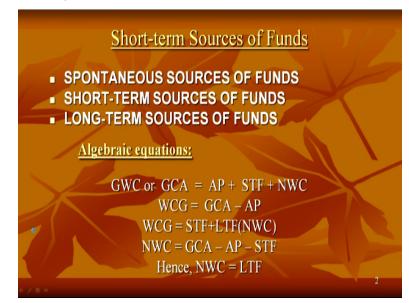
Working Capital Management Prof. Dr. Anil K. Sharma Department Of Management Studies Indian Institute of Technology-Roorkee

Lecture-60 Deciding a Suitable Mix

Welcome students, so we are meeting for the last lecture today and in this lecture, in this class I will discuss with you the firms of credit and financing of working capital requirements in the previous classes I have talk to you about the bank finance. So, bank finance is also the one of the sources of the funding working capital and apart from the bank finance there are so many other sources also 7, 8 other sources also which I will talk to you not in detail but in brief.

And for the detailed reference you can consult the book that is working capital management by (()) (01:04) publication. So, but let us discuss about the other forms of the credit or the other sources of the working capital finance other than the bank finance right. So, I will just take you back that I told you many times that normally we have 3 sources of funding working capital requirements.

(Refer Slide Time: 01:25)



That is spontaneous sources, short-term sources and long-term sources. So, emphasis here is that we should use largely the spontaneous and short-term finance and long-term finance should be

used as minimum as possible. So, if you look at this equation given here that when you talk about the working capital we talk about initially we talk about the gross working capital.

And the gross working capital is a sum total of the current assets which are on the asset side of the balance sheet on the lower part of the balance sheet and funding of those assets inventory, credit sales, cash prepaid expenses then marketable securities. So, we first decide that say to how to create current assets and what should be magnitude of the current assets in the balance sheet.

And then arises the question of funding these current asset right, so if you look at these equation, I have again say written it clearly that it is the gross working capital means when you talk about only assets then it is called as the gross current assets or the gross working capital. And the gross working capital can be funded from 3 sources, that is your accounts payables we have discussed and short-term finance which one we have discuss that is bank finance.

And others we are going to discuss in brief and then is a networking capital, networking capital is that part of the working capital which comes from the long-term sources right. So, if you look at this first of all what we have do is, we have to create or calculate the working capital gap that what is the working capital gap. So, first of all to find out this gap we will see that the gross current assets.



(Refer Slide Time: 03:06)

First of all will be funded from the first and the almost free source of finance that is accounts payable which we call as the spontaneous finance and then after that the remaining working capital that gap which comes up gross current assets-accounts payable is called as the working capital gap. And this gap will be say fulfilled from short term+long term sources. So after that accounts payable the next priority should be to the short-term sources that is the bank finance as well as the other sources.

And then whatever is the remaining need after fully exhausting the accounts, payable and the short-term sources which would resort to the long-terms sources of the funds. So, finally networking capital is gross current assets-accounts payable-short term sources. So, in net sale you can say that networking capital is basically the funds coming from the long-term sources right.

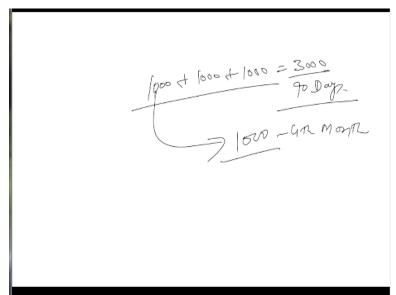


(Refer Slide Time: 04:00)

Now here I will take up small situation where we will talk about that how we can make use of the accounts payable or the spontaneous finance and it may be possible that without even using the short-term sources and the long-term sources only with the help of the spontaneous finance, if the firm wants and the firm is efficient one then only with the help of the spontaneous finance they can run the show.

And here we are assuming a situation that for example there is a firm which say buys on credit worth rupees 1000 per month and on the credit period of 3 months when we buy today some raw material when we buy today, we buy it at a credit period. So, selling from the supplier gives to the firm is question credit period for 3 months. So, every month how much we are buying, we are buying for 1000 each right.

