

**Working Capital Management**  
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**Lecture - 09**  
**Working Capital Management in Indian Business - II**

Welcome students. So in the previous class we were talking about the Indian business scenario and how the working capital finance is provided by the banks to the industry. So now let us see the different liquidity ratios of the different companies which are working in the steel sector.

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Year	Current Ratio	Acid Test Ratio
2000 - 01	1.58 : 1	0.71 : 1
2001 - 02	1.45 : 1	0.60 : 1
2002 - 03	1.68 : 1	0.66 : 1
2003 - 04	1.72 : 1	0.79 : 1
2004 - 05	1.55 : 1	0.77 : 1
2005 - 06	1.76 : 1	0.89 : 1
2006 - 07	1.98 : 1	0.89 : 1
2007 - 08	2.19 : 1	0.96 : 1
2008 - 09	2.07 : 1	0.97 : 1
2009 - 10	1.35 : 1	0.59 : 1
2010 - 11	1.35 : 1	0.57 : 1
2011 - 12	1.35 : 1	0.46 : 1

Source: Annual Report of SAIL

And if you look at the liquidity ratios of SAIL Steel Authority Of India Limited you see that right from 2000-2001 till 2011-12 their liquidity ratio is say if you talk about the current ratio though it is now touching the threshold level that is of the 1.33 in the later years but in the beginning or you say in the previous years the ratio was very high which was 1.58:1 in 2000-2001 and in the years like 2007-08 it had become 2.19 and 2.07.

Which is much higher as even compared to the threshold level of for the rule of thumb of the 2:1. So it means how the SAIL is managing their working capital. How the SAIL is managing their working capital it means how much financial cost they are paying by keeping say large or huge amount of the current assets. Similarly, you talk about the say acid test ratio if you talk about the acid test ratio is the liquidity ratio for which the rule of thumb now is 1:1.

And if you look at it say they have the acid test ratio which is quite manageable but in the current ratio which is very high so they have the level of current assets which is again very high. So it means you can you have to think about that how they are managing their liquidity position. Now why their current ratio is very high as compared to their acid test ratio? I will take you to this.

But before that let us see the other companies that how their say these 2 ratios are like.

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Year	Current Assets to Total Assets Ratio	% Current Assets to Total Assets
2000 - 01	0.51 : 1	51%
2001 - 02	0.56 : 1	56%
2002 - 03	0.60 : 1	60%
2003 - 04	0.56 : 1	56%
2004 - 05	0.55 : 1	55%
2005 - 06	0.56 : 1	56%
2006 - 07	0.48 : 1	48%
2007 - 08	0.49 : 1	49%
2008 - 09	0.41 : 1	41%
2009 - 10	0.34 : 1	34%
2010 - 11	0.36 : 1	36%
2011 - 12	0.33 : 1	33%
Average Percentage		48%

Source: Annual Report of SAIL.

If you talk about the again in the SAIL the level of the current asset to the total assets, so current assets to the total assets are say sometime in the beginning year it was half of the say you can call it as the ratio of the current asset to total asset means 50% assets are current assets and 50% even some cases the 60% the level is 60% as compared to the total asset 60% are the current assets and 40% are the fixed assets.

And percentage wise also we have seen that it is in one year it had gone up to 60% also and in half of the years it is 50% though it is coming down over the years. So average if you work out we have seen the average also, average percentage which is 48% which is very alarming percentage, not good for the health of the SAIL and this is the indication why SAIL has become a sick company because of a very large amount of the current assets.

If they are keeping such amount of the current assets, very large amount of the current assets it means they are not able to manage the liquidity or you can call it as their working capital properly but liquidity is there. Technical insolvency may not be there but if you look at the profitability of the firm if you look at the overall say financial health of the organization that is not in the interest of the company.

That is not at all up to the acceptable level because of the very high level of the current assets which is say indicated by the current ratio and maybe the percentage of the current asset to the total assets. Let us see now how it is the situation in the other companies like say we talk about the short term liquidity position in the other companies and we are comparing SAIL with the say other 2 companies like TISCO and JVSL and this comparison is only for the past 3 years 2009-10, 10-11, and 11-12 and we have calculated the average also.

