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Private Fund Finance & Controllership

Capital Calls, Waterfalls, NAV and Fund Financing
Course Book

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

MODULE 4

The distribution waterfall and carried interest

Objectives

- Run a European (whole of fund) waterfall: return of capital, preferred return, catch-up and carried interest.
- Run an American (deal by deal) waterfall and see why it pays the GP earlier.
- Compute accrued carried interest by hypothetical liquidation, and the clawback at the end of the fund.
- Explain why the GP commitment and the equalization interest stay outside the waterfall.

The waterfall decides how each distribution is split between the investors and the GP's carried interest. The LPA describes it in words; the controller turns the words into a calculation that must give the same answer whoever runs it. Four tiers are standard:

- Tier 1, return of capital: 100% to the investors until they have received back what they contributed.
- Tier 2, preferred return: 100% to the investors until they have earned the hurdle, here 8% a year compounded on contributions outstanding. On quarterly flows, (1 + 8%) ^ 0.25 - 1 = 1.943% a quarter.
- Tier 3, catch-up: 100% to the GP until the GP holds 20% of all profit distributed so far.
- Tier 4, split: 80% to the investors, 20% to the GP.

The GP commitment pays no fee and no carry, so the waterfall runs on the fee-paying investors only: they receive 98% of each distribution and the GP commitment takes its 2% directly.

European: the whole fund first

In a European waterfall the investors get back all their contributions, not only the cost of the deals sold, plus the preferred return, before any carry. The model does this cumulatively: a balance of capital and pref due grows each quarter at 1.943% and with each contribution, and falls with each distribution. While that balance is positive, distributions go to the investors. In Northmoor III the first carry is paid in Q2 2033, when the exit of Keswick Testing Labs clears the balance.

Quarter	Distributed	Capital and pref	Catch-up	Split to LPs	Carry paid (incl. catch-up)
Q1 2030	132.30	132.30	0.00	0.00	0.00
Q1 2031	98.00	98.00	0.00	0.00	0.00
Q4 2031	156.80	156.80	0.00	0.00	0.00
Q2 2032	47.86	47.86	0.00	0.00	0.00
Q4 2032	25.42	25.42	0.00	0.00	0.00
Q2 2033	83.79	69.71	14.08	0.00	14.08
Q2 2034	47.04	2.47	2.36	33.76	10.80
Q2 2035	88.20	2.07	0.01	68.89	17.24
Q4 2035	27.44	0.77	0.00	21.34	5.34
Total	706.85	535.39	16.46	123.99	47.46

Carry paid = catch-up + 20% of the split; the investors receive capital and pref plus 80% of the split.

American: deal by deal

In an American waterfall each exit first returns the cost of that deal, its share of fees and expenses and any realized losses, with the preferred return on them, then carry is paid on the rest. Good early exits pay carry long before the fund as a whole has returned its capital. In the model, fees and expenses are allocated to each exited deal in proportion to cost and the remainder is trued up at the end of the term. Many LPAs also require unrealized write-downs to be made good before carry is paid on an exit, which reduces the clawback risk; the model does not.

Under the American waterfall the GP receives its first carry in Q1 2030, on the exit of Harlow Industrial Services, about 3 years earlier than under the European. By the end it has received $56.97m, against $47.46m under the European waterfall.

Clawback

At the end of the fund, the GP must hand back any carry above its entitlement on a whole-fund basis: the European carry, and never more than 20% of total profit. Total profit of the fee-paying investors before carry is $236.36m, so the entitlement is $47.27m. Under the American waterfall the clawback is $9.69m: the late losses on Ridley Home Health and Saxby Logistics Tech came after carry had been paid on the early winners. Clawbacks are usually capped at the carry received net of the GP's taxes (here 30%); the cap does not bind here.

Even the European waterfall produces a clawback of $0.19m: fees and expenses called after the last carry distribution reduced total profit after the GP had been caught up. Small, but real, and exactly the kind of number an auditor asks about.

Accrued carry

Between distributions, the NAV reported to investors is net of the carry the GP would receive if the fund sold everything at its reported value today. The model runs the European waterfall on the investors' share of NAV as if it were distributed: at the end of Q4 2031, $282.31m of NAV would leave $48.94m of carry, which is accrued (not paid) and deducted from the investors' NAV.

Worked example, step by step

1. Q2 2033: $83.79m is distributed to the fee-paying investors. Capital and pref due before it: $69.705m.
2. Tiers 1 and 2 take $69.705m; $14.085m remains.
3. Profit distributed to investors so far: $460.382m + $69.705m - $464.367m contributed = $65.720m.
4. Catch-up target: 20% / 80% x that profit = $16.430m; the remaining $14.085m all goes to the GP as catch-up, which is not yet complete.
5. End of the fund: entitlement 20% x $236.36m = $47.27m; American carry $56.97m, so a clawback of $9.69m.

Pitfalls

- Returning only the cost of the deals sold in a European waterfall.
- Compounding the pref on the wrong balance, or quarterly at 8% / 4 when the LPA says 8% compounded annually.
- Defining the catch-up target on total distributions rather than on profit.
- Running the waterfall with the GP commitment inside it, or adding equalization interest to it.
- Reporting NAV without accrued carry.

Summary

- Four tiers: capital, pref, catch-up, split. European pays carry once the whole fund is repaid with pref; American deal by deal.
- Northmoor III: European carry $47.46m from Q2 2033; American $56.97m from Q1 2030 with a $9.69m clawback.
- Accrued carry by hypothetical liquidation: $48.94m at the end of Q4 2031.

In the Exercise Workbook: tab M4 Waterfall: run the four tiers on one distribution and compute the clawback.

Practice questions

4.1 In Q2 2033, how much of the $83.79m goes to tiers 1 and 2?

A. $67.68m

B. $67.03m

C. $83.79m

D. $69.71m

4.2 What triggers a clawback?

A. The fund lost money on one deal

B. The line was drawn

C. An investor defaulted

D. The GP received more carry than its whole-fund entitlement

4.3 Does the GP commitment pay carry?

A. No

B. Only in the American waterfall

C. Yes, at 20%

D. Only on gains