

Working Capital Management
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Lecture-39
Credit Policy Changes-II

Welcome students so we were discussing the credit policy changes in the previous class and we have seen the short term changes and as a result of that we have seen that there is incremental profit and that profit was substantial. So, we will have to see only in case of the short term that if we increase the sales and increase the variable cost only so what will be the incremental profit and how should be take the decision.

Now we talk about the long term policy change that is not the short term changes long term change permanent change that will be remain fixed for next one or two years then will review the market situation and then we will see that for the changes required or not when we go for the permanent or the long term in the credit policy see the factors to be considered are different. Again we have use the incremental analysis also but that has to be used in a different way in different style.

And we have not only take into account variable cost but we have take into account the variable cost but we have to take into account the total cost and as a result of change in the credits is not only going to increase the investment in the credit sales what is going to increase investment in the other current assets also your inventory level will increase because you have to have to buy more because we are going to produce more and more and more in the market on the permanent basis.

So, you have to produce more you have to say keep in the inventory more you have to sell more. So, because of that you are inventory requirements will go up your advance payment so sometime requirements will go up. Your cash requirements will go up this not only going to increase investment in the receivables is going to investment in the other current assets also. So, in that case we have to evaluate the total changes or total increase in the investment in all the current assets including the accounts receivables.

And then we will see that as a result of that increased sorry relax credit policy on the long term basis what is going to be the net result. Apart from that was a investment cost is there say our

collection cost is there, our bad debt cost also increased. So, many, many factors will be changing and all those factors should be considered while evaluating the policy change on the long term basis and it will be totally different as compared to what we did in the previous class and learnt about say measuring the short term policy change.

A relaxing the credit policy only for the short while or the short period so say changing the credit policy for the long term and long term basis is totally different and is going to create a different situation. So, how to evaluate the long-term changes again let us take the help of another case and that case is quite interesting and that is going to take into account too many factors.

And finally we are going to learn about that if some long term credit policy changes are expected to be done by the firm then what important factors should be considered and how the decision should be taken right. So, we have another case here and that case is quite comprehensive and it takes into consideration almost many factors.

(Refer Slide Time: 03:41)

Credit Policy Changes – Long-term

Present market size of the industry in which Ghama Ltd. operates is Rs 5000 crore which is growing @ 10 percent p.a. Ghama Ltd. has 20 per cent market share which works out to be Rs 1000 crore. Its desire is to increase market share by 5 per cent. As a part of various strategy formulations, the company is also considering an alternative receivables policy. Marketing department is of the view that it can achieve 25 per cent target if its credit policy is relaxed. But as a consequence of it, the average collection period is likely to increase from 60 days at present to 90 days. Further, the company believes that relaxation of credit policy would not have any major impact on its existing customers both in respect of collection efforts and bad debt losses. Cost of collection department is Rs 5 crore which is likely to be increased by 20 percent due to increase in sales. Relaxation of credit policy may cause increase in the bad debt losses to rise for new customers. Overall impact is expected to be 1.30 per cent as against present level of 1 per cent. Cost of sales will come down to 78 per cent due to economies of increasing scale from present level of 80 per cent of sales. Investment in the current assets other than receivables is expected to go up to 318.99 crore from present level of Rs 231.05 crore. Funds available from current liabilities will also increase up to Rs 87.31 crore from the present level of Rs 63.24 crore. Physical carrying cost of inventories is 0.5 per cent p.a. and opportunity cost of capital is 20 per cent p.a. Advise the company about the changes in the credit policy proposed to be made.

So, what the cases let us understand the case for the situation present market size of the industry in which Ghama Limited name of the company operates is 5000 crore rupees 5000 crores which is growing at the rate of 10% per annum industry is growing overall that market is going for the product of that industry at the rate of 10%. So, 5000 crore is today and is growing at the rate of 10% per annum, Ghama limited has 20% growing at the rate of 10% and Ghama limited has 20% market share which works out to be 1000 crores out of 5000 crores 1000 crore is held by Ghama limited.