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Years	SAIL	TISCO	JVSL (JSW)
	Current Ratio	Current Ratio	Current Ratio
2009 - 10	1.35 : 1	0.94 : 1	0.43 : 1
2010 - 11	1.35 : 1	0.92 : 1	0.48 : 1
2011 - 12	1.35 : 1	0.83 : 1	0.47 : 1
Average	1.35 : 1	0.90 : 1	0.46 : 1

Source: Annual Reports of SAIL, TISCO & JVSL

So you see that average current ratio for SAIL was 1.35:1 which is nearer to the rule of thumb, but you see TISCO. TISCO is having a negative working capital and JVSL. Look at the JVSL means look at the approach they are following. That is even their current ratio is current assets are not even half of the current liabilities. Not even half of the current liabilities so both the companies, both the private sector companies they are facing so many problems.

Even if you talk about the raw material, most of the raw material of these 2 companies is coming from the imported sources and because total say captive mines of the iron ore they are in the control of SAIL. So if they have to buy the iron ore they have to buy it from SAIL or if they are not to buy it from SAIL then they have to import from the other countries. JVSL that is now which is called as JSW Jindal Steel Works that largely depending upon the imported raw material.

So after having the imported raw material and then paying the total taxes and other costs they are maintaining a negative working capital. They are running the show by following a aggressive approach and if you even see the TISCO also is a properly means a well-managed company is a highly financially disciplined company and they are also running the show with a negative working capital where their current ratio is less than 1.

And they are means average if you see it is 0.9:1. As compared to SAIL these 2 companies which are recent means TISCO is a old player in the market but Jindal is a recent player in the market. They have means come in to the market especially after the liberalization of the Indian economy after 90s and look at the performance and the Jindals this Asia's this JVSL Jindal Vijayanagar Steel Plant was ranked as Asia's first high tech plant manufacturing steel.

So the quality of the steel and the price, the people were paying for the steel of these 2 companies is much less as compared to the SAIL product. So it is the reason that the company SAIL which enjoyed the huge market of this country for a period of you can say more than 50 years being sole player in the market having 90% or 80-90% of the market. They are means performing so bad as far as the working capital management is concerned and if you talk about these private sector companies they are far ahead.

So this is the difference in the public and the private sector and how the working capital is managed in the public sector companies or in the private sector companies. Similarly, if you talk about the percentage of the current asset to the total assets here in the 3 companies the percentage of the current asset to total assets. Current assets which was very high level in SAIL in the say early years. Over the later years it has come down to 34%. Average works out as 34%.

Look at the level of TISCO which is 23% and in JVSL the current asset as compared to the total assets are only one fifth that is the just 20%. They are keeping current assets only 20% because they know it that current assets are least productive so they are only keeping 20% not more. So it means they are ought to be efficient companies. Both the companies they are nearer to the mark of 20% whereas in SAIL recently it has come down to 34%.

Earlier years we have seen it was about 60% also. So it means if you compare these public and private sector companies we are seeing the difference and ultimately people have been paying the price for their mismanagement for the their say lack of efficiency on all the fronts. You talk about the quality of the product. You talk about the cost of the production. The price people are paying for that inefficient and the raw production in the market.

That was all against the expected norms from these companies and we can say that public sector model has miserably failed. I would tell you that even if you are curious to learn about the more about the working capital position you make a comparison, you collect the data from different data sources like say we have progress of the Center for Monitoring Indian Economy CMIE. It has a database of say more than I think 11000 companies.

You can pick up the balance sheets of this public sector companies in same sector. Public sector company and private sector companies and then you can see what is their working capital position means you will see that huge amount of cash is lying and public sector companies huge amount of the inventory is lying in the public sector companies and nobody cares for that. They do not know that this all current assets level the level they are maintaining it has a cost.

They should minimize this. If they are able to do it. They should minimize it. But if you compare the private sector companies in the same sector you would find that the level of current assets is very low and if they have they will have some amount of cash and credit sales, level of inventory will be very low. They will try to minimize the level of current assets. So this is the difference in the culture between the public and the private sectors.

