<u>**ANALYSIS OF CURRENT ASSETS AND CURRENT LIABILITIES**</u>
In the previous section we analyzed the change in the working capital. In this section we will try to understand the change in the components of current assets and current liabilities and the relationship between current assets and current liabilities.

Current Ratio
Current ratio shows the relationship between current assets and current liabilities. Current ratio is calculated as follows:

Current Ratio = Current Assets/Current Liabilities

Current ratio shows the ability of a company to meet its short term obligations. Conventionally, the ratio says that a company with higher current assets is considered to be in a better position to meet the short term liabilities. In other words, high current ratio is high liquidity. If the current assets = 50,000 and the current liabilities are 20,000; the current ratio = 2.5. So the company is not required to sell its non-current assets to meet the current liabilities.

Though the level of current ratio depends on the managerial decisions of a particular company, the industry average is an acceptable bench mark. . In some industry, a very low current ratio is adequate. While other industry may require a much higher Current ratio. In general, current ratio depends on the operating cycle. Longer the operating cycle higher the current ratio. Table 15.16 shows the current ratio of the some Indian companies.

Table 15.16					
Current Ratio for the year ending 31st March 2006					
Pharmaceutical Sector		Automobile Sector		IT Sector	
Cipla	2.52	Tata motors	1.36	Infosys Technologies Ltd.	2.7
DRL	3.73	Maruti Udyog Ltd.	1.98	Satyam Computer Services Ltd.	6.3
Ranbxy	1.95	Bajaj Auto	0.81	Wipro Ltd.	1.5
sun Phjarma	9.06	Hero Honda Motors Ltd.	0.53	Tata Consultancy Services Ltd.	2.3

The table shows that even the companies within same sector have different current ratio.

Will higher current ratio always reflect higher liquidity? Table 15.17 shows the current assets and current liabilities of three companies.

Table 15.17			
Current Ratio and Liquidity			
	A	B	C
Cash	15,000	15,000	15,000
Debtors	40,000	20,000	15,000
Stock	40,000	10,000	
Current Asset	95,000	45,000	30,000
Creditors	10,000	10,000	10,000
Short Term Loans	20,000	20,000	20,000
Current Liabilities	30,000	30,000	30,000
Current Ratio	3.17	1.5	1

When we see only the current ratio, the liquidity of A seems to high in comparison to the other companies. However, the composition of the current assets gives a different picture. Though the current ratio of C is lower than A and B, the ability of meeting the current liabilities is better. So one has to understand the limitations of the current ratio before one can use it as a measure of liquidity.

Limitations of current ratio

Possibility of window dressing
One of the important items of the current assets is stock of goods. Value of stock is subject to the accounting assumptions regarding inventory valuation. One can change the value of stock by changing the methods of inventory valuation. Such change may increase or decrease the current ratio without having any impact on the liquidity.

Example 15.7
Table 15.18 shows that the value of closing stock increases by 27% just because of the change in the methods of valuation.

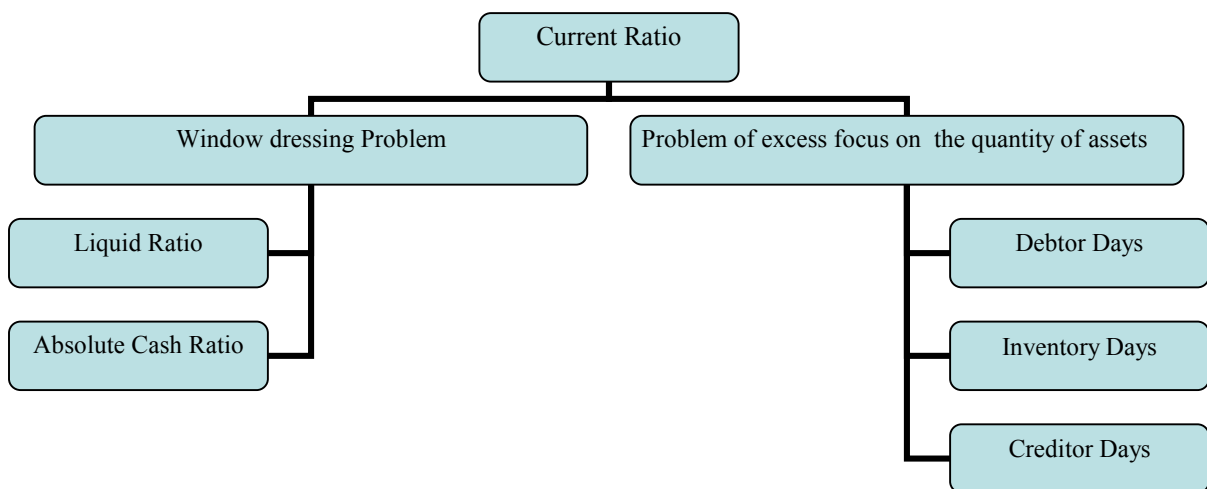| Table 15.18		
	Quantity	Rate
Opening stock	5,000	5
Purchases	4,000	8
Sales	3,000	
	LIFO	FIFO
COGS (Rs.)	24,000	15,000
Closing Stock (Rs.)	33,000	42,000