(Refer Slide Time: 04:57)



So, we are buying in the first month, we are buying for 1000, second month we are buying for 1000 and third month we are buying for say 1000. So, after 3 months how much balance will be there total purchases of the firm 3000 rupees. Now the credit period is how much that is 90 days, so after 90 days how much payment will be due to be made by the firm, this first 1000 rupees that is in the beginning of the fourth month, it means they bought for 1000 rupees in the first month, 1000 for the second month, 1000 for the third month.

And the credit period is for 3 months, for the first month of purchase 3 months for the second month of purchase and 3 months for the third month of the purchase right. So, first month of the purchase is will become due to be paid to the supplier in the beginning of the fourth month. On the other side the firm is very efficient and it is a very say you can call it as having a competitive position in the market or very strengthful position in the market.

So, in this case what we are doing here is they are selling their finish product in the market, 1000 rupees again worth 1000 rupees again but on a credit period of only 1 month not for 3 months. They are getting the credit for 3 months and they are selling their output in the market on credit but on a credit period of 1 month. So, it means first months production will be converted into the finish goods and will go to the market at the credit period of 1 month.

So, it means what will happen after 3 months this balance sheet will emerge like this, you have total trade credits at the end of the 3 month that is 3000 rupees, total amount will be 3000 rupees here.





And in this side also we will have the total of the assets that is 3000 rupees. So, it means this is the liabilities we have created 3000 and total assets are also for 3000 rupees and we are recovering first month sales at the beginning of the second month. So, in this second month that is a cash available with us, then the second month sales are there which we are making that will come in the third month, so we have that accounts receivable.

And then the third months purchases are still with us in the inventory, so we have 3 assets we have created inventory, accounts receivables and cash. So, it means total of the asset sides is 3000, total of the liability side is 3000, so it means in the beginning of the fourth month how

much is due to be paid by this firm to their suppliers only 1000 rupees and that 1000 rupees cash we have right after that this accounts receivables will be converted into cash.

So, in the fifth month this accounts receivables will turn in to cash. So, this cash will be available and in the sixth month then this inventory will be again turning into the accounts receivables and then in cash. So, this process will continue, so this happens that the firm gets the credit period for the longer duration and from gives the credit for the shorter duration. Then without even resorting for any amount from the short-term sources as well as from the long-term sources.

Firm is running the entire show with thus spontaneous finance without investing even a single penny from either borrowing from the bank or from their other sources. So, this can be done, so if this is a situation in this case you will have that the networking capital will be 0. Networking capital means no funds are coming from the long-term sources everything is coming from the short-term sources your assets are equal to the liabilities.

Here if you look at your current liabilities at the end of the third month is 3000 rupees, your assets are 3000 rupees. So, current assets are equal to the current liability is or vice versa, networking capital is 0. So, it means you cannot say that this cannot be possible this is possible it can be done provided the firm is having very strengthful position, mighty position in the market and they can have a or they can create a situation where they are buying on a credit period of 3 months and they are selling on a credit period of 1 month.

So, it means without resorting to short-term or the long-term sources only with a spontaneous finance they are carrying on the entire business.

(Refer Slide Time: 09:09)



Then we talk about the other sources is spontaneous finance we have already talked about which we are talking here as the trade credits. Trade credits means credit coming from the suppliers and under bills payable or the management of the bills payable, I have already discussed with you at length that how to manage the trade credits and how we can make maximum use of the trade credits in the form of the spontaneous finance.

(Refer Slide Time: 09:34)



Similarly we talk about the next thing is accruals these are basically the expense credit, expense credit is we know it that is the salaries, wages, power companies bills, water companies bills and all that. So, they also give us the credit, so that credit comes for a minimum period of 30 days or 1 month. So, with that also we can run the show, so spontaneous finance or management of

payables, bills payable we have already talked about. So, I will talk here again and now we will talk about the other sources and these other sources are like the sources of the short-tem finance.

