1. Before the price is agreed, and before the debt is signed

Appendix B. The figures quoted are Kestrel's; replace them with your own deal's before the meeting.

Company:		**Reviewer:**	
Model version:		**Date:**	

Check	Done	Finding or figure
Before the price is agreed		
1. Reconcile the seller's adjusted EBITDA to the reported figure line by line, and decide on each adjustment whether it is a result already in the accounts or an intention. Kestrel's seller claimed $8.5 million of adjustments and the fund accepted $3.5 million; at 9.0x, the $5.0 million rejected was $45.0 million of price.		
2. Ask the quality-of-earnings adviser to test the adjustments accepted, not only the ones rejected: the settlement really was a one-off, and the owner's compensation really was above the market rate for the CEO who replaced the owner.		
3. Look at what the revenue is made of. Kestrel's 45 percent of aftermarket revenue and 38 percent of revenue from the ten largest customers are the two numbers a lender will ask for first, and the split of last year's 4.5 percent growth into 3.0 percent of price and 1.5 percent of volume says how much of the growth was earned in the market.		
4. Compute cash conversion from the accounts, not from the memorandum: EBITDA less capital expenditure, $40.4 million or 80.8 percent here, and working capital as a share of revenue, 12 percent, so that the cost of every future point of growth is known before the plan is written.		
5. List every item of net debt and every debt-like item, with its definition in the purchase agreement: the $40.0 million of bank debt, the $3.0 million of leases, the $2.0 million of unpaid settlement and the $10.0 million of cash that turned $450.0 million of enterprise value into $415.0 million for the seller. Every item on that list moves the price dollar for dollar after the multiple is fixed.		
6. Read the definition of EBITDA in the purchase agreement against the definition used in the model. They should match, and often they do not.		
7. Price the comparables and precedents for what they are: a range (8.2x to 10.6x for the listed set) that shows where the market has been, not a number that settles anything.		
8. Run the entry-price sensitivity with the debt held constant, and know what half a turn costs before the final bid: 2.16 points of IRR here, from 9.0x to 9.5x.		
Before the debt is signed		
1. Reconcile the term sheet to the model: margin, base rate, amortization, maturity, fee, and the definition of the excess cash flow that the sweep applies to. The 8.50 percent on the term loan and the 11.00 percent on the second lien give a blended 8.95 percent, and year-1 cash interest of $24.63 million takes 45.1 percent of EBITDA.		
2. Read the covenant definition word by word: which debt is in the numerator (gross or net of cash), which add-backs are allowed in the denominator, and what caps them. Kestrel's synergy add-back was capped at 20 percent of covenant EBITDA and was worth $2.0 million in year 3, the difference between passing by 0.12x and failing by 0.04x.		
3. Lay the covenant schedule against the plan's EBITDA and compute the cushion in every year, then against the stress case. The base case's tightest cushion was 2.6 percent, or $1.5 million; the deeper stress broke the test by 0.64x.		
4. Read the equity cure clause: how many cures over the life of the loan, how many in a row, whether the cash is deemed EBITDA or repays debt, and whether it is capped. The model's loan allows one a year and two in all.		
5. Find the incremental capacity: how much more first-lien debt the company may borrow, on what test, and at what price. Marlin's $40.0 million and the recap's $35.0 million both came through that clause.		
6. Understand the sweep's steps and the leverage they key off. Here 50 percent above 4.5x and 25 percent above 3.5x, on opening leverage, and never while the revolver is drawn.		
7. Check the cross-default from the second lien to the first, and what a waiver from one lender group does to the other.		
8. Rerun the model with the base rate two points higher: the second lien is fixed, the rest floats, and the year-3 test failed by 0.13x on that path.		
9. Compare the unitranche alternative honestly. Simplicity gave 16.19 percent against 17.05 percent here and, more to the point, failed the year-3 covenant.		
10. Confirm that the fees add up in sources and uses and that the cash left in the company at closing survives the first year's cash flow without the revolver.		

2. Before the equity is signed, and in each year of the hold

Appendix B. The covenant test is computed from the loan's definition, never from the management accounts.

