Original Issue Discount (OID): What It Means and How It Works on the Financial Statements

The Question…

"Can you explain what **Original Issue Discount (OID)** means and how to model it on a Debt issuance in a 3-statement model or LBO model?"

"I've seen this concept in case studies and modeling tests before, but I'm not sure exactly how it works."

The Short Answer on Original Issue Discount

- **Concept:** Happens when a company issues Debt at a *discount* to par value, e.g., a bond is worth $100, but company issues it for $90

- **Why:** The bond's coupon rate (interest rate) is **below** those of other, similar bonds, and the company needs to incentivize investors (or if there are doubts about eventual repayment)

- **What:** Company **amortizes** this discount on the statements and keeps increasing the *Book Value* of Debt on the Balance Sheet

- **But:** The company still pays Interest based on the *Face Value* of that Debt – the $100!

The Short Answer on Original Issue Discount

- **So:** For $100 of Debt with a 10% Interest Rate, issued at $90, there will be $10 in Cash Interest and $2 of OID Amortization per year

- **Income Statement:** $12 in Total Interest Expense, which reduces Pre-Tax Income and Net Income

- **Cash Flow Statement:** Net Income is lower, and we add back the $2 in OID Amortization each year since it's a non-cash expense

- **Balance Sheet:** *Book Value* of Debt increases from $90 to $100 over time, going up by $2 per year, but the *Face Value* is a constant $100

The **Longer Answer** on Original Issue Discount

- **Principal Repayments:** When there are Mandatory or Optional Repayments, you must **amortize the OID more rapidly**

- **Label:** Companies call this “Extra Amortization” something like “Loss on Unamortized OID on Repayment”

- **This “Loss”:** Based on % Debt Principal repaid this year * OID balance after OID Amortization this year

- **So:** $10 OID, $2 OID Amortization, and $20 Repayment → ($20 / $100) * $8 = 20% * $8 = $1.6

The **Longer Answer** on Original Issue Discount

- **ALSO:** The Amortization of OID itself changes in this scenario! Not just a simple straight-line number anymore

- **Calculation:** =-MIN(OID Beginning Balance, OID Beginning Balance / Years Remaining in OID Amortization Period)

- **So:** With OID of $10 and a 5-year period, this will initially be $10 / 5 = $2… but will fall to less than $1 by the end

- **NET EFFECT:** Instead of amortizing $2 of OID per year, we amortize a total of $4, then $3, then $2, then $1, then < $1

The **Longer Answer** on Original Issue Discount

- **Financial Statements:** "Loss on Unamortized OID on Repayment" counts as another expense on the Income Statement

- **So:** Cash Interest, OID Amortization, and Loss on Unamortized OID on Repayment reduce the company's Pre-Tax Income & Net Income

- **CFS:** Net Income is lower, and you add back the last two components since they're both non-cash expenses

- **Effect of These Items:** Slight boost to company's FCF because they're non-cash items that reduce the company's taxes, similar to Depreciation

Does OID Really **Matter?**

- In most cases, **no**, not really

- Most Debt is **not** issued at a huge discount to par value; 1-3% range is typical in normal markets

- The company saves a *tiny* amount on taxes as a result, especially in countries with relatively low corporate tax rates…

- …and it takes a lot of extra work to set up these OID calculations, especially if there are many tranches of Debt

- **So:** Be familiar with OID, but don't obsess over it

Recap and Summary

- **Original Issue Discount (OID):** Face Value of bond is $100, but issued for $90… due to interest rate < market interest rate

- **No Principal Repayments:** Amortize $10 OID / # Years to Maturity each year; expense on IS, add back on CFS, and increase Book Value of Debt on BS; still pay Interest based on $100 Face Value

- **Principal Repayments:** Accelerate the OID amortization based on OID after normal amortization * % repayment in the year; normal amortization starts higher and declines each year

- **Impact:** Quite small in most cases; a bit of tax savings