(Refer Slide Time: 10:09)



And here are you see that we have almost 9 sources including bank finance, so bank finance I have talk to you in my previous class at length. So, I will not discuss the bank finance in this class other then bank finance what are sources of the short-term finance they are available here and we are going to discuss these sources in a summarised form. So, first thing is that what are these other sources 8 sources rather than the bank financé, short-term loans from financial institutions.

Then rights debentures, then factoring, then forfeiting, public deposits, inter-corporate deposits, commercial paper and financial derivatives, these are 8 more sources we can arrange the short-term finance from if the firm wants depending upon that if the bank finance is not available or bank finance is not sufficiently available. Then after say borrowing sufficiently from the bank other sources can also be used and these sources will help the firm to fund their short-term requirements or their working capital requirements.

So, let us know about these other sources in a summarised form and try to understand what these sources are.

(Refer Slide Time: 11:28)



First thing is the short-term loans from the financial institutions other than the banks we have many financial institutions like life insurance companies, general insurance companies, mutual funds and investment institutions right. So, investment banks also now insurance companies also and mutual funds are also sometimes giving working capital finance, short-term finance to the manufacturing sector firms.

Earlier it was not possible before 1991 or especially before the monitory policy of 96, 97 these institutions per not allow to invest into the short-term requirements of the firms, manufacturing sector firms. And for that these firms had to look towards only towards the commercial banks but now there is a totally complete independent and free scenario banks can provide the long-term finance.

And these institutions which are you can say that to some extend that they are investment finance institutions which have been providing the long-term finance in the past. Now they can also lend for the working capital or the short-term requirements of the firms. So, some conditions are there and in this case we will have to see that if we want to have the working capital finance from these financial institutions including insurance companies.

Then there are certain conditions put forward by the RBI as well as the other important departments of government of India. So, what are these conditions, these conditions have to be

fulfilled before borrowing the funds from these financial institutions say first thing is funds from these institutions are only available to the manufacturing sector firms. And manufacturing sector firms only require the working capital, unsecured loans on demand promissory note.

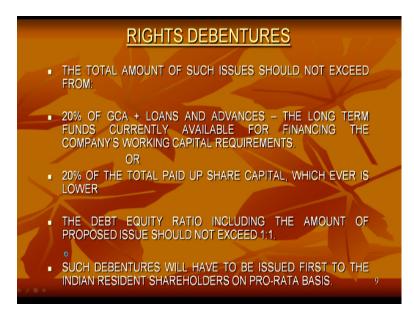
These institutions also cannot ask for any kind of the security or any kind of the clitoral from manufacturing sector firms only on a demand promissory note that is on the DP note. These funds can be provided and to make sure the security of the funds these say lending institutions or these financial institutions can make the thorough analysis of the firm and they can make sure that this firm is a well functioning organisation, loan only for 1 year extendable by 2 successive terms of 1 year each, maximum duration of the loan can be only one year.

And it can be availed by any organisation, any firm maximum for the 3 times. So, they should keep it reserved that when the funds are not available from the spontaneous sources or from the banks. Then they can think of make a use of this source and they can say have some financial help from the financial institutions other than banks. After repayment of a loan a gap of at least 6 months is must, it cannot be possible that you borrow for this year, you return the money.

And then next year again you borrow between the 2 borrowings there should be a gap of 6 months. Interest is charged on stipulated rates with quarterly rest with the quarterly compounding and some incentives these financial institutions can give to the manufacturing sector firms that is up to 1% in the interest means if they are charging 12%, they can charge 11% interest if the say borrowing from is the prompt paymaster.

If they are paying making the payment on the due date or sometime before the due date then some concessions can be given by these financial institutions to the manufacturing firms for being financially very discipline, very responsible and making the payment on time or sometimes before time.

(Refer Slide Time: 15:24)



Then we talk about the next source that is the rights debentures to fulfil the short-term requirements to some limited extend firms, these manufacturing sector firms can issue the right debentures also, you must be aware about what are the rights debentures. Rights debentures are basically the bonds which are issued to the adjusting shareholders sometimes when there is the shortage of the working capital finance or the short-term funds then these companies can resort to the existing shareholders.