The problem of window dressing can be addressed by removing from the current assets the items which are subject to accounting assumptions. So following ratios, if used, along with the current ratio one can get better picture about the short-term liquidity of a company:
- Liquid Ratio
- Absolute Cash Ratio

Focus is on the quantity of assets rather than the quality of the assets
Another limitation of the current ration is the focus on the quantity of current assets rather than the quality of the current assets. A company may be having high current ratio but the debtors may be of doubtful nature. Stock may be very slow moving. In such situations the current ratio may be high but the ability of the firm to convert the current assets into cash to meet the short-term liabilities. This limitation can be addressed by analysing the specific items of current assets and current liabilities. Following ratios help in understanding the quality of the current assets and current liabilities:
- Inventory Days
- Debtor Days
- Creditor Days

```
                              ┌──────────────┐
                              │ Current Ratio │
                              └──────┬───────┘
              ┌──────────────────────┴─────────────────────────┐
   ┌──────────────────────────┐              ┌──────────────────────────────────────────┐
   │ Window dressing Problem   │              │ Problem of excess focus on the quantity  │
   │                           │              │              of assets                   │
   └──────┬────────────────────┘              └──────┬───────────────────────────────────┘
   ┌─────────────┐                                   ┌──────────────┐
   │ Liquid Ratio │                                  │ Debtor Days  │
   └─────────────┘                                   └──────────────┘
   ┌──────────────────┐                              ┌──────────────┐
   │ Absolute Cash Ratio │                           │ Inventory Days│
   └──────────────────┘                              └──────────────┘
                                                      ┌──────────────┐
                                                      │ Creditor Days│
                                                      └──────────────┘
```

Liquid Ratio/Quick ratio
When current ratio is calculated excluding the inventory it is called liquid ratio. So liquid ratio relates most liquid assets to the current liabilities. Liquid ratio is calculated as follows:

Liquid ratio = Current Assets –Inventory/Current Liabilities

Absolute Cash Ratio
To check the ability of a company to meet the current liabilities immediately can be judge by computing the ratio between cash and near cash items and the current liabilities. Absolute cash ratio is calculated as follows:

Absolute Cash Ratio = Cash + Near Cash Items /Current liabilities

Absolute cash ratio indicates the immediate liquidity of a company. However, one has to be careful with the interpretation of this ratio. A very high cash ratio may be very high liquidity but it also represents high idle cash. Presence of such high cash may have negative impact on the profitability.

Is Cash equal to profit?

Generally cash is not equal to profit. Cash in hand is the result of cash receipts and cash payments. Whereas, the profit is the net result of incomes and expenses. Cash will not be equal to profit because of the following reasons:

- Every payment is not an expense: Loan repayment is a reduction of liability not an expense. Similarly, buy back of shares is a payment but not an expenses. Dividend is a payment but not an expense.
- Every receipts is not an income: Issue of shares results in receipt of cash but not an income. Borrowings from bank is a receipt not an income.
- Every income is not a receipt. This is due to the accrual concept. Goods sold on credit is an income but not an immediate receipt.
- Every expense is not a payment: This is due to the accrual concept and the presence of several non-cash expenses and provisions. Interest due not paid is an expense but not a payment (accrual concept). Depreciation is an example of non-cash expenses.

Table   15.19 shows the liquidity ratios of some of the Indian companies.

Table 15.19			
Liquidity Ratios as on 31st March 2006: Different measures			
	Current Ratio	Liquid Ratio	Cash Ratio
Tata Consultancy Services Ltd.	2.33	2.31	0.1
Infosys Technologies Ltd.	2.71	2.71	1.47
Cipla Ltd.	2.52	1.47	0.05
Ranbaxy Laboratories Ltd.	1.95	1.2	0.1
Tata Motors Ltd.	1.36	1.07	0.16
Mahindra & Mahindra Ltd.	1.34	0.9	0.37

CMIE Data base

Now let us get into the ratios which address the second limitation: focus of current ratio is on the quantity rather than on the quality.

Debtors Turnover

Liquidity depends not just on the size of the current assets. The composition and the quality of the current assets affects the liquidity. How liquid are the debtors? The ratio used to assess the quality or the liquidity of debtors is called debtors turnover. This ratio compares sales with the debtors. The ratio is calculated as follows:

Debtors Turnover = Net Sales /Average Debtors

Net sales shows credit sales. Unless seasonal factors are significant, average debtors can be computed by taking opening and closing debtors.

High debtors will result in low ratio and low debtors will result in high ratio. However, one has to be careful in interpreting the debtors turnover. Comparison should be made with other players of the industry and also the past performance. See the table 15.20:

Table 15.20		
Debtor Turnover Ratio		
Year 1	Year 2	Year3
A	10	8	7
B	2	5	6

Though DTR of A is higher than that of B, the debtors management of A seems to be better as it is reducing over the years.