Company:		**Reviewer:**	
Model version:		**Date:**	

Check	Done	Finding or figure
Before the equity is signed		
1. Confirm that the rollover shares are bought at the same price as the sponsor's: $1.00 here, for both.		
2. Size the option pool on a fully diluted basis and know what it costs the sponsor at the base-case exit: 8 percent, 17.39 million options, $19.8 million of the sponsor's proceeds.		
3. Read the vesting: how much is time-vested, how much is performance-vested, what the performance test is and who computes it. Half of Kestrel's pool needed a 2.0x sponsor multiple, and in the downside that half lapsed.		
4. Read the leaver terms: what a good leaver and a bad leaver keep, at what price the shares are bought back, and whether the sponsor may waive.		
5. Check what happens on a sale before the end of the vesting period, and whether a recapitalization pays the options anything (here it paid them nothing).		
6. Have the executive's own adviser read the package for tax; the book computes $16.1 million before tax for the CEO and says nothing more.		
In each year of the hold		
1. Compute the covenant test from the loan's definition, not from the management accounts, and record the headroom and the EBITDA cushion at each test date. Year 3's 0.12x should have been in front of the board before the year began, not after.		
2. Check the sweep: that it ran on the right leverage step, that the revolver was at zero, that the minimum cash was respected, and that the term loan balance moved by exactly the mandatory amortization plus the sweep.		
3. Watch cash as well as leverage. Kestrel's cash rose from $10.0 million to $37.7 million because the sweep stepped down, and that cash counts in net debt.		
4. Compare the plan's margin improvement with the accounts each year, line by line: procurement, pricing, mix. The whole plan was worth 4.21 points of IRR; half of it delivered was 15.30 percent and a breach.		
5. Keep the deeper stress case alive and rerun it every year, with the cure clause and the sponsor's reserve for it beside it. The cure cost $7.0 million of new shares and left the sponsor at 15.09 percent against the base case's 17.05 percent.		
6. Integrate the add-on before the add-back expires: the synergy add-back shrinks as synergies arrive, and the covenant assumes the run rate will be reached.		
7. Confirm each year that the balance sheet closes, that the tax line applies the interest cap, and that the carried-forward interest is tracked. Kestrel carried $34.5 million of disallowed interest into the exit.		
8. Ask what the exit multiple would have to be to hold the IRR if the plan slipped: the two-way grid of chapter 16 answers that in one table.		

3. Before a dividend recapitalization, and before the exit

Appendix B. Run the tests with the new debt in, and fix the treatment of the options in the sale documents before the price.

Company:		**Reviewer:**	
Model version:		**Date:**	

Check	Done	Finding or figure
Before a dividend recapitalization		
1. Run the incremental-debt test and the covenant with the new debt in: 4.17x on reported EBITDA against 4.25x here, and headroom on covenant EBITDA cut from 0.61x to 0.11x.		
2. Compute the cost of the dividend at exit: $38.5 million less equity for a $35.0 million dividend, the difference being a year of interest and the fee, and 0.50x more leverage on the day of sale.		
3. Compute what the recap does to the IRR and to the multiple separately (0.30 points up, 0.002x down), and be honest about which of the two the fund is paid on.		
4. Know who receives the dividend: the shares, pro rata; the options, nothing. Tell the management team before, not after.		
5. Ask what the recap does in the downside: at 7.0x the recapped deal's multiple was 1.50x against 1.51x, and the dividend banked was the difference.		
6. Send the tax on the dividend to the adviser.		
Before the exit		
1. Agree the definition of net debt in the sale documents before the price, and reconcile it to the model's $229.7 million: term loan, second lien, less cash, plus anything the buyer will call debt-like.		
2. Read the second lien's prepayment terms and their cost, and the term loan's, before the exit process starts.		
3. Budget the fees against the enterprise value, not the equity: 1.5 percent of $700.4 million is $10.5 million, and it comes out of the equity.		
4. Fix the treatment of the options in the sale documents: which vest on a sale, at what price, and whether the buyer or the seller bears them. The pool took $20.8 million of $460.2 million.		
5. Prepare for the buyer's own quality of earnings on the exit EBITDA: the synergies, the add-backs and the add-on's integration will all be tested against the accounts, and the buyer prices the whole, not the parts.		
6. Compute the holding-period table before choosing the year: the IRR peaked at year 5 and the multiple went on rising to 2.75x at year 7, and the two disagree on when to sell.		
7. Run the exit-multiple table one last time and state, in the investment committee paper, what one turn is worth: $76.7 million of equity here.		