And they can request the existing shareholders that you provide or some additional fiancé on the basis of some right debentures we will issue you some debentures, some bonds you give us the funds that is only for a shorter period of time maximum 1 year after 1 year that debenture will be or those debentures will be redeemed by the firm and the funds will be return back. So, in this again some conditions are put here by the RBI.

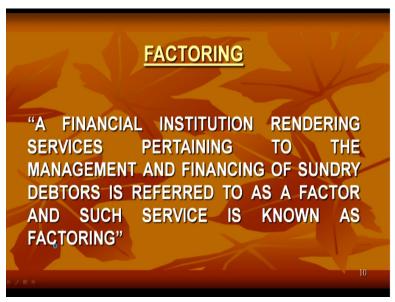
And in this case what are these conditions that total amount of such issues should not exceed from what from 20% of the gross current assets+loans and advances-long-term funds currently available for financing the company's working capital requirement, 20% of the gross current assets+loans and advances which they have given to somebody. So, sum total of this gross current assets+loans and advances-long-term funds they have currently invested in the firm to fulfil their short-term requirements, 20% of the total paid up share capital whichever is lower.

So, out of these 2 whichever is the lower, either 20% of the share capital paid up share capital or 20% of gross current assets+loans and advances-long-term funds whichever is the lower of the 2 can be arranged or can be generated by way of the rights debentures. The debt equity ratio including the amount of the proposed issue should not exceed 1:1, that is a very important restriction.

Because normally the manufacturing sector firms can have a debt equity ratio of 2:1 but when they are using the rights debentures there debt equity ratio will be very very stringent and that has to be certainly 1:1 including the current issue. Such debentures will have to be issued first to the Indian residential holders on the PRO-RATA basis, any company can have 2 kind of shareholders, Indian shareholders and the foreign shareholders.

But if these debentures have to issue then of the PRO-RATA basis on the basis of the number of shares being held by them, these Indian shareholders can be issued the rights debentures.

(Refer Slide Time: 18:06)



Then we move to the next source and this very very important source not much used in India but it is very much used in the other countries like US, Europe. It is very popular source in the other countries but because of easy availability of the bank finance in India this particular source is not used to the desired extent. So, what is a factor, first let us understand what a factor is and kind of the services the factors render. And how the manufacturing sector firms can make use of this particular source of the funds, I have refer to use sometimes back about the factors that factors are the firms who buy the say credit sale ledger or who handle the (()) (18:47) not buy would who handle the credit sale ledgers of any manufacturing sector firms. So, when we start selling on the credit rather than maintaining our own debt collection department we can pass on our debt ledger to the factors.

And factor can manage our ledger they can collect our credit sales, they can do the necessary correspondence for collecting the credit sales and that way whatever the commission we are paying to the factor that can be compensated by not having a bills collection department in the firm itself. So, let us understand what the factoring is or what the factor is, a factor is a financial institution rendering services pertaining to the management and financing of sundry debtors.

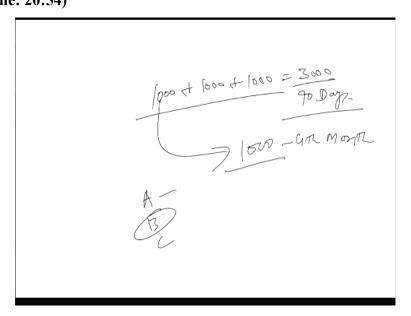
And say such service is known as factoring means who are taking care of your sundry debtors, who are handling the credit sale ledger, who are taking care of the sundry debtors. And who are financing the firms requirement while the firm is selling on credit because when the firm is selling on credit it means we need to have some funds from some source and factors provide the funds that you sell on credit, we will refinance your requirement.

So, that by the time the buyer pays back to the firm, factor will support the firm and when the buyer pays back to the firm then the firm will pay back to the factor for which the factor will charge, commission, factor will charge administrative charges and factor will charge the interest for the amount lend right.