Debtor turnover ratio can also be determined in terms of days: debtor days or average collection period. The ratio in days will show the number of days of sale remaining in the form of debtors. It is calculated as follows:

- Debtor Days = Average Debtors /Sales per day

- Sales per day = Annual Sales/365

Example: 15.8

Annual Sales of ABC ltd   = Rs. 146,000 and at the end of the year the balance sheet shows the Rs. 20,000 as debtors. Find debtor days.

- Annual sales = 146,000
- Sales per day = 146,000/365 = 400
- Debtor Days = Debtors/Sales per day = 20,000/40 = 50 days

In the above example, one can say that on average the company is having 50 days of sales as debtors. However, to make it more useful it is necessary to compare it with the industry and its past. Table 15.21 shows the average debtor days of some of selected companies belonging to different industry:

Table 15.21			
Debtor Days as on 31st March 2006			
Hero Honda Motors Ltd.	4.49	Sun Pharmaceutical Inds. Ltd.	66.23
Tata Motors Ltd.	9.05	Dr. Reddy'S Laboratories Ltd.	83.75
Maruti Udyog Ltd.	15.34	Cipla Ltd.	86.04

Mahindra & Mahindra Ltd.	22.62	Ranbaxy Laboratories Ltd.	91.66

CMIE Data base

Creditor Turnover Ratio
It expresses the relationship between credit purchases and the liability to creditors. It can be calculated as follows:
- Creditor Turnover = Net Purchases/ Average Creditors or
- Creditor Days = Average Creditors/Purchases per day

This ratio provides an indication of the average time it takes for your business to pay its bills. It's worth looking at the figure over a number of financial years to see if a trend is developing. A lengthening in the ratio could indicate a problem with working capital, such as decreasing stock turnover or slower debt collection

Inventory Turnover Ratio:
Is the company having slow moving inventory? Can the company convert inventory into sales as when required to meet the short term liabilities? These questions can be answered partly by the inventory turnover ratio. Inventory turnover shows relationship between inventory and sales. It is calculated as follows:

Inventory Turnover = Cost of Goods Sold /Average Inventory

Where,
Cost of goods sold = Sales –Gross margin.
Average inventory = Average of the opening inventory and closing inventory.

Inventory turnover shows the number of times average inventory is turned into sales. Conventionally, higher the ratio better is the quality of inventory or better is the liquidity position of the company. However, one has to be careful in interpreting the inventory turnover due to the following reasons:
- Inventory turnover may be high due to the timing of the purchases. The balance sheet may not reflect the inventory during the year.
- Value of the inventory and cost of goods depends on the method of inventory valuation.
- Low inventory turnover may be due to expected shortages in the supply of the material.

Inventory turnover can also be calculated in terms of days as follows:

- Inventory Days = Average Inventory/COGS per Day
- Where
- COGS per day = COGS / 365

Example:15.9
Opening stock and closing stock of A ltd was 30,000 and 40,000 respectively; Annual sales was 10,00,000; Gross margin =25%; Find inventory days.

- Average Inventory = 35,000
- COGS = 75% of 10,00,000 = 750,000
- COGS per day = 2055 days
- Inventory turnover = COGS/Average Inventory = 21 times
- Inventory Days = Average Inventory/COGS per day = 17 days
- Inventory Days = 365/Inventory Turnover = 365/20 =17 days

Table15.22 shows the inventory days of ITC limited.

Table 15.22			
ITC LIMITED			
PARTICULARS	**2003**	**2004**	**2005**
CLOSING STOCK	1,252	1,534	2,003
OPENING STOCK	1,180	1,252	1,534
AVERAGE INVENTORY	1,216	1,393	1,769
COGS	3,712	4,110	4,847
COGS PER DAY	10.2	11.3	13.3
Inventory Days	119	123	133

Source: Calculated using the annual reports data

Inventory days shows the number of days that it will take to sell the current inventory. However, one has to be keep in mind that the COGS is based on the previous year's sale and there is no guarantee that the sales in the next year will be same as the sales of the previous year. However, analysing inventory days over a period of time will give some idea about the inventory management of a company.

Operating Cycle

Operating cycle represents the time take for converting the stock into cash. It represents the working capital cycle. It is also defined as the average time between purchasing inventory and received cash from its sale. It shows how long cash gets stuck in receivables and inventory.

Operating Cycle = Debtor day + Inventory Days –Creditor days

Table 15.23								
Operating Cycle								
Company Name	Average days of raw materials stock	Average days of finished goods stock	Average days of semi-finished goods stock	Average days of debtors	Average days of creditors	Gross working capitals cycle	Net working capital cycle	Avg daily sales
Bajaj Auto Ltd.	6.73	6.79	1.96	10.1	54.43	25.58	-28.85	23.65
Hero Honda Motors Ltd.	9.42	2.6	0.7	4.49	32.83	17.21	-15.62	27.66
Tata Motors Ltd.	22.26	14.15	5.83	9.05	107.58	51.28	-56.3	64.57