Wall Street
Playbook.

FREE FIELDNOTES / PRIVATE EQUITY

Paper LBO: a template and three solved cases

Work each fictional case before opening the solution. The first isolates the equity-return bridge; the second adds taxes, interest and a cash sweep; the third asks whether a downside case can support the proposed debt. All dollar figures are in millions unless stated otherwise.

THE TASK

Reconcile entry funding, cash generation, exit equity and sponsor returns on paper.

Foundational modeling practice | Suggested session: 45-60 minutes

Updated 2 October 2026. Original exercises with stated assumptions and source notes.

How to use this resource

Work through the prompts before checking the answers. Keep a record of the assumption or step that caused difficulty, then repeat that part without notes. The suggested timing is a study aid, not an employer assessment standard.

Your five-step solving sheet

For these cases, assume a cash-free, debt-free acquisition with no fees, no existing cash or other claims, no interim dividends and a sale at the end of the stated final year. Acquisition debt is newly issued. Cases that require tax or interest assumptions state them explicitly.

Step	Write this down	Check
1. Entry	EBITDA x entry multiple = enterprise value	Clarify whether debt is refinanced and cash is retained.
2. Funding	Purchase uses + fees = debt + sponsor equity	Sources must equal uses.
3. Cash and debt	Operating cash after interest, taxes and investment; debt roll-forward	EBITDA is not cash available for repayment.
4. Exit	Exit EBITDA x multiple - debt + distributable cash	Include exit fees and other claims if specified.
5. Returns	Sponsor proceeds / invested equity; timing-consistent IRR	Include interim flows once, in their actual periods.

Entry enterprise value / debt / sponsor equity

Annual cash available / beginning debt / ending debt

Exit enterprise value / exit equity / MOIC / IRR

Case 1 / Separate growth from repayment

Allow ten minutes as a practice target. Cedar Services has entry EBITDA of $20 and is acquired at 8.0x EBITDA. Acquisition debt is $80. Exit EBITDA in year five is $25, the exit multiple is 8.0x and cumulative debt repayment is $30. The repayment figure is already cash after interest, taxes and investment; do not subtract those items again.

- Calculate enterprise value, initial sponsor equity and exit debt.
- Calculate exit equity, MOIC and annual IRR.
- Explain how much of the equity gain came from growth and how much from repayment.
- Repeat the exit at 7.0x EBITDA and explain what changed.

Entry and exit calculation

Return-driver explanation

WORKED ANSWER

Case 1 / Worked solution

The $70 equity gain consists of $40 from EBITDA growth at the entry multiple and $30 from debt repayment. There is no multiple expansion. At 7.0x, exit EV is $175, equity is $125, MOIC is 1.5625x and IRR is 9.34%. The one-turn multiple reduction removes $25 of equity proceeds.

Calculation	Result
Entry EV: $20 x 8.0	$160
Sponsor equity: $160 - $80	$80
Exit debt: $80 - $30	$50
Exit EV: $25 x 8.0	$200
Exit equity: $200 - $50	$150
MOIC: $150 / $80	1.875x
IRR: 1.875^(1/5) - 1	13.40%

Case 2 / Build the cash sweep

Harbor Components has EBITDA of $30 in each of three years. Entry and exit valuation are 7.0x EBITDA. New debt is $100 at 8% cash interest on beginning-of-year debt. Annual D&A is $5, capex is $7 and operating NWC investment is $3. Tax is 25% of positive EBIT less interest, paid in the same year. Sweep all cash after those items to debt at year-end. Ignore financing fees, minimum cash, mandatory amortization, losses and interest-deduction limits.

• Calculate entry equity.

• For each year, calculate interest, taxable income, cash tax and cash available for debt repayment.

• Reconcile the debt roll-forward and calculate exit sponsor returns.

Year 1 interest / tax / repayment / ending debt

Year 2 interest / tax / repayment / ending debt

Year 3 interest / tax / repayment / ending debt

WORKED ANSWER

Case 2 / Worked cash and debt schedule

Entry EV is $210 and sponsor equity is $110. The cash sweep is EBITDA minus cash interest, cash taxes, capex and NWC investment. In year one: $30 - $8 - $4.25 - $7 - $3 = $7.75. D&A lowers taxable income but is not a separate cash payment.