(Refer Slide Time: 20:26)



So, seller features of the factoring are here like, factors accept accepts factor, accepts the sundry debtors accounts on selective basis and that too within a certain limit stipulated by them for each account. Normally what happens, that is when we go to the factor and we request the factor to provide us the funds for meeting our short-term requirements and purchase our credit sale bills. So, in that case what the factor does, factor divides our credit sales into 3 categories A, B and C. **(Refer Slide Time: 20:54)**



A category of the factors those credit sales are which are very good accounts, which are highly credit worthy accounts. There is not even aorta of the doubt that on the due date the firm or the buyer will not make the payment or the firm selling from has to make some efforts that kind of

thing is not there. There these buyers are having a very good credulity they are very strengthful, they are very powerful buyers.

So, it means this is a A category and C category are the once who are means literally doubtful, we have sold to them on credit or whether they will pay us on the due date or in any case whether they will pay us back even after the due date that thing is doubtful. And in between there is B category of the buyers who are moderately strengthful, trustworthy and having the credibility right.

So, what happens A category of the bills the selling firm or the manufacturing firm does not want to discount with the factor because it becomes expensive. C category of the bills factor does not want to buy, so it means finally it is the B category of the bills which the firms discount from the factors or with the factors and factors are also happy because here the security of the factors funds is moderately acceptable right.

So, categorization is A, B and C, so B category is the kind of the bills which are largely saleable by the firms to the factors or discountable not saleable you would say discountable by the firms from the factors. Factoring without recourse to drawer or with recourse, factoring without recourse and with recourse you must be knowing it little factoring without recourse means that when the credit sale bills are got discounted by the selling firm from the factor.

Then on the due date the buyer has to make the payment to the factor not to the firm because firm has already got discounted from the factor and now the invoices with the factor and the selling firm informs the payer that now you have to make the payment to this company who is offer factor we have already got the bill discounted from the factor. So, finally now you have to settle the payment with the factor.

In this case for example the buyer defaults, he does not make the payment or he delays the payment or finally it maybe say found out that he will not make the payment or will not get the payment and that loan or that credit sales will turn into the backdates. So, if the factoring is

without recourse then it is a factors loss, factor cannot not return the uncollected bills they cannot return it back to the selling firm.

But if it is with recourse then on the due date the factor would like to receive the payment from the buyer who has to make the payment after the end of the credit period. But if the buyer is delaying the payment or trying to default the payment then factor makes some efforts but if the factor is not successful in receiving the payment then these invoice they are sent again back to the selling firm.

And selling firm has to receive from the buyer and anyway they have to settle the selling firm make the responsibility of the selling firm to settle the factor's bills. So, in India factoring without recourse is not allowed only factoring with recourse is allowed. So, that interest of the factor is also safe and the interest of the selling firm is also safe and the buyer or the buying firm is also under pressure that if he not pay to the factor then we will have to pay to the selling firm.

Otherwise we will have to spoil the relationship with the selling firm forever, no maintenance of the bills collection department. Once we are taking this services of the factor selling firm is not required to maintain the bills collection department because everything is taken care of by the factor itself they collect the credit sale bills they issue the necessary notices they receive the payment and finally after deducting their interest or commission if any.

They transfer the funds to the selling firms accounts, interest slightly higher than interest charge on the credit line by the banks. Factors charge the interest little higher as compare to the bank but if it is say foldable by the selling firm to borrow money from the factors. Then I think is a very good source, factoring is not as same as advance against bills when we get the bills discounted from the banks is not like that.

Because though the factoring is with recourse in India but factor goes beyond the level the banks cannot go on the due date. Normally it remains the responsibility of the selling firms if they have got the bills discounted from the banks. Then it is a responsibility of the say selling firm to collect the funds from the buyers and then to pay back to the banks. But in the factoring case, factor collects the funds from the buyer and then after deducting their commission and administrative charges+interest.

