Working Capital Management Ratios

Working Capital Management Ratios…

Ratios related to:

Accounts Receivables Management

- Days’ Sales Outstanding: the time to collect payment from customers

Inventory Management

- Inventory Turnover Ratio: how often inventory is replaced throughout the year
- Days’ Sales in Inventory: how many days it takes to sell the inventory

In other words, how well are is the company running the product-side of the business?

Days’ Sales Outstanding (DSO)…

Days’ Sales Outstanding (“DSO”)

The average time it takes to collect on Accounts Receivables.

The Days’ Sales Outstanding ratio shows you how long your average customer is taking to pay their bill.

Just because you’ve extended credit terms to your customers to pay in 30 (”net 30”) or 60 days (“net 60”), doesn’t mean customers <u>will</u> pay on time.

Days' Sales Outstanding (DSO)...

The average time it takes to collect on Accounts Receivables.

Step 1: Determine the Average Revenue per Day:

$$\text{Average Revenue per Day} = \frac{\text{Annual Revenue}}{365}$$

Step 2: Divide Accounts Receivable by Average Revenue per Day:

$$\text{DSO} = \frac{\text{Accounts Receivable}}{\text{Average Revenue per Day}}$$

Days' Sales Outstanding (DSO)...

Example: A company has sales of \$10M, with an Accounts Receivable of \$1.5M. What is the Days' Sales Outstanding?

$$\text{Average Revenue per Day} = \frac{\$10{,}000{,}000}{365} \approx \$27{,}400 \text{ per day}$$

$$\text{Days}' \text{ Sales Outstanding (DSO)} = \frac{\$1{,}500{,}000}{\$27{,}400 \text{ per Day}} \approx 55 \text{ days}$$

- If the company has 60-day payment terms, life is good!
- If it has 30-day payment terms, time to get tough with those delinquent customers!

Days' Sales Outstanding (DSO)…

The Concept of "Aging Receivables"

Accountants often like to "bucket" the time it takes for customers to pay their bills.

Let's say a company has 30-day payment terms:

Most of the "AR" may not be due yet, since it is in the 30-day period.

Some AR may be more than 45 days old or longer, which is a red flag about customers willingness to pay their bills.

Days' Sales Outstanding (DSO)…

The Concept of "Aging Receivables"

Aging Receivables Report:	
Less than 30 days (on-time):	$200,000
30-45 days (up to 15 days late):	$100,000
45-60 days (up to 30 days late):	$ 50,000
60-90 days (up to 60 days late):	$ 25,000
More than 90 days:	$ 5,000
Total Accounts Receivable:	$380,000

This report indicates problems in collecting from customers.
20% of the money owed is very late, and the company may not get all of it!

Inventory Management Ratios...

Inventory Turnover Ratio

Describes how well your company manages inventory.

- Specifically, how many times inventory is ”replaced” every year.
- Sometimes referred to as ”Inventory Turns”.

Days’ Sales in Inventory:

- Determines how many days it takes to sell inventory on hand.

A popular product sells quickly, requiring the company to frequently replace its inventory to keep customers happy!

Inventory Turnover Ratio…

$$\text{Inventory Turnover} = \frac{\text{Cost of Goods Sold}}{\text{Inventory}}$$

Ex. A company has a Cost of Goods Sold of $1,350,000 (from the Income Statement) and an Inventory of $425,000 (from the Balance Sheet).

What is its Inventory Turnover Ratio?

$$\text{Inventory Turnover} = \frac{\$1{,}350{,}000}{\$450{,}000}$$

$$\text{Inventory Turnover} = 3.17 \text{ times}$$

The company replaces its inventory 3.17 times per year.

Days' Sales in Inventory…

$$\text{Days' Sales in Inventory} = \frac{\text{365 Days per Year}}{\text{Inventory Turnover}}$$

Ex. A company has an inventory turnover of 3.17. What is its Days' Sales in Inventory?

$$\text{Days'Sales in Inventory} = \frac{\text{365 days}}{3.17}$$

$$\text{Days' Sales in Inventory} = \text{115 days}$$

The company sells (or alternatively, replaces) its inventory every 115 days.

Inventory Turnover Ratio…

$$\text{Inventory Turnover} = \frac{\text{Cost of Goods Sold}}{\text{Inventory}}$$

What Inventory Turnover (or ”Turns”) means:

1: the company has 1 year of inventory on hand

6: the company has 2 months of inventory on hand

12: the company has 1 month of inventory on hand

52: the company has 1 week of inventory on hand

The optimum inventory turnover ratio depends on the type of business the company is in.

Inventory Turnover Ratio…

If you have a high-tech product where the technology changes quickly, you don't want a lot of inventory sitting around for very long: you want a high turnover ratio.

If you have a capital + labor intensive product that is custom-built to the user's specifications (i.e., jet engines), you may have a low turnover ratio, which is ok.

Main Takeaways…

Working Capital Management Ratios are measures of a company's ability to manage its day-to-day operations.

Days' Sales Outstanding reflects the time it takes to collect payment from customers.

Inventory Turnover is a measure of how many times inventory is replaced per year.

Days' Sales in Inventory reflects the number of days it takes to sell the inventory.

Working Capital Management Ratios help managers see how to best manage their inventory as well as credit practices with its customers.

Next Time…

Profitability Ratios

Credits & References

Slide 1: Businessman working data document graph chart report marketing research development planning management strategy analysis financial accounting by Chaosamran_Studio, Adobe Stock (296141290.jpeg).

Slide 12: Drone with high resolution digital camera by nesterenko_max, Adobe Stock (111078013.jpeg). Jet engine by frank peters, Adobe Stock (162427570.jpeg).

Slide 14: Profitability ratios by magele-picture, Adobe Stock (298687131.jpeg).