

Financial Accounting
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Lecture – 71
6.2 Liquidity Ratios

In this video we are going to discuss the Liquidity Ratios which is the first category of indicators to analyze the financial statements of a company.

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The slide is titled "6.2.1 Need for liquidity ratios" in red text. It features two logos in the top right corner: the Indian Institute of Technology Mandi logo and the NPTEL logo. The main content consists of a bulleted list:

- Short term financial position
 - Ability to pay off short term dues
 - Short term is one year period

In the bottom right corner, there is a video inset showing Dr. Puran Singh, a man with a beard and glasses wearing a white turban, pointing towards the camera.

The liquidity ratios help us understand the short-term financial position. Short term refers to one year period and we are going to learn to gauge the ability of a company to pay off its short-term dues.

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6.2.2 Types of Ratios

1. Current Ratio = $\frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{100}{50} = \frac{2}{1}$

$CA = 2 \times CL$

$\frac{1000}{100} = \frac{10}{1}$

✓ CA = Cash + Bank + Debtors + Prepaid Exp + ST Investment + Unsold Stock +

✓ CL = Creditors + ST Loans + Bills Payable + Outstanding exp

Thumb Rule : 2:1

The first indicator under this category is current ratio. The word current is not new to you; the current assets, current liabilities. The word has been used in those two terms and the word refers to less than one year. Current assets are the assets which are expected to be converted in cash in less than one year and current liabilities are the liabilities which are to be paid within the next one year.

The current ratio dictates that you make use of the current assets and current liabilities to come to some kind of understanding. So, what kind of understanding are we expecting to arrive at? If the current assets of a business are let us say 100, and the current liabilities of a business are 50; that means that the business will have to pay 50 out of the 100 that it will recover in the next one year. *Current assets* mean you will have this much cash in the next one year and current liabilities mean that you will have to pay this much cash. As per these numbers you will have double the liabilities, you will have cash equal to double the liabilities; current assets are double of the current liabilities. So, we can divide these numbers and come to a 2/1 ratio. So, the current ratio is 2/1 or 2:1. This current ratio means that current assets are 2 times the current liabilities. Even if some of the current assets fail to convert themselves into cash, you will still have the money to pay the current liabilities. You have a good cushion; you can forgo 50 percent of your current assets or you can fail to recover 50 percent of your current assets and still be able to pay off your current liabilities.

This is what this ratio indicates and the higher this ratio, better it is for the business because more cushion is available for the business.

However, if you have too high a ratio, say you have 1000 as the current assets and on the other hand current liabilities are only 100. So, you have a 10:1 ratio which means you have too many current assets and too less current liabilities. Now, business is not only about having assets and not liabilities; assets and liabilities are two sides of the same coin. The current liabilities essentially mean that you have creditors, which means your supplier is giving you the credit period. And if you have too less current liabilities; that means, you are not able to get good terms from your supplier. So, a very high ratio may not always be good either. What you need to do is to look at industry standards. What are my competitors doing? What is the current ratio for my competitors? Accordingly, take a decision, come to a conclusion as to this ratio is too high or too low, or you know; it is comparable to the industry standard.

That is how you calculate the current ratio and interpret the current ratio. Now, current assets and current liabilities: I think we are aware of those. The typical terms that you see in the current assets include cash, bank balance, debtors, prepaid expenses, any short term investments that you have done; I am referring to the company when I say you; plus you can have stock; unsold stock is another asset that you can have. There can be some other items in the current assets which we may have missed, but the list can go long and can vary depending upon the nature of the company. These are some typical items. Current liabilities, as we know, will have the creditors; you can have short-term loans that you have taken, any other advances that you have taken. There can be bills which are payable, there can be outstanding expenses. All the items that we have seen in the balance sheet under the current liabilities head. So, just use the sum of these two for a given financial year. It is important to know the current ratio is calculated for a financial period. At the end of the financial year, pick up the total of the current assets and current liabilities from the balance sheet and then figure out this number. Now, there is a theoretical thumb rule. The thumb rule—and again I say, theoretical thumb rule—is 2:1 i.e., a current ratio of 2:1 is the ideal ratio. However, that is what you will read in the textbooks, but it varies according to the industry. Are you in the manufacturing industry? Are you in renewable energy? Do you have a health care business? Depending

upon that you look at the industry means at the competitors; what is it that the other players in the market are maintaining? What is that ratio? And you compare to that. This is the first type of ratio which helps us understand the short-term financial position of the business.

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6.2.2 Types of Ratios

2. Liquid Ratio (quick ratio or acid test ratio) = $\frac{CA - (\text{prepaid Exp} + \text{Stock})}{CL}$

$$= \frac{100 - (10 + 20)}{50}$$
$$= \frac{70}{50} = 1.4$$

$LA = 1.4 * CL$

Let us go to a second indicator which is called liquid ratio, or quick ratio, or acid test ratio. The purpose of this second indicator is to be more stringent; more stringent compared to what? Compared to the current ratio. Current ratio takes into account all current assets to pay all current liabilities. We will have to pay all current liabilities for sure. However, it is possible that in order to pay all the current liabilities, we may not be able to get all the current assets converted into cash. Let me go back to the previous slide and look at the contents of current assets. You have cash and bank which are 100 percent certain, you have those with you unless there is a fire or there is a theft. Cash in bank is something which is sure shot with you. Debtors again when you show debtors in the balance sheet you adjust these debtors for any bad debts that could possibly be there. So, you create provisions, adjust this number, and show a toned-down number for debtors. Again, this is very likely that you will receive this money.