They if any balance is left then they send it back to the seller, commission at the rate of 1 to 2% of the face value of the bill, factor will charge the commission of the face value of the bill that is 1 to 2%. And it is very useful for the small scale industries especially for those firms who do not have a say desired credit rating and who are little say you can call it as not having a very good financial position in the market whom the banks sometime are reluctant to lend the funds.

Apart from the say this discounting or the credit sale bills there are certain other services which is the factors gave.

(Refer Slide Time: 26:42)



So, I have lay down and noted down other things which is the factors do for the firms, for the manufacturing sector firms which you can go through here they are self explanatory. Other services they take care of the credit sale ledger apart from discounting of the credit sale bills they help the firms to have the credit information and other advisory services.

(Refer Slide Time: 26:59)



To whom to sell on credit and to whom to not to sell on credit, factors do this kind of service also. And regarding the cost of factoring as I told you it involves the 3 important components 1 is the commission the factor charge for giving the services, second the factor administrative charges and third is the interest which they charge if they lend the funds, discount the credit sale bills and lend the funds to the selling firms.

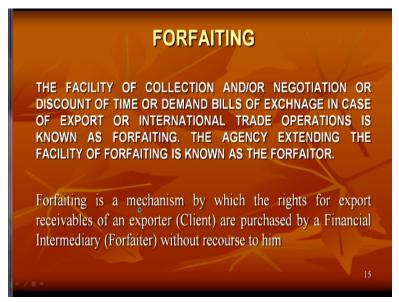
(Refer Slide Time: 27:28)



Factors in India these are some of the companies and if you see largely these are the factoring companies largely sponsored by the commercial banks in India. There are some in the private sector also but in the beginning the lead has been taken by the commercial banks and they have

say establish the factoring services. So, bank finance is easily available in India, so factoring has not become a very popular source because of the easy availability of the bank finance.

(Refer Slide Time: 27:57)



Then we talk about the next source is a forfeiting, forfeiting is as same as factoring but only the difference is that factoring can be with or without recourse. But forfeiting is always without recourse and forfeiting will act in case of the import, export process. If any firm in India who is manufacturing any particular product and their entire production they are exporting outside or maybe part of the production they are exporting outside.

And when they are exporting on the credit they do not know the financial creditability of the buyer in the other country. So, in this case to make sure that whatever the sales they are making on credit their bills will be paid back by the buyer they can take the help of forfeiters, forfeiters after the sales made by the exporter in India to importer in the other country they will get the sales bill discounter from the forfeiter.

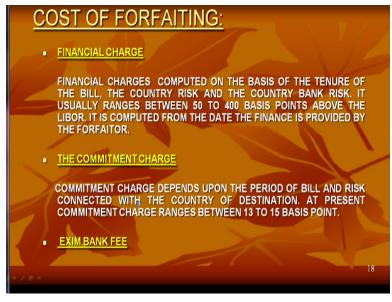
And it is a forfeiter's responsibility to collect the bills from the buyer in his own country. So, forfeiting is almost as same as with the say comparable with the factoring but it is only applicable in case of the export import process whereas factoring is available for the in-house trade or in-house vigilance. All these conditions I have put here you can read them and then you try to understand what the forfeiting is that if you want to know it in detail.

(Refer Slide Time: 29:22)



There is a detailed procedure involved I have given that what procedure is involved how we can take the help of the forfeiters and how exporters can make use of them what kind of the charges can be paid.

(Refer Slide Time: 29:33)



So, the charges to be say charged by the forfeiter from the exporters or in say 3 components, first component is the financial charge, second component is the commitment charge and third component is the exim bank fees. So, financial charge ranges between 50 to 400 basis points above the libor, so it means if the libor is 6% then it maybe 10% the forfeiter charges maybe

6.5% to 10%, commitment charges there for example if any firm exporter has enter into an agreement with the forfeiter that I will sell to X importer in your country.

