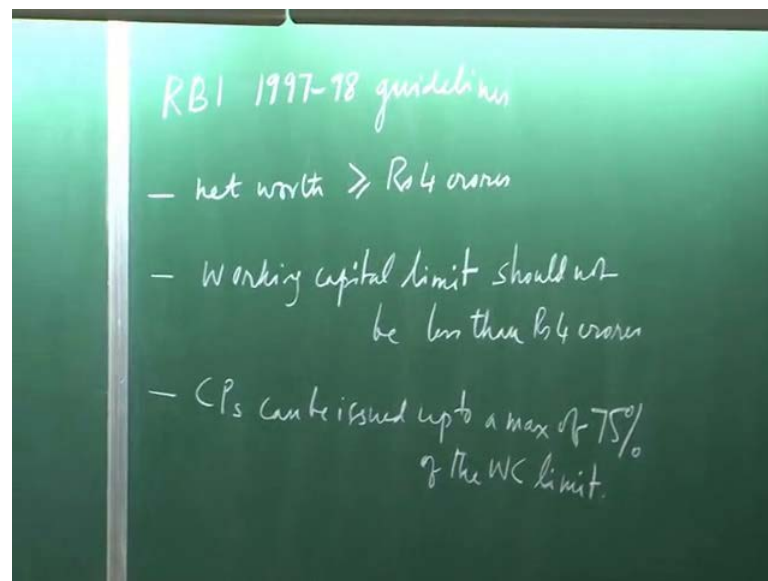
So, net worth is equal to paid up capital, net worth is equal to paid up capital paid up capital is essentially essentially consist of the equity capital that company has, and what is the equity capital? It has sold how much shares, it has sold or it has to also in case of paid up capital, it has to announce also at the time of registration, how much of equity capital would you like to have, so it is consist of equity capital, and then it sells share to get that capital alright equity capital.

So, paid up is capital nothing but an announced equity capital of a company, but net worth is not just the paid up capital of the company it also includes reserves and surpluses. Reserves and surpluses is a more difficult more complex concept, reserves and surpluses both the words are used are essentially, the retained earnings of the company from the past. What are retained earnings? The part of the profit that they did not pay either as taxes or as dividends, but are lying with them like, savings corporate savings.

So, reserves and surpluses they usually put reserves and surpluses in various heads they have something called revenue, reserves they have something called capital reserves and all kind of things alright. So, I need not go into that reserves and surpluses essentially consist of all money that it has with itself, from retain earning etcetera that they can use for various things, they can use for reinvestment they can use for all sorts of things as their own money.

So, net worth of a company is essential how much many it has a equity capital which is a share capital alright, total share capital value of a company can always be calculated how many shares they have sold. They have calculated most probably on face value and then how much of reserves and surpluses it has, so what RBI said a company has to have minimum of 4 crores of net worth. If it has to sell C P first point second this is a very difficult point this was withdrawn later, Which C P sellers complained a lot.

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At the same time it said working capital limit should not be less than 4 crores. This is also very interesting, what you are saying what RBI is saying that the working capital that you have arranged with the banks that they will give. You what they do is that bank announces, the maximum they will give you as working capital giving you financial standing and type of business you do. And you have it in terms of returning money etcetera, etcetera this money working capital is a sanctioned loan which is not always use by the company.

Company would come and borrow against it or under it, if they need the cash and this is sets the working capital limit for a company alright. Often banks have working, often companies have working capital limits. Some total of three banks which they have contacted. And all of them together have agreed upon that this is the amount of money that you can borrow which is called banking you can borrow for working capital purposes.

So, what do RBI is saying should not be less than 4 crores; that means, the company is having substantial business to run 4 crores means there are some labor and other costs for which working capital can exceed 4 crores, so should not be less than 4 crores. Next then it said this where the trouble started with C P market, they said RBI the C P's can be issued up to a maximum of 75 percent of the working capital limit. That is if 4 crores is working capital limit of a company it can sell C P's maximum amount will be 3 crores 75 percent of it.

So, the total amount of C P that they can sell to raise short term funds will be 75 percent of the working capital limit, then what they said they said that tremendous clause here. Where which I am going to just utter and not mention is as soon as you sell C P's worth 75 percent, suppose you have sold 75 percent of your working capital limit as C P's, say 3 crores some working company is working capital limits is 4 crores. It has sold C P's worth 3 crores, immediately the working capital limit that was sanctioned by the banks would be lowered by 3 crores.

That means, it did not give the corporate companies to use them as alternative in that sense, if you have sold C P of 3 crores now you are working capital limit will became after you have sold it till that cp matures will be 1 crore only. That means, the total amount of working capital they can borrow either from the C P market, either from the banks or a combination of banks and C P is still 4 crores. This was the famous guidelines 1997, 98 of RBI that if you borrow through C P market your working capital limit would immediately lowered by that amount you have borrowed.

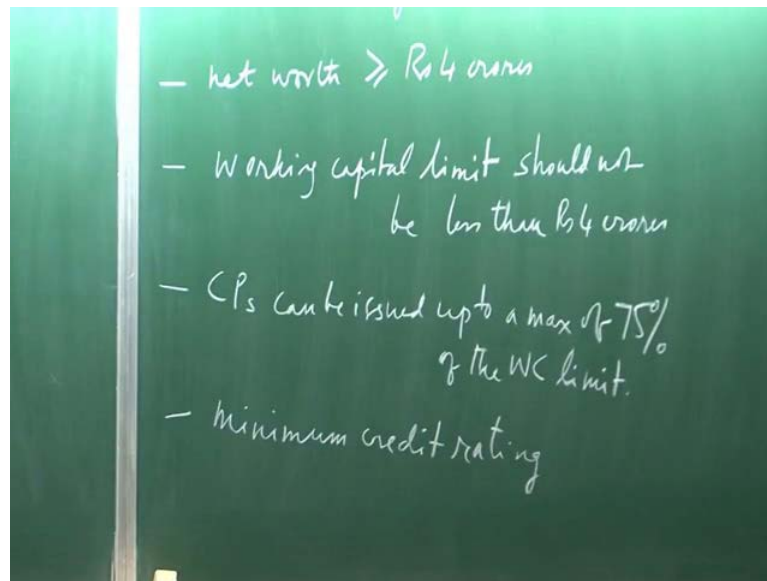
Until that C P matures and then it will be raised again, and I will tell you this is where trouble started. This clause of that working capital limit would be a flexible thing depending upon how much C P you have bought, and the 75 percent of the working capital can be floated can be used. For C P borrowing was where de linked in 2000 2001 that economic survey I found finical year.

