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Build an LBO Model in Excel

From Sources and Uses to Sponsor Returns
Course Book

Eight modules, one running case, every figure computed.
Educational material. Not investment advice. Prepared with AI assistance.

MODULE 1

How a buyout makes money

Objectives

- Explain what a leveraged buyout is and who puts in the money.
- Build the sources and uses of the running case, fees and minimum cash included.
- Name the three engines of an LBO return: EBITDA growth, multiple change and debt paydown.
- Do a paper LBO in a few lines, the way interviewers ask for it.

In a leveraged buyout, a private equity sponsor buys a company and pays for most of it with debt that the company itself will carry. The sponsor puts in the equity, lenders put in the rest, and the company's cash flow repays the lenders over the holding period. Three to seven years later the sponsor sells. Whatever is left after the debt is repaid belongs to the equity.

That structure explains why buyout returns can be high and why they can disappear. Debt magnifies the change in value: if the business is worth a little more at exit, the equity is worth a lot more; if it is worth a little less, the equity can be wiped out. The model you build in this course measures both sides of that bet.

The running case

Every module uses the same company: Corvane Industrial Components, Inc., a fictional US maker of industrial components with three revenue lines (engineered components, aftermarket parts and field services). Last twelve months (LTM) revenue is $350.0m and EBITDA is $50.0m, a margin of 14.3%. A sponsor buys it at the end of fiscal 2026 at 9.0x LTM EBITDA: an enterprise value of $450.0m. This is the worked example of the LBO Model, Pro Edition included with the course, so every number in this book can be found in that workbook.

Sources and uses

The first table of any buyout lists what the money is used for and where it comes from. The two columns must be equal. The uses start with the price of the shares. The sponsor agrees an enterprise value of $450.0m, takes over the company's $120m of existing debt and $15m of cash, so it pays the sellers $345.0m for the equity. The existing debt is repaid ($120m), advisers are paid (2.0% of value, $9.0m), lenders take upfront fees ($6.625m) and $10m is left on the balance sheet as minimum cash.

Uses	$m	Sources	$m
Equity purchase price	345.0	Revolver drawn at closing	5.0
Refinancing of existing debt	120.0	Term Loan B (4.0x EBITDA)	200.0
Transaction costs	9.0	Senior notes (1.5x)	75.0
Financing fees	6.63	PIK notes (0.5x)	25.0
Minimum cash	10.0	Cash acquired	15.0
		Sponsor equity	165.07
		Management equity	5.56
Total uses	490.63	Total sources	490.63

Debt totals $305.0m, 6.10x LTM EBITDA, and the equity check is the balancing figure: $170.63m, 35.9% of the capital. Equity is always the plug. Fees are not: they are real cash that the equity pays for, $15.63m here, or 0.31x EBITDA before the company has done anything.

Where the return comes from

The equity at exit is the exit enterprise value, less exit costs, less net debt. Between entry and exit, three things can raise it:

- EBITDA growth: more revenue and better margins. Corvane's revenue grows 5.5% a year and its margin rises from 14.3% to 15.7% by year 5.
- Multiple change: selling at a higher multiple than you paid. The base case assumes none: exit at 9.0x, like the entry.
- Debt paydown: every dollar of debt repaid, or of cash kept, belongs to the equity at exit.

Module 5 turns this into a bridge that adds up to the dollar. For Corvane, revenue growth explains 51% of the gain, margin 22%, multiple 0%, and the fall in net debt 36%; fees take back 9%. The sponsor's IRR is 19.9% and its multiple of money (MOIC) 2.48x.

The paper LBO

Interviewers like a buyout done without Excel. You need three numbers: the equity in, the equity out, the years in between. IRR is then MOIC to the power of one over the years, minus one. Learn four reference points for a five-year hold:

MOIC in five years	IRR
1.5x	8.4%
2.0x	14.9%
2.5x	20.1%
3.0x	24.6%

On the running case: exit EBITDA $72.1m at 9.0x gives $648.8m. Start from net debt of $295.0m, deduct the $115.9m of cash flow after interest (before any debt repayment) earned over five years and add the PIK interest that accrued ($17.1m): net debt at exit is about $196.2m. Equity out $452.5m for $170.6m in is 2.65x, an IRR of about 21.5%. The full model gives 2.60x and 21.0% for the total equity: the paper version ignores exit costs, which is why it is a little high. That is the point of a paper LBO: the right order of magnitude in two minutes.

Worked example, step by step

1. Enterprise value: 9.0 x LTM EBITDA of $50.0m = $450.0m.
2. Equity price paid to the sellers: $450.0m - existing debt $120m + cash acquired $15m = $345.0m.
3. Transaction costs: 2.0% x $450.0m = $9.0m. Financing fees: 2.0% of the Term Loan B ($4.0m), 2.0% of the notes ($1.5m), 2.5% of the PIK notes ($0.625m) and 1.0% of the $50m revolver commitment ($0.5m): $6.625m.
4. Total uses: 345.0 + 120.0 + 9.0 + 6.625 + 10.0 = $490.625m.
5. Debt: $5.0m of revolver + 4.0x, 1.5x and 0.5x of $50.0m = $305.0m, or 6.10x EBITDA.
6. Equity: $490.625m - $305.0m - cash acquired $15.0m = $170.625m, 35.9% of debt plus equity.
7. Check: a 2.5x MOIC over five years is (2.5)^(1/5) - 1 = 20.1% a year.

Pitfalls

- Forgetting that the price is agreed on enterprise value: the sellers receive the equity value, after their debt is repaid and their cash counted.
- Leaving fees out of the uses. They are paid in cash at closing and reduce the return.
- Treating the equity check as an input. It is the plug of sources and uses; change the debt and it changes.
- Reading MOIC without the years. 2.0x is a great result in two years and a poor one in eight.

Summary

- An LBO buys a company with a large share of debt that the company itself repays.
- Sources must equal uses. For Corvane: $490.6m on each side, $305.0m of debt (6.10x) and $170.6m of equity.
- The return comes from EBITDA growth, multiple change and debt paydown, less fees.
- IRR = MOIC^(1/years) - 1 when there is one cash flow in and one out: 2.0x in five years is about 14.9%, 2.5x about 20.1%, 3.0x about 24.6%.

In the Exercise Workbook: tab M1 Sources & uses: price, fees, debt, the equity plug and a paper IRR.

Practice questions

1.1 The company has $120m of debt and $15m of cash. What do the sellers receive for their shares?

A. $345.0m

B. $330.0m

C. $315.0m

D. $450.0m

1.2 Which item is the plug of sources and uses?

A. The equity check

B. Transaction costs

C. The Term Loan B

D. Minimum cash

1.3 Why must fees appear in the uses?

A. They are optional

B. They are cash paid at closing that the investors fund

C. They reduce the debt

D. They are paid by the sellers