4. For the subscriber: questions to put to a manager

Appendix B and Chapter 18. Four numbers can describe one deal; ask which one you are being shown.

Manager:		**Fund:**	
Deal:		**Date:**	

Check	Done	Finding or figure
For the subscriber		
1. Ask which IRR is being shown: the deal's 17.05 percent, the gross 15.14 percent after fees, the net 12.70 percent after carry, or the 14.39 percent with a subscription line. Four numbers, one deal.		
2. Ask for the bridge and for what the multiple did. Here it did nothing; across a fund the answer will vary, and the share of the gain that came from the multiple is the share the manager did not make.		
3. Ask how much of the EBITDA growth was bought: Marlin was $108.0 million of the $250.4 million, at 6.5x.		
4. Ask for the covenant's worst year and its headroom, and whether an add-back or a cure was needed.		
5. Ask for the unlevered return of the same deal (11.96 percent here) so that the 5.09 points that leverage added can be weighed against the risk it added.		
6. Ask about the subscription line: how long the capital was borrowed, at what rate, and what it did to the net IRR and the net multiple (1.69 points up, and 1.78x down to 1.69x).		
7. Ask for the fee base (committed or invested), the preferred return's clock with the line in place, and the catch-up. On this deal the fees and the carry took 4.34 points and 0.42x, and the subscriber kept 72.6 percent of the profit.		
8. Ask what management made, on what terms, and whether a recapitalization went to the shares alone.		
9. Ask how unrealized deals are valued: at what multiple, against what entry multiple and what comparables, and who reviews it.		

5. Model review: the ten mistakes of a first LBO model

Chapter 19. Tick each test against the model under review; a model that fails one prints an IRR that has not been earned.

Model:		**Reviewer:**	
Version:		**Date:**	

#	The mistake	The test the model must pass	Pass	Note
1	Interest on the average balance	Interest is charged on opening balances; no circularity, no iteration switch.		
2	A price sensitivity that borrows the difference	The entry-price table holds the debt in dollars constant; only the equity moves.		
3	A bad year the plan is allowed to absorb	The bad year is a stress with a covenant test, not a dip the plan absorbs.		
4	An IRR with no dates on it	Flows carry dates; the IRR used matches them (annual only if every flow is at a year end).		
5	Fees that vanish from the uses and the bridge	Fees appear in sources and uses and in the bridge, at entry and at exit.		
6	The multiple change measured on the wrong EBITDA	The multiple change is measured on the same EBITDA at entry and exit.		
7	A sweep that ignores the revolver and the cash floor	The sweep respects the revolver, the minimum cash and the leverage steps.		
8	Tax computed as if every dollar of interest were deductible	Tax applies the cap on interest and carries the disallowed amount forward.		
9	The add-on that lives in one statement only	The add-on is in the income statement, the debt, the covenant and the bridge alike.		
10	A balance sheet that closes with a plug	The balance sheet closes without a plug line.		

6. Covenant tracker: leverage, headroom and cushion

Chapter 8. Kestrel's figures in grey for reference; fill in your own at each test date. Headroom = maximum less actual, in turns; cushion = how far EBITDA can fall before the test fails.

Borrower:		**Agent:**	
Definition ref.:		**Date:**	

Year	Net debt ($m)	Covenant EBITDA ($m)	Covenant leverage	Maximum	Headroom	EBITDA cushion
1	253.6	54.6	4.65x	5.75x	1.10x	19.2%
2	291.6	71.5	4.08x	5.25x	1.17x	22.4%
3	277.0	59.9	4.63x	4.75x	0.12x	2.6%
4	257.2	70.8	3.64x	4.25x	0.61x	14.5%
5	229.7	77.8	2.95x	4.00x	1.05x	26.2%
Your deal, year 1						
Your deal, year 2						
Your deal, year 3						
Your deal, year 4						
Your deal, year 5						

Kestrel's tightest test was year 3: 0.12x of headroom, a 2.6 percent cushion, $1.5 million of covenant EBITDA. Put the stress case beside the base case at every date, and the cure clause beside both.