So here I would like to take you little back say just telling you the background of the SAIL why the SAIL has this kind of the luxury or they have the say current ratio so high. If you look at the difference in the 2 ratios, current ratio and the quick ratio or the say acid test ratio. The current ratio is very high and the acid test ratio is you can say it is manageable. Still manageable it is less than 1. So why there is a huge gap in the current ratio and the say your quick ratio acid test ratio.

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The image shows handwritten mathematical formulas on a whiteboard. The first formula is for the Current Ratio (CR), which is Current Assets (CA) divided by Current Liabilities (C.L.). Above the CA, there is a list of assets: '1. Cash + 2. P + 3. C + 4. S'. The second formula is for the Quick Ratio (Q.R.), which is (CA minus Inventory) divided by C.L., and is also equated to Quick Assets divided by C.L.

$$CR = \frac{CA}{C.L.}$$

$$Q.R. = \frac{CA - Inv.}{C.L.} = \frac{\text{Quick Assets}}{C.L.}$$

You see that when you calculate the current ratio, the current ratio is the you can say it is the current assets divided by the current liabilities right. We take all the current assets maybe it is inventory, it is the credit sales, it is the prepaid expenses. It is the cash in hand, it is the cash at hand or there is the marketable securities everything we are taking into account and total of the current assets make the current assets as the numerator for calculating the current ratio.

But and current liabilities are the same as we have the short term that is the spontaneous finance as well as the short term finance both including bank finance that make the current liabilities of the denominator. But when you calculate the acid test ratio or quick ratio when you calculate this so this is calculated like current asset minus inventory, minus inventory divided by current liabilities.

So it means when you are seeing this current ratio like say current ratio is very high and the quick ratio or the acid test ratio is at the manageable or at the acceptable level it means if you are

subtracting inventory from the current assets then what happens. These assets become quick assets. These assets not remain current assets they are called as quick assets. So the ratio becomes now quick assets divided by the current liabilities.

So quick assets are one which are say quick assets are current assets minus inventory divided by the current liabilities. So denominator remains the same. Only numerator changes. In this case we are finding out that for calculating the acid test ratio we are taking the quick assets and quick assets are current assets minus inventory. So when you are subtracting inventory from the current assets the ratio becomes manageable, at the acceptable level.

Acceptable level is 1:1 so it is less than 1. So it is acceptable. It means the large chunk in their current assets is the inventory. Large chunk in their current assets is inventory and why they have huge amount of inventory the reason is clear. Why have they have the huge of amount of inventory the reason is very clear because till 1991 steel sector was reserved for the public sector only and SAIL was enjoying 90% market share.

If you see the old advertisements of the SAIL they were showing so many things and at the end they were writing one the punch line of the SAIL was that steel maker to the nation. So they were the steel maker to the nation at that time. They had no challenge. Whatever the garbage they were manufacturing, at whatever the cost they were manufacturing, what were the price they were charging from the people, people were bound to this huge market of, one billion plus people they were bound to buy the steel from SAIL only.

There is no other company. There are no other company can manufacture and sell steel in India. TISCO was there but TISCO's market share was very nominal. So there was no pressure, no competition, no control, and finally they were the having the might and because of their might because of their existence in the market they were running the show. But now when the sector was opened up for the private sector participation in 1991 immediately SAIL has to face the music.

When the, in the western part 2 steel sector, 2 private sector companies Lloyd and Essar Steel when they came up in the western part of the country they snatched the western market of steel from SAIL. Similarly, in the southern market of the company JVSL Jindal Vijayanagar Steel Plant when this came up this totally snatched the market from SAIL so it means out of the 100% or 90% market of India SAIL was reduced to only to the just you can 50 or 60% market.

50 or 60% market. They lost the western market. They lost the southern market. They lost the part of the central market of India. These companies are selling their product up to the central part. And then some part was, some central part was served by TISCO. It means now the sale is left in the north, eastern part of the country and some part of the central India. So it means out of the total market maybe they were enjoying 90, 95% market.