Its desire is to increase market share by 5% right from 20 to 25% they want to make the market share as a part of various strategy formulation the company is also considering an alternative receivables policy because they cannot increase the market share without not extending the further credit by without not relaxing the credit policy so, they will have to consider the changes in the credit policy also. Marketing department is of the view that it can achieve 25% target if its credit policy is relaxed not on the present credit terms.

But they have to relax credit policy terms but as a consequence of it the average collection period is likely to increase from 60 days at present selling at present for 60 days credit period they are giving currently 2 months credit and then they want to increase it now from 60 days to 90 days means from the 2 months to 3 months. For that company believe that relaxation of the credit policy would not have any major impact on the existing customer's right.

Existing customers would continue to co-operate with the company and they would not have any negative impact upon the existing customers. Both in respect of collection efforts and the bad debt losses if you are selling for the 60 days even then they are ready to do business with the company and if you are increasing the credit period for them as well as to others even then they are going to have same terms as well as the same situation cost of collection department is 5 crores.

Currently the collection department which the company's maintaining is 5 crores which is likely to be increased by 20% due to increase in sales right. So, it means that increased is 1laks rupees increasing 1crore rupees increased expected. So, 20% increase is expected to be there relaxation of credit policy may cause increase in the bad debt losses to rise for the new customers. New customer because they are going to be tried for the first time they are not for the existing customers.

When we tried for the first time so it means that is going to have the problem the company is going to face that is of the increased by the bad debt losses. Overall impact is expected to be 1.3% as against 1% of the bad debt losses. So, bad debt losses will may go off from 1% to 1.3% cost of sales will come down to 78% due to the economies of increasing scales from present level of 80% of sales that is a cost of sales the total cost of sales will come down to 78% due economies of increasing scale from present level of the 80% of the sales.

So, the cost of sales is 80% currently but when you are increasing the production and increasing their market share and selling more in the market your cost of production will go down or cost of sales will go down from 80% to 78%. Investment in current assets account receivables is expected to go yes that is a very important question I was talking to you that not investment in the accounts receivable is going to increase.

Investment in other current assets also inventories, advance deposit then say your cash that is going to increase along with the investment in the current assets or maybe in the in the current assets along with the investment in the receivables. Investment in current assets other than receivables is expected to go up to 318.99 crore from the present level of 231.5 crore right, funds available in the current liabilities not going to going to increase the investment in the current assets.

Funds available from the current liabilities from the spontaneous finance that is supplier's credit and the expense credit that is also going to supplements that are also going to increase and funds available from the current liabilities will also increase up to rupees 87.31 crores from the present level of the 63.24 crores. So, it means there is also going to be increased of something like say about how much that is 20 about 24 crores of the funds will be available from the current liabilities from the spontaneous finance others we have to arrange.

Physical carrying cost of inventory is 0.5% per annum and opportunity cost of capital is 20% per annum. Advice the company about the changes in the credit policy proposed to be made. Advice changes in the credit policy about to be advice the company about the changes in the credit policy proposed to be made. So, whether company should relax is credit policy from 60 days to 90 days.

As a result of that additional investment will be there, additional cost will be there, additional losses will be there and despite that the company is going to have additional profit or not incremental profit or not. Companies going to achieve the target of having 25% market share or not that is the million dollar question. So, because your market share is 20% so, you want to increased by 5% which is a very, very large amount substantial amount 5% in the market of 5000 crores which is growing at the rate of 10% growing is means increasing the market share say by 5% that is a very big task.

So, whether the company will be able to achieve the target of not they are going to increase this sales by selling both on cash as well as credit relaxing the credit terms on the long term basis so that they become the sustained player in the market. So, whether the company will succeed in achieving that target or not they are evaluating all these is a possibility and propositions and what will be the net result that has to be seen after the detailed analysis.

So, now let us make the analysis here the method of making analysis is little different. Here we have to work out is first we have to work out is the additional investment in the total current assets. First the beginning will be how much additional investment we are going to have in the because you have the say increase the credit period information is a with us that from 60 to 90 days bad debt losses information is with us right.