Exit EV remains $210. Exit equity is approximately $134.673, MOIC is 1.2243x and three-year IRR is approximately 6.98%. Debt repayment drives the entire equity gain in this flat-EBITDA, flat-multiple case. Retain unrounded amounts while calculating.

$m	Year 1	Year 2	Year 3
Beginning debt	100.000	92.250	84.035
Interest at 8%	8.000	7.380	6.723
EBIT less interest	17.000	17.620	18.277
Cash tax at 25%	4.250	4.405	4.569
Cash sweep	7.750	8.215	8.708
Ending debt	92.250	84.035	75.327

Case 3 / When the downside consumes cash

Pine Distribution is bought for 8.0x entry EBITDA of $20, funded with $100 debt and sponsor equity. In year one, EBITDA falls to $15. Interest is 10% of beginning debt; D&A is $3; capex is $4; NWC investment is $2; tax is 25% of positive EBIT less interest. There is no opening cash or undrawn revolver.

• Compute entry sponsor equity and year-one cash after interest, taxes and investment.

• Can the business repay debt from this cash flow? Identify the funding gap.

• For return analysis only, assume the sponsor injects the shortfall at year-end, debt stays at $100, years two through five generate exactly zero distributable cash, and year-five EBITDA is $15 with a 7.0x exit multiple.

• Calculate total invested equity, exit equity and MOIC. Explain why the single-investment IRR shortcut is inappropriate.

Cash shortfall and financing response

Sponsor cash-flow timeline

WORKED ANSWER

Case 3 / Worked downside

Entry EV is $160 and initial sponsor equity is $60. Year-one interest is $10. EBIT is $12; taxable income is $2; tax is $0.5. Cash after investment is $15 - $10 - $0.5 - $4 - $2 = negative $1.5. There is no cash for repayment. The case requires an explicit funding response; do not show negative debt repayment without specifying how it is financed.

Under the stipulated sponsor injection, total invested equity is $61.5. Exit EV is $105; exit equity is $5. MOIC is $5 / $61.5 = 0.0813x. The annual cash-flow series is [-60, -1.5, 0, 0, 0, 5]. Its periodic IRR is approximately -39.66%. Taking MOIC^(1/5) - 1 treats all equity as invested at entry and ignores the later contribution.

The operating and financing assumptions are deliberately severe. They illustrate liquidity risk; they do not predict an actual acquisition outcome.

Return anchors and a final reconciliation

For equally spaced cash flows, Excel IRR uses the ordered cash-flow series. Use XIRR or another date-aware method for irregularly timed contributions and distributions. Confirm the interview's permitted tools and conventions before relying on shortcuts.

MOIC, no interim flows	3-year IRR	5-year IRR
1.5x	14.47%	8.45%
2.0x	25.99%	14.87%
2.5x	35.72%	20.11%
3.0x	44.22%	24.57%

- Entry sources equal entry uses.

- Beginning debt less principal repayment equals ending debt, after any new borrowing or PIK interest.
- Exit equity reconciles to enterprise value, remaining debt and any other stipulated adjustments.
- Sponsor cash flows include every contribution and distribution exactly once.
- Your verbal explanation identifies the operating and financing drivers rather than just stating the IRR.

Source notes and next steps

Microsoft: IRR function

Periodic cash-flow convention. All three cases and return calculations are original fictional exercises.

https://support.microsoft.com/en-us/excel/functions/irr-function

SEC: non-GAAP measures

Context for distinguishing EBITDA and adjusted performance measures from cash flow. The cases define their own simplified cash-flow bridges.

https://www.sec.gov/rules-regulations/staff-guidance/corporation-finance-interpretations/non-gaap-financial-measures

Continue when you have identified a gap

Continue with more varied cases, debt structures and explanation practice when these three exercises reconcile without your notes.

Preview the Paper LBO Playbook

Read this resource online and find the current edition