They lost half of the market. It means their production is continuously going on because all the 6 plants they are continuously the production is going on that cannot be stopped. So if the production cannot be stopped but the market is lost so ultimately where the product will go? The product, finished product, finished steel is going to the inventory and inventory is mounting. Because you cannot stop the product. It is a public sector company.

Public sector company means people have the permanent jobs. They cannot be thrown out. When the labour cannot be thrown out plant cannot be shut because ultimately have to pay the salaries to the people. So once you have to pay the salaries to the people the plant cannot be shut, the people cannot be thrown out. So ultimately you have to go for the production. So you are producing at the same pace as you were producing in the past.

But you have lost half of the market it means your inventory will mount. This is the same reason we are finding here when you see the gap between the current ratio and the acid test ratio you see here that inventory level is very high because SAIL has lost half of its market. So SAIL tried to recoup the market but they failed as far as the Indian market was concerned, Indian territory was concerned.



Because the steel which is coming from the this private sector companies they are manufacturing the steel by having a latest new technology which is very efficient giving the very efficient quality product as well as when you are using the new technology, latest technology, efficient technology naturally your price will also be very low or at the acceptable or at the manageable level.

So you have the price of the manageable level and you have the quality of the steel which is far more better as compared to the quality of the steel of the SAIL. So it means people will shift to the private sector companies rather than buying the garbage from SAIL. So they lost the market and they could not throw the people out. They could not reduce the labour. They could not reduce the manpower and at that time in the 90s the manpower of the SAIL was 1.47 lakh people which was far more than the actual requirement of this company.

So if you have say huge labour which is employed on not on the say rational basis but on some other considerations you cannot remove the people. They are permanent employees. It is a public sector company. Your production is continuous but your sales have come down. So income is becoming half. Income has gone down to half and your say expenditure is 100%. Output is there but there is no sales in the market so what will happen? You will become a sick company.

So then what happens? Steel this SAIL tried for many years to recoup the market or to say regain the lost market share but they could not do it. So finally, the case of the SAIL was referred to one consulting organization McKenzie International. McKenzie is a consultancy firm and they were asked by the company that you please study our overall say position and performance and suggest us that how we can come out of the present situation and how to deal with the situation of sickness.

Even the government also tried to disinvest this company and to sell it to the private sector and to sell it to the private sector even the global tenders were given by the government by the Ministry of Steel. But they could not find any buyer of this company because of the huge manpower. No world company could think of that because of the very stiff Indian labour laws when you cannot

remove the people who are not required in the company if somebody had to take over the company they have to face the music with this kind of the labour, huge manpower.

So nobody came forward to buy this company. When nobody came forward to buy this company. So government ultimately thought of reviving it within the public sector. Because there is a question of saving the employment. Otherwise if you close down the company so 1.47 lakh people will come on the road. So they have to save the employment so because of that reason then government thought of reviving it.

And when they thought of reviving it the company was referred to McKenzie and McKenzie studied the entire say position of the SAIL and the internal say situation of the SAIL and they finally say made some observations. They made some observations like that see you have lost the Indian market. You would not be able to regain it because your competition is with the people or with the players who are very efficient in this market.

So you cannot think of competing with them. You have lost the market. You have lost the market. So to make this lost market good you have to go out of this country in search of new markets. So search for the new markets and think of exporting your product rather than selling it in India as you have been doing it in the past. So then McKenzie suggested that Middle East countries Iran, Iraq, Saudi Arabia.

These middle east countries, Kuwait, can be the markets for you. If you think about selling your steel to them to those countries maybe you can negotiate the price and the supply chain arrangement with them and then you can think of say to some extent recouping or making the lost market good by which you have lost in India by say gaining some market out of India. So that suggestion was well taken by the company.

A long term contract channelizing agency was opened up in Dubai. Office was opened up in Dubai and that agency now procures a long term steel supplying contracts from the Middle East to SAIL and then SAIL supplies steel to them. So now this is the one factor which has contributed to improve the performance of the company. This is one part of the story. Second

part of the story which McKenzie suggested to the SAIL that over a period of time you have reduced you have to reduce your manpower. You have to reduce your manpower.