And that same collection cost department's cost information is with us but the opportunity cost is 20% and how much would be that cost that will only be possible for us to work out if we have the total investment information with us. Such we have concluded here that when we are going to increase the investment in the accounts receivables is not only accounts receivable then when it is going to increase all the current asset level is going to be at the next level.

So, we will have to first the start analysis to start this analysis by working out of the investment that total current assets increased investment in the total current assets. So, if you look at this information you have given the information about the current assets other than accounts receivables where additional investment will be required and how much that investment will be required. So, investment in the current assets other than receivables is expected to be 318.99 crore from the present level of 231.05 crores.

Other than accounts receivables investment need or increased investment requirements are already given to us that is in the current assets other than that can be the entry that can be cashed that can be advance deposit. But accounts receivables investment we have to work out as the increase the credit period and the because of some other factors. So let us do this analysis and learn how to evaluate the long term policy changes.

(Refer Slide Time: 12:36)

Credit Policy Changes - (Long Term)		
Calculation of Invest. in A/R.		
Particulars	At S.P.	At C.P.
Existing Invest	$(₹.1000 \times 60) / 365$ = ₹. 164.38 Crores	$(₹.1000 \times 0.80 \times 60) / 365$ = ₹. 131.50 Crores
Projected Invest	$(₹.1375 \times 90) / 365$ = ₹. 329.04 Crores	$(₹.1375 \times 0.78 \times 90) / 365$ = ₹. 264.45 Crores

So, Credit Policy changes we take the and this is long term right. So, first of all will have to begin this analysis by working out the additional investment in the accounts receivables so, we will have to do this calculation of investment or you can call it as additional Investment calculation of investment or not additional total investment we are going to do calculation of investment in accounts receivables right.

his will have to do other is available to other than account receivable investment is available to us. So, we will have to do it at two levels first thing is particulars right then is the say as investment at the selling price and at we have to evaluate the price at cost price selling price and at the cost price and amount is in rupees crores this also available with us. So, we will have to see here what is the existing investment here is at the selling price is how much existing market share that is 1000 crore.

And how much is the credit period we are giving that is 60 by this is 60 by 365 this is the one because this is only investment we are making in the accounts receivables because we are giving the credit period of 60 days and at this level at the cost price if you calculate you have to take it as a rupees 1000 and we have to take the cost and the cost of sales is 80% right. And again the credit period is 60 days so this is at the cost price divided by the 365. So, how much investment works out here this is something like 164 if you solve this 164.38.

And here this investment is how much this investment is 131.85 crores so it means this investment sorry this is not 85 but this is something different this investment is 50, 131.50 crore this is growth of the investment right. There are two investment which are existing that is at the

selling price we had invested or we are expected to invest 164.38 crores and the cost price we are investing the 131.50 crore.

Now projected how much is additional required now projected investment right so how much we are expecting or market share to be that is 375 crores what was the market share if you look at his the 1375 crores if you can work out the market share which is the we are growing at this level and we want to increase the market to 25% and the market is also growing at the rate of 20%. So, our total market share will become if you should take it to 25%. So, what will be is this will become not 1000 now it will become 1375 crores and credit period is going to be how much 90 days right.

Divided by 365 this is 90 days 365 and here it is how much at cost we will have to see 1375 into what is the cost is that will not come down from the 80% to 78%, 0.78 into 90 by 365 right. So, this is going to be the new investment level that our market share will increase from the 1000 to say 1375 crores and the credit period will increase from 60 to 90 days. But the selling price we are taking 1375 as 1375 and at the cost price we are taking the 78% of 1375 because the cost is expected to decrease from the say 80% to 78%.

But the credit period is against that is 90 days so how much investment we are expecting on the accounts receivables that is rupees 339.04 crores and here it is this investment is going to be how much this is going to be at cost price if you consider 264.45 crores this is this much of the crores of the investment is there, this investment is there. We are going to have this much of the investment right. So, this thing is very clear in the problem given to us that if we are investment in the current assets other than accounts receivables sorry I will say other than accounts receivable is going to be 318.99 crore at both the levels.

