

CONCEPT: RATIOS – TIMES INTEREST EARNED (TIE)

- The **Times Interest Earned (TIE)** ratio helps analyze if a company can cover its _____
 - The TIE ratio is a common _____ ratio
 - There are different ways to calculate the TIE ratio, we will discuss the two most common calculations
 - The calculations produce similar results: Double check how your professor calculates this ratio!

$$TIE = \frac{\text{Operating Income}}{\text{Interest Expense}}$$

or

$$TIE = \frac{\text{Net Income} + \text{Interest Expense} + \text{Income Tax Expense}}{\text{Interest Expense}}$$

Analysis: The TIE tells us how many times we could cover our interest expense with our core business income

Comparison: When a company gets a loan, the bank will generally stipulate a level of TIE (i.e. 3x) that must be maintained
_____ TIE implies better solvency because you can cover your interest expense easily

PRACTICE: XYZ Company had Income from Operations of \$320,000 and Net Income of \$80,000. Interest Expense during the current period was \$40,000 and Notes Payable totaled \$400,000. What is the company's Times Interest Earned?

- a) 2x
- b) 6x
- c) 8x
- d) 10x

PRACTICE: ABC Company had Net Income during the period of \$60,000 after Income Taxes of \$40,000. Furthermore, the company had outstanding Notes Payable at the beginning and end of the year, respectively, of \$250,000 and \$350,000. If interest expense was \$15,000 during the period, what is the company's TIE ratio?

- a) 7.7x
- b) 5x
- c) 4x
- d) 20x