They were finally, delinked because the companies was screaming, that you are not giving us any additional room to get working capital bank, that is why we are going to the C P market, but if you make that too substitute relationship alright, not complementary substitute relationship. Then I do not benefit from the C P market, bank,

working capital. So, CP market was not developing at all, because of this clause it was delinked only 4 years later or 2 3 years later 2000 2001 financial year.

In that economic survey I found it was delinked clear, now if you meet this criteria particular this 3 criteria later it was delinked. Then it announced that RBI would automatically grant permission, if you can show these things provided one more thing I have to tell you provided you get a minimum credit rating done.

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Last point the minimum credit rating has to be done by a credit rating agency, what is credit rating, you submit a fee you go to a organization like or somebody investment information. And credit rating agency of India limited and say do a credit rating of my company, so they will ask for all sorts of information past ten years five years profit and loss account balance sheet data. What kind of goods I sale, what kind of money I have borrowed market. How much of paid up capital I have what is the net worth, there are many variables financial variable they are called financial variables of a company.

If you open a balance sheet, you will see that what are the assets to liabilities ratio all sorts of things there they will check and then they give a credit rate, like a grade we give you a b c d. So, there is some minimum credit rating that you need to get, in my notes it is saying I do not really know the meaning of that credit. From if you get the credit rating it should p 2 and from if you get the credit rating done it should be a 2 there is some credit rating some grade.

So, if it is p 2 from or a two from (( )), now you are free to sell C P, basic story I am telling you the main story. There can be lot more rules and regulations, now then after that how is CP sold, CP C P is sold as discount bonds do you remember discount bonds. They are sold at a discount and when they mature that discount rate is the interest rate, you get by that entire money which is the face value of C P. C P's are sold just like this discount bonds, and whoever is the holder of the C P at maturity replaces he get back the full money.

So, you can change hand it started with me I bought it then I gave to him, he gave to her, she sold it again there may be ten hands it has circulated in 4 months. Then whoever is the last carrier at the time of maturity will give it to company and company suppose to pay the face value, just like a discount bond. It is sold C P's alright and we are running out of time, so I would not rush, I would just mention one or two more points every every share certificate has a value I, so far I know 10 rupees.

Every share certificate is 10 rupees, but the 10 rupees may be selling at premium 240 rupees, there is a reason why it happens I told you company is, so good, but on 10 rupees. If they buy the amount of dividend, they will get in the life time of share, will fast exceed the price they are paying now. Now the minimum denomination it is called the minimum denomination of C P is 5 lakhs, so one C P certificate has 5 lakhs written on it. And the minimum size of an issue, when the company is selling someone CP's that is call an issue.

The minimum size of an issue to one investor, anyone person can buy is 25 lakhs; that means, what if I have to buy a C P, invest in C P market alright. I have to buy a minimum of 5 C P's because each C P is worth 5 lakhs the face value and 25 lakhs I have to buy which means 5 into 5. So, I was given I was not given the freedom to buy one C P or two C P if I am investing in it I have to buy a minimum of 5 C P's, now you can see this must have been a problem for small investors I can invest in 1 C P good company.

I do not have 25 lakhs, I can invest 5 lakhs may be, so only companies were buying, then who has lot of cash or banks can buy the C P's a financial organization who have that amount of excess cash. And therefore, you can see that the C P's are sold in multiple of 5 lakhs, because minimum is issue size to one investor is 25 lakhs and each C P is 5 lakhs.

That means, you can go into multiple of that this is just like the mutual fund certificate UTI units same thing each unit is worth 10 rupees or 100 rupees something like that.

Now, you can buy multiples of that 10 units; that means, 10 into 10 I am investing, but you know what happen this things have changed. And the last point I want to mention 1997, 98 guidelines. We change later the maturity period was from 91 days which is 3 months to 6 months, the C P maturity period varied between 91 days to 6 months, so 6 months was the upper limit (( )) C P mature (( )). So, it is a money market instrument, but you know what happen in the July 2000 that is 2001, 2001 economic survey I found, that government of India smartened up they realized there, are too many strangest clause here.

They made the minimum issue size of C P to 5 lakhs; that means, if anybody wants to invest and buy only one C P he can buy not 5 C P's anymore they relax that 2 years later 3 years later. They relaxed it and the maturity period became very interesting it was no longer from 3 months or 91days to 6 months it became from 15 days, unbelievable 15 days to 1 year maximum.

So, it is a huge range of the maturity flexibility given to the C P market, massive range it can be 15 days; that means, a fortnight it can be 1 month, it can be 2 months, it can be 6 months, it can at most be 1 year C P market. So, this is an instrument, it is good you are coming to know these new things because tomorrow, when you enter the world the job you will have, they will be like bread and butter everyday for you. You will be dealing with them all the time, but for the time being is new, but I am glad I am telling you this because it will help you, but something more to be said about C P. So, what I am planning to do can I talk about this enough tomorrow.