



Assessment Center Case Study – LBO Modeling Test

In this case study exercise, you will build a simple leveraged buyout model for a company and then answer questions about the cash-on-cash (CoC) multiple and IRR, under both a traditional M&A exit and an IPO exit.

Please note that you need to provide not only the correct answers to these case study questions, but also a model that is easy to understand and well-formatted.

Ideally, you will also create sensitivity tables that show the impact of different entry and exit multiples on the cash-on-cash multiple and IRR.

The company in this exercise has the following financial profile:

- **LTM Revenue:** €200 million
- **LTM EBITDA:** €50 million
- **Revenue Growth:** 10% per year over the 3-year projection period
- **EBITDA Margin:** 25% per year over the 3-year projection period
- **D&A:** 5% of sales
- **Tax Rate:** 20%
- **Inventory:** 10% of sales
- **Receivables:** 5% of sales
- **Payables:** 5% of sales
- **CapEx:** 7% of sales

Please use the following assumptions for the purchase and exit:

- **EBITDA Purchase Multiple:** You will be solving for this in the case study questions; no baseline value.
- **EBITDA Exit Multiple:** Assume 8x LTM EBITDA in the base case.
- **Management Rollover / Equity:** Assume nothing, i.e. the PE firm owns 100% of the company after the transaction.
- **Fees:** Assume a 0.5% M&A advisory fee on the purchase price, a 1.5% financing fee on the total debt raised, and a 0.5% sponsor fee on the purchase price.

Use the following assumptions for the capital structure in the deal:

- **Term Loan A:** 1.0x LTM EBITDA; amortized equally over 5 years; L + 350 interest
- **Term Loan B:** 1.0x LTM EBITDA; amortized equally over 5 years; L + 400 interest
- **Term Loan C:** 1.0x LTM EBITDA; amortized equally over 5 years; L + 450 interest
- **Second Lien:** 1.0x LTM EBITDA; bullet repayment in 7 years; 8.25% fixed interest
- **PIK:** 0.5x LTM EBITDA; no amortization; 14.00% fixed interest



Assume that LIBOR is 2.25%, and that the company earns 1.50% interest on its cash balance. Assume an initial cash balance of \$20 million just before the leveraged buyout takes place.

Within the model, assume that excess cash is **NOT** used to repay debt, and instead simply accumulates on the Balance Sheet.

Set up your model and sensitivity tables, and then use them to answer the following questions:

Case Study Questions

1. How much can a private equity firm pay for the company to achieve a 2.5x cash-on-cash multiple over a 3-year period?
2. What IRR does this purchase price imply?
3. By how much would the EBITDA margin need to increase in each year to achieve a 3.0x cash-on-cash multiple over 3 years, if you assume the same purchase price?
4. If the EBITDA exit multiple is 1.0x higher, how does that impact the purchase price required to achieve a 2.5x cash-on-cash multiple over 3 years?
5. What are the IRR and cash-on-cash multiple if the private equity firm pays 7.0x LTM EBITDA for the company, and exits at 8.0x LTM EBITDA after 3 years?
6. What are the IRR and cash-on-cash multiples if the PE firm exits via an IPO in 3 years, but only sells 60% of its stake initially? Assume that the senior debt **stays in place** in this scenario, and that the purchase and exit multiples are the same as in question #5 above. Also assume that the PE firm's remaining stake is sold 1 year following the IPO, and that the company's share price increases by 30% in that period.