



The Times Interest Earned (TIE) Ratio: Real- World Risk or Spreadsheet Swindle?



What is “Interest Expense?”

The 3-Minute Times Interest Earned Ratio

This is a topic with a lot of “samey” content online that makes the same points repeatedly (try searching)...

We’ll present the basic definition here, but I want to focus on the **nuances** and the “why” behind the numbers.

The 3-Minute Times Interest Earned Ratio

For the files and resources, go to:

<https://breakingintowallstreet.com/kb/financial-statement-analysis/times-interest-earned-tie/>

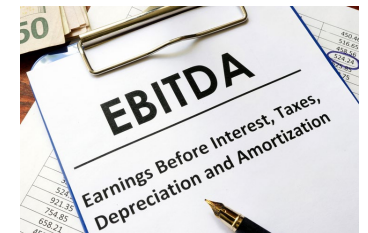
The 3-Minute Times Interest Earned Ratio

- **TIE:** Measures how well a company's **core-business earnings** can pay for the Interest Expense on its Debt; represents credit risk and capacity for new Debt issuances and the *terms* of these issuances



- “Aggressive” TIE Ratio =

$$\frac{\text{EBITDA}}{\text{Interest Expense}}$$



- “Conservative” TIE Ratio =

$$\frac{\text{EBIT}}{\text{Interest Expense}}$$



The 3-Minute Times Interest Earned Ratio

- **EX:** \$10 million in EBITDA and \$8 million in EBIT with a \$2 million Interest Expense → TIE is either 5.0x or 4.0x

5x

- **“Acceptable” Levels:** Vary by industry, but lenders usually want at least 2.0x, with 3.0x – 4.0x+ considered “healthy”

3x

- **Meaning:** Company with 3.0 – 4.0x+ can raise Debt more easily on more favorable terms (interest, covenants, etc.), assuming its other stats (FCCR, DSCR, etc.) look good



- **Low Numbers:** Not necessarily a “red flag,” but could indicate more expensive new Debt or difficulty in issuing



The 3-Minute Times Interest Earned Ratio

- **Complexities:** There are **cash components** and **non-cash components** to Interest (Paid-in-Kind Interest, Debt Discount and Issuance Fee Amortization, etc.)
- **Complexities:** Lease Interest complicates things, especially under IFRS, and the treatment of Interest Income is debatable
- **So:** Ask yourself *the purpose* of your analysis – is it to measure Debt Service in the current period or to measure the possible costs of *New Debt* and the company's ability to issue it?



Plan for This Tutorial

- **Part 1: TIE Definitions in a Simple LBO Model** **5:34**
- **Part 2: What Does TIE Tell You?** **10:51**
- **Part 3: How Companies Can Boost Their TIEs** **13:07**

Part 1: TIE Definitions in a Simple LBO Model

- **Numerator:** Not much debate here; either use EBIT or EBITDA, depending on how conservative you want to be (don't bother with cash flow adjustments → just use FCCR or DSCR)
- **Non-Cash Interest Components:** These mean the *Cost of Debt* is higher than what is implied by its Cash Interest Expense
- **EX:** \$70 in Cash Interest, \$20 in PIK Interest, and \$10 from Original Issue Discount Amortization → Can't say that the "Cost of Debt" is just $\$70 / \$1,000 = 7\%$ for this company



Part 1: TIE Definitions in a Simple LBO Model

- **Why:** Investors were not satisfied with only \$70 in Cash Interest and wanted a higher return, so the company had to offer additional concessions → Higher effective cost for them



- **Non-Cash Interest Components:** We recommend including these if you're estimating credit risk and the cost of future issuances; not necessary if your main concern is "ability to pay"



- **Lease Interest and Interest Income:** Less appropriate to include because Leases and Debt are different, and a Cash balance does not necessarily "offset" the risk of Debt



Part 2: What Does TIE Tell You?

- **Analogy:** It's like going to the doctor → Can't just look at the results of one number in a blood test and say much
- **Usual Approach:** Always review TIE with other metrics like Debt / EBITDA, the FCCR, DSCR, etc.
- **TIE Low But the Rest Are Fine:** Company might still be able to raise new Debt on similar terms, depending on the “why”
- **Multiple Metrics Are Low:** Much more difficult in this case; lenders would demand better terms (higher interest rates, etc.)



Part 3: How Companies Can Boost Their TIEs

- **GOAL:** Maintain or increase the numerator (EBIT or EBITDA) while reducing the Interest Expense denominator



- **Idea #1:** Refinance the Debt and replace it with lower-cost Debt in exchange for other concessions, such as stricter covenants



- **Idea #2:** Cut costs via headcount reduction or lease/supplier renegotiation (like DOGE, but it actually works)



- **Idea #3:** Grow the core business so that the higher EBIT and EBITDA in the future reduce the TIE



Recap and Summary

- **Part 1:** TIE Definitions in a Simple LBO Model



- **Part 2:** What Does TIE Tell You?



- **Part 3:** How Companies Can Boost Their TIEs