And later on I will get the bell discounter from you and because of any reason after the agreement this transaction does not match your exporter does not export to the importer even then the exporting firm has to pay the commitment charges to the forfeiter and that charge is ranges between 13 to 15 basis point and third thing is exim bank is also involved in this process to safeguard the interest of the exporter.

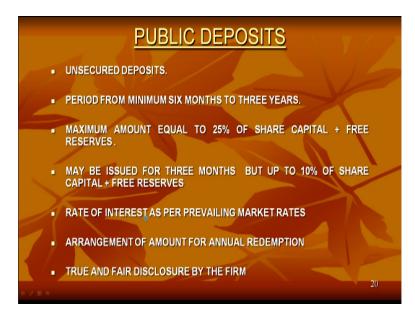
So, exim bank in India also charges some fees from the selling firm right, then like factors forfeiters also give the many other services.

(Refer Slide Time: 30:49)



And these services are almost the same credit information help to locate the customers advise on the economic trends, implications of the physical policy on industry, global scenario, work load analysis, machinery replacement, technology identification and import. So, all these things these services apart from discounting the credit sale bills forfeiters provide to the exporters. Now we talk about quickly about the public deposits, public deposits is another importance source which the firms can say arrange the funds from.

(Refer Slide Time: 31:24)



And they can invite the deposits from the general public for a short-period of time maximum for a period of 1 year and people who are interested investors who are in interested to buy or make investment into the short-term deposits with the manufacturing sector firms. They can make deposits, earn interest and after that say 1 year period of time these deposits have to be redeemed by the borrowing firms back to the depositors.

But here the again the point here is that here also depositor cannot ask any kind of the collateral any kind of the security from the borrowing company. So, they are unsecured deposits and the period in India ranges from 6 months that is a minimum to 3 years maximum, after 3 years maximum it has to be redeemed by the borrowing company back to the depositors and how much public deposits can be arranged that is maximum equal to the 25% of the share capital+freee reserves of the borrowing company or the manufacturing company maybe you should for 3 months.

But up to 10% of the share capital+free reserves, rate of interest as per the prevailing market rates and arrangement of amount for the annual redemption. So, it means every year some deposits are becoming due to be redeemed by the borrowing company back to the depositors. So, they have to make the provisions in their budgetary balance sheet for the next year that they will make the payment back to the depositors of those deposits which are becoming due to be paid in the next year.

Then is the true and fair disclosure by the firm, when they are inviting the public deposits from the general public, then they have to give a detailed picture of the firm and depositors must be knowing about the firm in detail before depositing here money or their funds with the manufacturing sector firms.

(Refer Slide Time: 33:18)



And then one more sources is inter corporate deposits, sometime what happens manufacturing sector companies when they have surplus funds with them and they do not require these funds, they can invest into the other manufacturing sector companies and then the need arises they can ask these funds back from the other manufacturing sector companies and this is again important source of working capital finance.

These days in India we have called deposits, so any time we can deposit and give to the other company and ask it back from them it can be 3 months deposits also, it can be 6 months deposits also. So, inter corporate deposits are the very important source and sometimes firm is make use of these funds if they are of the surplus funds, one manufacturing firm lends it to the other. If there is a shortage of the firm then the same firm may borrow it from the other firms who have the surplus funds available with them.

So, apart from these sources I have listed here back some sources like say here we have the list in the beginning we have seen and say inter corporate deposits Apart from that we have a commercial paper. Commercial paper is another say source which can provide the working capital finance and the commercial paper is again a 1 instrument which is literal different from the loan or borrowing, commercial paper is sold by the borrowing company the market with the help of 1 commercial bank.

And that is sold on discount but redeemed at par, so the difference of the selling price and redeeming price is the return available to the investor. So, detailed procedure is available for that but this is a 1 important instrument which the firm can make use of for generating the say short-term finance. And apart from these 7 sources then we have one more that is the financial derivatives.

Financial derivatives are normally of 2 categories one is the interested swap another is the forward rate agreement. Interested swaps is like something that when 2 firms in the 1 country or maybe 2 firms in the 2 different countries when they come closer and help each other in reducing the financial cost. If it is within 1 country here might be 2 firms and there we brought together by bank which is a common bank to both the firms.