The prepaid expenses are something that you have already paid and in future you will not have to pay. However, it is not going to bring in any cash into the business and what we are interested in is the cash which will be used to pay off the current liabilities. So, we are going

to just put a small cross at the top of prepaid expenses because it is not bringing in cash for the business. Then, you have a short term investment which you could sell in the market. Short term investments mean that you have invested money in the stock market, for example, you can sell off and on the next day, you can get the cheque, get the money in your bank account. So, these are also highly likely to be recovered at any point at which it is required and then you have the closing stock; unsold stock.

Now, the stock is with you and you expect to sell it. But you expected to sell it in the last year as well and it is still unsold. So, the stock is considered to be another highly unlikely item which may or may not bring in cash, which may still remain unsold at the end of next year. So, I am again putting a small cross at the top of it.

Out of these items, prepaid expenses and unsold stock will either not bring any cash into the company, or are very less likely, very highly uncertain, to bring cash into the business. Thus, instead of using all the current assets; we are going to take out the prepaid expenses and the stock. When stock and prepaid expenses are taken out of the current assets you have a new definition of current assets. They are no longer current assets as you took out two components of the current assets. This new term is called *liquid assets*. Liquid assets means they can be converted into cash with higher probability compared to the prepaid expenses and the stock. Using that as the basis; now we say how much of the current liabilities am I going to be able to pay. If previously we had 100 as the current asset and, let us say 10 plus 20 comes out to be the prepaid expenses and stock, can I pay off my 50 rupees of liabilities? Well, yes you can. You have a 70/50 ratio; it is not 2 is to 1, but it is more than 1:1. So, you have a 7/ 5 which comes out to be 1.4. Thus, the liquid assets are 1.4 times the current liabilities. Even if some of the current assets are not converted into cash; we are not able to realize the cash from the current assets, we still have 1.4 times the current liabilities. Our liquid assets will be sufficient to pay off the current liabilities; this is what liquid ratio means. It is a more stringent test. We are saying that there are some assets which are less likely to be converted into cash, let us get rid of those and then come to a new category of assets called liquid assets. Again, what is the thumb rule that you would see in the textbooks? The thumb rule for liquid ratio is 1:1. However, it depends upon the industry standards, it depends upon the ratios maintained by your competitors. So, do not go by thumb rules or textbook rules, rather

look at the industry where this company that you are analyzing, belongs. Accordingly, make a comment on the liquidity position of the business. That is the second indicator of the short-term financial health of the business.

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6.2.2 Types of Ratios

3. Absolute liquid ratio = $\frac{\text{Cash} + \text{Bank} + \text{Marketable Securities}}{CL} = \frac{ALA}{CL}$

$= \frac{50}{50} = 1:1$

IIT Bombay
NPTEL

Let us now go to a third indicator which is called absolute liquid ratio. The premise again is to further refine the current assets and say why only stock and prepaid expenses, you have debtors, you have other current assets which may not be converted into cash in the next one year; what happens then? So, in order to create that scenario; this is a third ratio wherein we say let us look at only the current assets which are guaranteed to be converted into cash. So, we will say cash balance, bank balance plus any marketable securities. Marketable securities are short term investments, these are sure shot, readily convertible into cash, in a matter of hours or a day. You divide this by current liabilities and there you have it. You can call this class of assets as *absolute liquid assets* and divide those by current liabilities. So, all we are doing is making this test more difficult; that is it. Let us say this comes out to be 50 over 50 and 1:1 is the absolute liquid ratio. This means that despite removing all the other assets; if we have to pay off our liabilities immediately, we still have the cash, bank balance and the marketable securities sufficient to meet those current liabilities. So, current liabilities, the creditors should feel secure that the company is in a good short-term financial position with even the most stringent test. They will be able to pay off their current liabilities in the

short-run. So, from the current ratio to liquid ratio, to absolute liquid ratio, we are increasing the difficulty level of the test for the business.

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The slide displays three ratios: $\frac{CA}{CL}$, $\frac{LA}{CL}$, and $\frac{ALA}{CL}$. These ratios are grouped under a red bracket with the handwritten text "(ST Fin Position of the Company)". The slide also features logos for the Indian Institute of Technology Madras and NPTEL in the top right corner. A "Done!!" button is located at the bottom left of the slide area. A presenter wearing a white turban and glasses is visible in the bottom right corner of the video frame.

So, in the short term, you could look at these three types of assets; current assets, liquid assets, and absolute liquid assets, divide them by the same denominator which is current liability and these three indicators will help you understand the short-term financial position of the company.

To summarize, we wanted to look at the indicators which help us gauge the short-term financial position and these are the three indicators. In the next video, we are going to look at some practice problems, some tutorials where we can make use of these ratios.

I will see you in the next video.