McKenzie was of the view that normally the total manpower of any company should not be more than the 15% of the total turnover of the company. If the turnover the company is 100 Rs then your this labour expense your human resource expense can be maximum 15%. At that time when McKenzie studied SAIL, the actual cost, human resource cost of the company was more than 22%. 1.47 lakh people were not required in this company.

They were hired on terms other than say the rational terms and they were surplus people. So McKenzie said as a second measure you have to reduce the manpower over a period of time. Either you offer them the voluntary retirements or you say throw some people out by say negotiating with them giving some lump sum amount or something like that but anyhow do whatever you want to do but reduce the manpower.

So over a period of time SAIL also has done that and I think till the least recent past the manpower of the SAIL was reduced to 1.17 lakh people. So significant decrease by 30000 people in a phased manner. Third suggestion which was given by the McKenzie to SAIL was that since your plants are very old your technology is very old so immediately you need to inject 50000 crores of the rupees to modernize your 3 plants at Bokaro, Rourkela, and Bhilai. So 3 plants require 50000 crores of rupees. You have to arrange this money.

If you can arrange this money you can modernize your technology. You can modernize your plants. Then you can think of that the product coming out of that technology and at that cost will be acceptable to the people not in the world markets but in the Indian markets also and you would be able to compete with the rival sector companies. So that money was not easily available 50000 crores.

Because this company tried hard with the government, with the Ministry of Steel, with many other sources but they could not generate this money but somehow in a phased manner now they are replacing the old plants with the new ones and they are improving the technology also. So

now the SAIL is it seems to be that it is back on the wheels that we are seeing here from the current ratios that the current ratio is declining.

It is coming to the close to the standard rule of thumb and your quick ratio was already managed ratio you can see it was at the acceptable level. So over a period of time if you calculate the recent ratios for 2017 or 16 or 15 I think you would see that remarkable change in the performance of SAIL so it has improved because not they have changed the technology also so they are say improving their position in the domestic market also.

They are exporting it to the world markets also and better technology, better products at a very competitive price if they are selling in the market they are improving. So this is the story of the SAIL. So why this indication given to us by these ratios or the working capital management or the working capital position in SAIL we could easily make out that because there is a huge difference in the current ratio and the quick ratio.

So the difference is because of this inventory and why the inventory was too high I told you the story that how the SAIL has or the phases the SAIL has passed through over the past you can say 10, 15 years. Still it is a sick company. Still it is a sick company. It cannot be considered that it has come out of the red but its position has improved.

Now they are hiring say efficient young people, technical people who are technically sound who are financial sound who are say knowledgeable people and they are replacing the old staff with the new people and now they are thinking of competing in the say world markets also and they are running the show with that. When you talk about the other 2 companies, other 2 companies like we have seen the TISCO and we have seen the JVSL. You will see the TISCO.

TISCO is a very stable company. It is a it is small in size but a very stable company for the past say since its inception and since the beginning it has a sustainable growth and existence in the market. So that is the reason they are able to maintain their negative working capital also and to run the show with the negative working capital also. JVSL, JSW they are following the aggressive approach.

Here I would like to share with you that following the aggressive approach is not very easily possible for all the companies. If you join any company tomorrow and if you happen to work in the finance department of any company and for example with God grace if you become the CFO of a company even you cannot think of say following the aggressive approach as far as the say short term funds management is concerned.

But JVSL is very efficiently doing. If you look at this, this ratio, this is say the current ratio is in this company is the short term liquidity position if you see the current ratio in this company is say less than you can call it as less than 0.5. And the extent of the current assets is only 20%. So do you not think that this company is always under the threat, under the constant threat of becoming technically insolvent or defaulting while making the payment to their suppliers. So this company has never defaulted because there is a secret behind it.

What is the secret that most of the steel, most of the raw material of the JSW or JVSL comes from other countries. The raw material comes as a imported steel say raw steel they imported from the other countries and largely they imported from the Middle East countries. In the Middle East countries these countries have been into the state of war, Iraq and Iran for many years.

