JULIAN R. STERLING

# Unitranche & All-in Yield

Price a Direct Lending Deal from Margin, OID, Fees and Call Protection

Course Book

Five modules, one loan, every figure computed.

Educational material. Not investment advice. Prepared with AI assistance.

# About this course

This course prices a direct loan the way a lender does, in Excel: the $178.5m unitranche of Marston Applied Controls, a fictional US industrial company owned by a sponsor. You split it into first-out and last-out pieces, build its coupon from SOFR, the floor and the margin, turn its OID and fees into a yield, value its call protection, PIK toggle and delayed draw, and follow it into a levered direct lending fund and into the borrower's choice between a unitranche and a senior plus mezzanine stack.

It is written for analysts and associates of private credit funds, leveraged finance and portfolio teams, fund investors who read direct lending reports, and finance teams of sponsor-backed companies. You need basic Excel and the idea of an internal rate of return. Marston is the borrower of the Private Credit Modeling course; this course stands on its own.

| Module | What you compute | Workbook sheet |
|---|---|---|
| 1. Unitranche structure: first-out, last-out and the AAL | One loan for the borrower, two risks for the lenders; Last-out margin = (blended - share x first-out margin) / (1 - share) | Structure |
| 2. The coupon: base rate, floor and margin | Coupon = max(base rate, floor) + margin; Interest = opening balance x coupon x period | Coupon |
| 3. OID, fees and the all-in yield | Price = 1 - OID - upfront fee; amount funded = par x price; Yield = IRR of the lender's flows to an exit date; the expected life is the market's choice | Yield, DM |
| 4. Call protection, PIK toggle and delayed draws | Call premium = balance repaid x (call price - 1); PIK adds part of the coupon plus a premium to the balance; the yield rises, the exposure grows | Options |
| 5. The fund, the borrower and the pitfalls | Unlevered return = yield - PD x LGD; Gross return on NAV = unlevered x (1 + leverage) - cost of debt x leverage | Fund, Compare |

## How to use this book

1. Read a module: objectives, lesson, worked example, pitfalls, summary.
2. Build it: open the start file of the module in Step_Files (or the Case Workbook), fill the orange cells, compare with the solution file.
3. Do the module tab of the Exercise Workbook: the checks turn green or red.
4. Answer the Check yourself questions, then practice the module in the Quiz App or your learner account.
5. After module 5, take the certificate exam online: 40 questions, 60 minutes, 80% to pass, retake as often as you need.

## The case at a glance

| Marston Applied Controls (fictional) | Value |
|---|---|
| Unitranche term loan, closing 31 Dec 2026 | $178.5m, 5.25x lender EBITDA of $34.0m |
| Coupon | SOFR + 5.50%, floor 1.00%; SOFR path 3.90% falling to 3.50% |
| OID and upfront fee | 2.00% + 0.75%: price 97.25% |
| Amortization, maturity, expected life | 1% a year, 6 years, 3 years |
| Call schedule | 102 in year 1, 101 in year 2, par after |
| Yield to 3 years / to maturity | 10.320% / 9.755% |

Units: US$ millions unless stated. Annual periods: interest and amortization are paid at each year end, so that every flow can be checked by hand. The excess cash flow sweep of the Private Credit course is left out to isolate the pricing.

MODULE 1

# Unitranche structure: first-out, last-out and the AAL

One loan for the borrower, two risks for the lenders: how an agreement among lenders splits a unitranche into a first-out and a last-out piece, and what each piece earns and recovers.

## Objectives

- Explain what a unitranche is and why sponsors use it.
- Split a unitranche into first-out and last-out pieces and find the last-out margin that keeps the blended margin.
- Compute the yield and the recovery of each piece, and read the main terms of an agreement among lenders.

## The lesson

A unitranche replaces the senior and junior layers of a leveraged financing with one loan: one credit agreement, one agent, one set of covenants and one blended margin. Marston Applied Controls, the borrower of this course, raised $178.5m, or 5.25x its lender EBITDA of $34.0m, at SOFR + 5.50%, from a small group of direct lenders. The sponsor gets speed and certainty: no syndication risk, one lender group to negotiate with, and no intercreditor contest between a senior and a mezzanine lender when things go wrong.