Because we are not valuing the other receivables or the selling price or the cost price so the investment in the current assets other than the receivables is expected to be 138. 318.99 crore from 231.05 crore and the investment in the accounts receivables we have worked out at the cost this is going to be the at the selling price this is going to be the investment at the cost is going to be the investments this is the existing level of investment that is 164.38 crores.

We have invested if you are valuing at selling price and 131.50 crores we have already invested into the credit sales accounts receivables if you are valuing them only at the cost and we are

ignoring the profit. New investment expected to be at the selling price it is expected to be 339.04 crores from the existing level of 164.38 crores and that the selling price and the cost price this is expected to be 264.45 crores from the existing level of 131.50 crore. So, now this investment we have worked out in the receivables.

Projected investment in the other current assets other than the receivables is already given to us know on the basis of this total investment requirements let us workout do incremental analysis start doing the incremental analysis and try to find out that how much say the final outcome is the whether we end up at making the profits or we end up at making the losses that will be seen with the time. But let us make the calculations and let us go ahead with this further analysis and this further analysis again called as the incremental analysis or we have to calculate or we have to prepare the marginal profitability statement.

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Profitability Statement of Alternative Credit Policies			
Sr. No.	Particulars	Receivables Valued at Cost	Receivables Valued at S.P.
1.	Marginal Profitability of Sales $[1375(1-0.78)] - [100(1-0.80)]$	Rs. 102.50	Rs. 102.50
2.	Additional Invest in Net CA's (BPs valued at cost) $(231.68 + 264.45) - (167.81 + 131.50)$	Rs. 196.82	
3.	Additional Invest in Net CA's (BPs are valued at S.P.) $(231.68 + 339.04) - (167.81 + 164.38)$		Rs. 238.53

So, for this let us make this analysis, so let us go for this preparing a statement which is called as profitability statement of alternative credit policy right. So, what we have to do we have to again make a table and do the detailed incremental analysis. So, first one it is the serial number then is the particulars then we have to take the say receivables valued at cost or receivables valued at cost and receivables valued at selling price right.

Receivables valued at cost receivables valued at selling price so this way will have to do this further analysis. So, in doing this analysis we will have to now consider all the factors which are important for this analysis. So, first of all number 1 what we are going to calculate here is marginal profitability of sales or incremental profitability of sales marginal profitability of sales

because we are going to have additional sales when we are going to relax the credit policy on the long term basis.

We are going to have the additional sales so this is the marginal profitability of the sales and how much is going to the marginal profitability of the sales of the incremental profitability of the sales this can be calculated how much we are going to sell extra now the total sales will be worth rupees 1375 crores and what is the say we are talking about the for the profit part. So, how much is the current 1375 so what will be the cost here, cost will come down to 0.78 right and 1375 into $1 - 0.78$ and in this case as we close the bracket.

And what was the existing level existing level was 1000 into $11 - 0.80$ right this is the profitability we are going to have. If we are considering the 80 and 78 as the cost of sales total cost of sales including all the cost not only variable cost in this in that case what will happen your new sales level will be by increasing the market share of market which is growing at the rate of 10%. Our new share will be 25% and that will be 1375 crores and the cost of sales will come down to 78% as against the market share which we had when we had the credit policy like say not relax what only 60 days credit period.

Our total sales were 1000 crores and the cost of sales was 80% so in that case if you look at the profit here profit is same right that is rupees 102.50 and here also 102.50 right. This is same profit we are going to have at both the levels despite knowing the profit is going to be remain the same at both the levels 102.50 whether the investment in the receivable is considered at the cost or is considered at the selling price.

That will affect only the investment cost but not will affect the profits. Profits we are going to be 102.50 at both levels whether we considered account receivable at the cost price selling price. Now calculate the investment, how much investment is required to be made. So, additional investment in the net current assets including receivable additional investment in current assets additional investment in net current assets valued at accounts receivables valued at cost.

How much investment is going to be their now when the receivables at valued at cost you see that when we are talking with receivables are valued at cost here it is the important component for us. So, what is going to be the new investment here we are going to have that investment

which is 264.45 will be in the accounts receivables and 231.68 which is given to us here is that was 231.68 that is the investment which is given to us.

