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### Module 2

# The Language and Tools of Financial Analysis

# Efficiency Measures (Are we doing more with less?)

Presenter: Paul Kofman





### **Efficiency**

The efficiency "activity" ratios capture the firm's ability to effectively use its assets in generating revenue.

$$Total Asset Turnover = \frac{Sales}{(Average) Total Assets}$$

Total Asset Turnover (Kellogg's, 2014) = 
$$\frac{14,580}{(15,153+15,474)/2} = 0.95$$



#### Moving inventory...

Most firms hold inventory

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

Days in Inventory = 
$$\frac{365}{\text{Inventory Turnover}}$$

Measures how quickly inventory is produced/ sold.

Depends on production technology, perishability, inventory valuation methods....

#### **Turnaround time**

Inventory turnover is only meaningful in comparison with other (similar) firms or over time

Inventory Turnover (Kellogg's, 2014)

$$=\frac{9,517}{(1,279+1,248)/2}=7.53$$

But days in inventory is easier to assess!

Days in Inventory = 
$$\frac{365}{7.53}$$
 = 48 days



#### Credit and accounts receivable

Most firms sell on credit (accounts receivable)

Accounts Receivable Turnover = 
$$\frac{\text{Sales}}{(\text{Average}) \text{ Accounts Receivable}}$$

Again, Accounts Receivable Turnover should be assessed in comparison with like firms, but the collection period is more intuitive.

Average Collection Period (in days) = 
$$\frac{365}{\text{Accounts Receivable Turnover}}$$

#### Credit and accounts receivable

Accounts Receivable Turnover (Kellogg's, 2014)

$$= \frac{14,580}{\left(1,276+1,424\right)/2} = 10.80$$

Average Collection Period (in days) =  $\frac{365}{10.8}$  = 34 days

As a rule, this measure should not exceed the credit terms by more than 10 days!



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	KELLOGG'S		KRAFT	
	2014	2013	2014	2013
Total Asset Turnover	0.95	0.96	0.79	0.79
Receivables Turnover	10.80	10.28	17.11	17.05
Average Collection Period	34 days	36 days	21 days	21 days
Inventory Turnover	7.53	6.65	7.88	6.43
Days in Inventory	48 days	55 days	46 days	57 days

## Source list

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