Behind the single loan, the lenders can split the economics among themselves in an agreement among lenders (AAL). The first-out piece is repaid first from the proceeds of an enforcement, and sometimes of prepayments after a trigger; in exchange it accepts a lower margin. The last-out piece bears the first loss and earns more. The borrower usually is not a party to the AAL, or signs only an acknowledgment, and keeps paying one coupon. Some deals write the split into the credit agreement itself; the arithmetic is the same.

Because the borrower's coupon does not move, the margins of the two pieces must average to the blended margin, weighted by their shares. With a first-out of 20% at 3.50%, the last-out margin is (5.50% - 20% x 3.50%) / 80% = 6.00%. The test that the split is right: first-out interest plus last-out interest equals the unitranche interest, every year.

The AAL also allocates control. The last-out lenders usually hold most of the votes, while the first-out lenders keep consent rights on the terms that protect their priority, a standstill before the last-out can enforce, and often a purchase option that lets one class buy the other out at par plus accrued interest. A revolver is often super senior and ranks ahead of both pieces in the waterfall.

The waterfall decides recoveries. If Marston defaulted at the end of 2029 with $130.0m available to the term lenders, the first-out claim of $34.63m would be repaid in full and the last-out would recover 68.9%, against 75.1% for the unitranche as a whole. Price the last-out on its own recovery, not on the average.

## Worked example: the case in numbers

**The split of the Marston unitranche**

| Marston Applied Controls, US$ m | First-out | Last-out | Unitranche |
|---|---|---|---|
| Share of the loan | 20% | 80% | 100% |
| Amount | 35.70 | 142.80 | 178.50 |
| Margin | 3.50% | 6.00% | 5.50% |
| Year-1 coupon (SOFR 3.90%) | 7.40% | 9.90% | 9.40% |
| Year-1 interest | 2.642 | 14.137 | 16.779 |
| Yield to 3 years at a price of 97.25% | 8.28% | 10.83% | 10.32% |
| Claim in a default at the end of 2029 | 34.629 | 138.516 | 173.145 |
| Recovery out of $130.0m | 34.629 | 95.371 | 130.000 |
| Recovery rate | 100.0% | 68.9% | 75.1% |

## Pitfalls

- Pricing the last-out on the recovery of the whole unitranche.
- Forgetting that the borrower's coupon is the blended margin: a split changes nothing for the borrower.
- Reading the AAL for priority and missing the votes, the standstill and the purchase option.
- Ignoring a super senior revolver ahead of the first-out.

## Summary

- One loan for the borrower, two risks for the lenders.
- Last-out margin = (blended - share x first-out margin) / (1 - share).
- First-out plus last-out interest equals the unitranche interest.
- In a default, the first-out is paid first; the last-out takes what is left.

## Build it

Open the Case_Workbook (sheet Structure) or the start file of module 1 in Step_Files, build the orange cells and compare with the solution file. Then do tab M1 of the Exercise Workbook.

## Check yourself

**1.** Marston's unitranche is $178.5m and the first-out piece is 20% of it. First-out amount?

(a) $44.62m (b) $35.70m (c) $142.80m (d) $17.85m

**2.** The borrower pays a blended margin of 5.50%. The first-out piece (20%) earns 3.50%. Last-out margin?

(a) 4.50% (b) 6.00% (c) 6.87% (d) 7.50%

**3.** Year 1: SOFR 3.90%, last-out amount $142.80m at SOFR + 6.00%. Year-1 interest on the last-out piece?

(a) $14.14m (b) $16.78m (c) $8.57m (d) $13.42m

**4.** If the lenders change the first-out share, the coupon paid by the borrower...

(a) Rises (b) Does not change: the split only reallocates the same interest between the lenders (c) Falls (d) Doubles

Answers: 1. (b) 178.5 x 20%; 2. (b) (5.50% - 20% x 3.50%) / 80% = 6.00%; 3. (a) 142.80 x 9.90%; 4. (b) First-out and last-out interest always add up to the unitranche interest.