

### Module 2

# The Language and Tools of Financial Analysis

Leverage Measures (Creating value with other people's money)

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### Leverage (gearing)

The profitability measures focus on the return to the investors – the owners/ shareholders – but many firms also rely on debt financing.

- Debt owners do not participate in profit sharing, but...
- Unlike equity, debt needs to be repaid regardless of the firm's financial circumstances



## Leverage (gearing)

Debt financing provides a significant tax advantage (interest is tax deductible) but...exposes the owners to financial distress risk,

 where the firm's operating cash flows are insufficient to meet current obligations

More debt means higher distress risk and may cause a conflict of interest between the firm's investors.

- Equity investors want the firm to invest in risky projects
- · Debt investors want the firm to avoid risky projects

### **Debt-Equity Ratio**

The proportional use of financing the firm's operations is expressed in the Debt-Equity ratio:

$$Debt-Equity Ratio = \frac{Total Debt}{Total Equity}$$



### **Debt-Equity Ratio**

DE ratio can be computed using either book value or market value of equity:

Debt-Equity Ratio (Kellogg's, 2014, BV) = 
$$\frac{12,302}{2.851}$$
 = 4.31

Debt-Equity Ratio (Kellogg's, 2014, MV) = 
$$\frac{12,302}{23,478} = 0.52$$

What does the difference tell you?

### **Debt Ratio**

As a proportion of total assets:

Debt Ratio = 
$$\frac{\text{Total Debt}}{\text{Total Assets}}$$

Debt Ratio (Kellogg's, 2013) = 
$$\frac{11,867}{15,474}$$
 = 0.77

Debt Ratio (Kellogg's, 2014) = 
$$\frac{12,302}{15,153}$$
 = 0.81

Again, market value ratios may differ significantly from book value ratios



### **Interest Coverage Ratio**

A measure that better expresses the likelihood of financial distress is interest coverage:

$$Interest Coverage Ratio = \frac{EBIT}{Interest Expense}$$

which captures the ability of the firm to generate sufficient income to cover interest expense

Interest Coverage Ratio (Kellogg's, 2014) = 
$$\frac{1,034}{209}$$
 = 4.95

### Comparison

	KELLOGG'S		KRAFT	
	2014	2013	2014	2013
D/E	4.31	3.29	4.26	3.46
D/A	0.81	0.77	0.81	0.78
ICR	4.95	12.09	3.90	9.16



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