So, a total investment will become how much that investment will be this investment is given to us here is that is the one, so it is going to be how much this is 231.05 old and new will be 318.9 crores 318.99 crores. So, this investment we are working here and that is the additional investment in the net current assets. So, when the receivables are valued at cost so what will be that additional investment is the net current assets that will be 231 this will be the additional investment that is 231 this is going to 231 rupees 231.68 + 264.45.

This is the investment in the receiver total investment in the total current assets and was a new investment and what was the existing investment? Existing investment is 168.81 + 131.50 crore so this is going to be the new investment this is 167.81 + 131.50 and it is 231.68 and 264.45 so from where it is coming here that how much is the old investment in the other current assets 231.05 and when we taking old investment of current assets is 231 point say this much crore and here if you take this is how much is the new investment in that assets here.

This investment here we are taking here it is 264.45. So, look at this how much you have work now here is 264.45 crores is the investment here. So, this is the new investment minus old investment and old investment if you look at the 167 is we have calculated in this is the 131.5 crore that was in the accounts receivables investment earlier this investment was there and if you look at the investment which we had now existing investment which we had a calculated was 164.38.

And in this case if you look at this investment this investment is now at the cost price is 131.5 and at the selling price is was 164.38. So, if you calculate this total investment that is 231.68 + 264.45 this is the additional investment know the total investment new investment and what was the existing investment this is the sum total is this investment. So, if you talk about the additional investment we are making here is this minus this, this works out as 196.82 crores this is 196.82 crore that is at the when the receivables are valued at cost.

Next thing is that when the receivables are valued at the selling price additional investment in net current assets when accounts receivable are valued at when the accounts receivables are valued at the selling price. How much investment we are going to make here now that investment is

little think we will have to work out which is already investment in the net current assets receivables valued at selling price so it is going to be again 231.68 and plus it is going to be 339 339.04 - 167.81 + 164.38 so we are taking this 164.38 this is the 164.38 this is the investment here.

And if you look at this investment how this investment works out as receivables valued at cost was 196.82 and this minus this, this minus this, this will work out as rupees 238.53 crores 238.53 crores so this is the two investments and incremental profit share this is incremental profit at both the levels receivables are valued at cost and receivable are valued selling price and this is the investment we are making because investment in the current total current assets only the investment will be differing in the accounts receivables If they are valued at cost.

And they are valued at selling price where is Investment visa the current assets will remain the same total investment which we are making or you can call it is marginal investment we are making here is that is 196.82 crores which we have worked out here and will be valued the receivables and selling price. So, for the other assets investment is remaining the same only for the receivables the investment level is changing.

So, when we have taken that into account then we worked it out. So, we have seen that because of the relax credit policy increase the sales and increase credit period we are going to have the additional investment in this is that investment in the receivables we are going to have at the selling when the receivables are valued at selling price that investment is going to be 238.53 crores. So, we have worked out for both investments profit is also worked out in both the levels.

Investment which we worked out is different 196.82 the cost price when the receivables are valued at and 238.53 when receivables are valued selling price. And the next step would be to calculate the cost marginal cost after profit marginal profit and marginal investment. Now we will have to calculate the marginal cost at both the levels when the receivables are valued at cost price and receivable are valued at selling price.

What is going to be the total cost of this investment in all senses taking into account the investment cost, bad debts losses, collection cost, opportunity cost all these coast by taking these into account how much is the cost when the receivables are valued at cost how much is the cost

when the receivables are valued at selling price and then that cost both these cost will be compared with the profit which we are going to have the marginal profit that is 102.5 crores.

And then we will have to see if the cost is less than the profits then we will go for say taking the credit policy decision otherwise you will not take this credit policy decision and we will not relax the credit policy. So, how to calculate the cost now and that total cost at 2 levels when receivables are valued at cost and valued at selling price, how to calculate the cost and how to compare it and how to take the final decision that I will discuss with you in the next class thank you very much.