So they have so much used missiles and say that much type of the you can call it as the shells of the missiles now they have collected and they have means these companies maybe companies from India and different parts they are collecting that material and then they are supplying it to convert that into the finished steel. So Jindal Steel Group is a this JVSL or Jindal Steel Work is also a group company which manufactures the finished steel at this Vijayanagar Steel Plant.

But their raw material comes from their own group company which is in the Middle East. So their supplier is also not an outsider. Their supplier is also within the group. That supplier or subsidiary of the Jindal Steel Works that is operating in say Middle East they collect they arrange the raw material from there use the missiles and their shells and their so many other say other sources also.

So used steel as well as the raw steel iron ore they arrange from the other countries and then they supply it to the Jindal Steel Works in India and that is how they finally manufacture the finished product and sell it in the Indian as well as in the other country's markets. So now see the supplier when it is within the group, supplier when it is within the group so even if Jindal Steel Works is not able to make the payment to the supplier on the due date and they default.

So that news does not go out of the group. One company, one group company is making the payment to the other group company and if that group company is defaulting by not making the payment on time to the supplier so it means the supplier would not mind it because the top management is same. Top management is same so the reputation there is no question of spoiling the reputation. There is no question of say losing the financial credibility in the market.

There is no question of say losing any goodwill in the market. They are both are the group companies. So yes if the supplier is also within the group and final user is also within the group then you can easily think of adopting the say aggressive approach and maintaining the level of current assets that is just 20%.

But otherwise if you are independent company and independently operating in the market and depending upon the say number of suppliers in the market who are independent free suppliers in the market we are expecting the supplies from them then I think following the aggressive approach will be very difficult and maybe you can call it as risky also. Because anytime the company because their current asset level is very low.

So it means you can make out that in this 20% they must have the cash also. They must have the marketable securities also. They must have the credit sales also. They must have the inventory also. And their liabilities are 80% more than the current assets. So if any liability which is becoming due to be paid if sufficient cash is not available from the current assets so what will they do. It means they will default in making the payment.

And when any company defaults in making the payment, maybe it is otherwise a good company. If that company is not able to make the payment on due date or on the due time as and when it is

due then the company is called as technically insolvent. So that insolvency is quite possible if you follow the aggressive approach so we should try to avoid it but if it is possible we can do that. Real story is with TISCO.

TISCO is running the show with just 23% of the current assets whose supplies are also coming from outside say place. Most of the time they are buying the iron ore and other inputs from SAIL because SAIL is the owner of the captive mines in this country. So they are buying their raw steel from SAIL and from some other say suppliers but still they are managing the show with just 23% of the current assets or very low current ratio.

So here it is a very very important say you can call it as we can learn many things from the management of TISCO. There is many thing to learn from say JSW also but nothing from SAIL. SAIL only we can learn that how this current high level of current assets impact the working capital overall and the overall financial position of the firms negatively but if you see the story of TISCO as well as Jindal Steel Works then we can learn many things.

That if we are financially disciplined and if we are vigilant organization then even by keeping a very low level of the current assets you can run the show and can say have the liquidity also, sufficient liquidity. You can be technically solvent also. Make all the payments on time and save upon significantly save upon the financial cost also and then you can maximize the profits of the company.

So working capital is such a say useful and important subject to learn that if we are able to manage our lower part of balance sheet efficiently and say more usefully then I think to a larger extent we can save and manage our financial cost and if you are able to manage the financial cost successfully automatically the other cost will also have to be managed but ultimately the cost, total cost of production will be under control.

And the profitability can be enhanced by having a competitive position in the market. So this is just introductory part of the working capital management, foundation of the working capital management till now, up to the classes till now. And from now onwards we will build up the say

the total structure of this subject and next concept I will be talking to you is that how to assess the working capital requirements of a company.

That the different techniques, tools, that how to assess the working capital requirements of different companies or of a single company. What are the tools, techniques, and processes available that all and many other things I will discuss with you in the next class. Thank you very much.