For example there is a firm who want to borrow the short-term finance for meeting their working capital requirements on the fixed rate of interest but to that firm bank wont to give the loan but at the variable rate of interest. There is another firm who want to borrow the funds at the variable rate of interest but the bank is ready to give to that from the funds at the fixed rate of interest.

So, it means there is a problem to both the firms, so what will happen bank knows both the firms. So, bank will bring them closer and bank will advise them that you want to borrow at the fixed we want to give you at the variable. So, you borrow from I have said the variable rate of interest and the other one is you want to borrow at the variable we want to give you at the fixed rate of interest. If you borrow from us as at the fixed rate of interest and then both of you swap the interest right, you pay that the interest back to us on our terms and conditions and whatever the interest differentials are you swap with each other. So, that means the firm who want to borrow the funds at the variable rate of interest that firm got the funds at the variable rate of interest and the firm who want to borrow at the fixed rate of interest.

That firm got the funds at the fixed rate of interest, so bank's need is also fulfilled, borrower's need is also fulfilled and funds are also same. So, these are called as the interest rate swaps, then is the forward rate agreement FRA's commonly known as FRA's these are basically OTC arrangements and OTC means over the commuter. FRA's are sold by the banks, commercial banks to the borrowers.

And there basically to protect the interest rates for the borrower also and for the bank also. For example the market is volatile interest rates are expected to go up, come down. So, in that case in some cases banks are also in trouble and borrowers are also in trouble. So, what happens that to safeguard the interest of the bank as well as the borrower bank may offer a forward rate agreement to the borrower that okay.

We are say lending you the funds but to safeguard the interest variables or maybe the interest changes. For example because of the interest is variable and over the period of time interest rates go down and in the borrower has borrowed and the fix rate of interest which is very high. So, it means what will happen that the borrower has to pay the high rate of interest and reverse may also happen that interest rates are going up.

And bankers lend the funds to borrower at the low rate of interest. So, bank will earn the low rate of interest. So, in this case what will happen they will lend the firm the funds today and they will sell the FRA also and in case of the FRA for which they will charge some amounts, some nominal amount and FRA normally makes the interest rates fixed. For example if the bank has given any particular loan at a particular rate of interest and tomorrow for example the interest rate goes up.

So, what will happen the firm will pay the bank, the increased rate of interest but the bank will return back the increased part because interest rate is variable it is not fixed. So, if the interest rate is moving upward. So, what will happen, the firm borrowed are the 8% but today the rate of interest has become 12%, so bank will charge 12%. So, bank would receive 12% from the firm but because the firm is purchased FRA, so bank would return 4% back to the firm later on.

But firm has to deposit the total 12%, reverse may happen that the bank has lend at 12% but the rate of interest is gone down to say 8% now. So, what will happen because variable rate of interest, so borrower will pay back to the bank 8%. So, there loss to the bank by 4%, so what will happen that the borrower will pay to the bank only 8% and they will compensate for the loss of 4% to the bank by paying additional amount of the 4%.

So, in a way that interest rates are locked for the borrower also and for the bank also, so this can be done or can be possible with the help of the forward rate agreements and these forward rate agreements protect the interest of each other. So, these are some of the sources which are available other than the bank finance, so in total we have seen there are 9 sources and any of the 9 sources or some of the 9 sources together maybe use by the firm to fund their short-term requirements, working capital requirements.

And they can run their business smoothly, so for the detailed consultation and if you want to learn about these sources and some detailed discussion if you want to have, detailed say explanation of these you want to have again I would request you to refer to the book that is working capital management by (()) (40:29) publication, you read the book, buy the book read it.

And you will find the explanation, clarification on all these sources including bank finance in that book. So, with this I close the discussion on this subject and I hope that say after going through all the 60 lectures you will be means enjoying that what we have learned in the working capital finance that is really enriching, useful and really valuable for you, I stop here, thank you very much.