

HARBOR MAINTENANCE

Harbor Maintenance services commercial buildings under multi-year contracts: HVAC, electrical, and preventive repair for offices, clinics and warehouses across four metro areas. Revenue is 80% recurring. The founder wants to sell; a sponsor is underwriting the buyout.

A sponsor is weighing a buyout at 8.0x LTM EBITDA of \$25.0M, with a 20% target IRR. You'll work it three ways, from a quick paper answer to a full model with a linked downside.

Fictional company. Original practice material; all values in \$ millions. Tax rates and SOFR paths are labelled assumptions, not forecasts or statutes.

MODE 1 - PAPER LBO - 15 MINUTES

A maintenance company has entry EBITDA of 25 and is bought for 8x EBITDA on a cash-free, debt-free basis. New acquisition debt is 120. Sponsor equity also funds 4 of transaction fees. Hold for 5 years.

Exit EBITDA is 32 at 8x, and cumulative debt repayment is 10. Calculate sponsor returns.

Then change only the exit: EBITDA 28 at 7x, repayment unchanged. Finally: what is the most the sponsor could pay for a 20% IRR, holding the exit, debt, fees and timing fixed?

- All values in \$ millions.
- The 10 of repayment is supplied after interest, taxes, capex and working capital. Don't subtract those again.
- No excess cash, interim distributions, additional equity, management dilution or exit fees.
- The downside changes the exit only. It is an isolated sensitivity, not a linked operating downside.

MODE 2 - ONE HOUR MODEL

Build the base case in the blank workbook: operating forecast, cash flow, debt schedule and returns. Then check your outputs on the case page.

- Sponsor equity at close
- Year 1 interest
- Year 5 EBITDA
- Term loan at exit
- Sponsor proceeds, MOIC and IRR

MODE 3 - THREE HOURS: THE LINKED DOWNSIDE

Harbor's largest customer, 18% of revenue, doesn't renew after year 1. Transition costs of \$14.0M land in year 2. SOFR rises to 5.00% from year 2 and the exit multiple falls to 7.0x. Run it through the whole model, add the revolver, and write a one-page investment committee memo with a

recommendation.

ASSUMPTIONS

ASSUMPTION	BASE	DOWNSIDE
LTM revenue / EBITDA at close	180.0 / 25.0	same
Entry multiple	8.0x	same
Fees (sponsor) / minimum cash	4.0 / 5.0	same
Term loan	120.0	same
Rate	MAX(SOFR, 0.50%) + 4.50%	same
Amortisation / sweep	1% of original / 100%	same
Revolver	20.0 at 7.50%	same
D&A / capex / operating WC	2.5% / 3.0% / 10.0% of revenue	same
Cash tax rate (fictional)	25%	same
Exit multiple	8.0x	7.0x

Base case by year

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Revenue growth	6.0%	6.0%	5.0%	5.0%	4.0%
EBITDA margin	14.0%	14.5%	15.0%	15.5%	16.0%
SOFR assumption	4.00%	4.00%	4.00%	4.00%	4.00%
One-time costs (\$M)	0.0	0.0	0.0	0.0	0.0

Downside by year

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Revenue growth	6.0%	-18.0%	3.0%	4.0%	4.0%
EBITDA margin	14.0%	12.0%	13.0%	13.5%	14.0%
SOFR assumption	4.00%	5.00%	5.00%	5.00%	5.00%
One-time costs (\$M)	0.0	14.0	0.0	0.0	0.0

CONVENTIONS

- Interest is charged on beginning of year balances, so there's no circularity.
- Operating working capital excludes cash and debt; its increase is a use of cash.
- Cash above the minimum repays the revolver first, then sweeps the term loan. Cash below the minimum draws the revolver. Anything the revolver can't cover is a funding shortfall. Report it; never net it against debt.
- At exit, sponsor proceeds are exit EV less net debt (debt minus cash), floored at zero.
- IRR uses one entry and one exit cash flow over five years.