# Private credit: leverage, loans and returns

Private Markets

## 1 A story: the house and the mortgage

- Most buyers borrow, from day one
- The kind of debt follows the stage
- Companies borrow, and so do funds
- Debt can add return, or add danger

IN THE LESSON

- Think of buying a home.
- Most people do not pay in cash.
- They take a mortgage, and the bank lends against the house itself.
- Later they may refinance on better terms, or borrow again as the house gains value.
- If they fall behind, a different kind of help is needed, with different rules.
- Private markets work the same way.
- Debt turns up at every stage of an asset's life, and the kind of debt changes with the stage, because the risk changes.
- A start-up, a mature factory and a company in trouble each need a different lender.
- On top of that, the funds themselves borrow, and that is a separate story we will meet shortly.

## 2 Borrowing across a company's life

*Early and middle life*

Start-up: venture debt →
Growth: asset or revenue loans →
Buyout: loans, bonds, mezzanine

*Later life*

Hold: refinance, dividend recap →
Distress: rescue and DIP loans →
Real assets: construction loan

IN THE LESSON

- Read the top row from left to right, then the bottom row.
- A start-up has little revenue, so it takes venture debt: short-term lending, usually with warrants attached, which are options to buy shares.
- It buys time until the next equity round.
- A growing firm can borrow against its assets, against its revenue, or through an expansion loan.
- A mature company in a buyout carries layers: senior secured loans, second-lien debt, high-yield bonds and mezzanine.
- On the bottom row, later in the holding period the sponsor may refinance, or borrow more to pay itself a dividend, called a dividend recapitalisation.
- In distress, rescue loans keep the business alive, and a debtor in possession loan, made during a court process, ranks ahead of older claims.
- Real assets, such as a building, use a construction loan, refinanced once the asset is stable.

## 3 The stage and the debt that fits

*Match the debt to where repayment comes from*

| Stage | Typical debt |
|---|---|
| Start-up | Venture debt |
| Growth | Asset-based |
| Buyout | Loans, bonds |
| Distress | DIP loan |

**IN THE LESSON**

- Here is the same idea as a table, with the reason behind each pairing.
- A venture lender is repaid from the next round of equity, so it asks for warrants to share in the upside.
- An asset-based lender relies on collateral it can seize, and a revenue-based lender relies on the sales coming in.
- A buyout lender relies on steady cash flow from a mature business, which can carry several layers of debt.
- A lender in distress relies on its place in the queue: the new money ranks first, which is why it can be lent at all.
- The lesson for the exam is to match the debt to the source of repayment at that stage.

## 4 The fund borrows too

*Early in the fund's life*

Uncalled commitments → Subscription line → Capital calls delayed

*Later in the fund's life*

Portfolio of companies → NAV facility → Cash for deals or payouts

**IN THE LESSON**

- Now the funds themselves, because they borrow separately from the companies they own.
- Early in a fund's life, it can use a subscription line.
- The bank lends against the uncalled commitments, which are the promises investors have made to send money when asked.
- The fund buys a company with the bank's money, and calls cash from investors later.
- So the capital call is delayed.
- Later in the fund's life, it can use a net asset value facility, a loan secured on the portfolio of companies it already owns.
- The cash might fund a new purchase, a payout to investors, or support for a company in need.
- Notice what neither does.
- Neither loan makes any company worth a penny more.

## 5 Example 1: the subscription line trap

*Fund III buys Tennick for 100, sells for 150 in 4 years; line repaid after 1 year*

| | | |
|---|---|---|
| **No line** | 150 ÷ 100 = 1.50× | **IRR 10.7%** |
| **Call with a 5% line** | 100 × 1.05 | **105** |
| **With the line** | 150 ÷ 105 = 1.43× | **IRR 12.6%** |
| **Gain in IRR** | 12.6 − 10.7 | **1.9 points** |
| **Profit to investors** | 150 − 105 against 150 − 100 | **45 vs 50** |

**IN THE LESSON**

- Fund Three buys Tennick Packaging for one hundred and sells it four years later for one hundred and fifty.
- Without a line, investors pay in one hundred on day one.
- The multiple is one point five times, and the I R R, the yearly rate that turns one hundred into one hundred and fifty over four years, is ten point seven per cent.
- Now the fund bridges the purchase with a subscription line at five per cent for one year, then calls one hundred and five to repay it.
- The multiple falls to one point four three times.
- But the investors' money is in for a year less, so the I R R rises to twelve point six per cent.
- The reported return improved by nearly two points, while investors' profit fell from fifty to forty five.
- That is why the line flatters the result.

## 6 Example 2: borrowing must earn its cost

*60% debt at 9% costs 5.4; assets earn 7% or 12% before financing*

| | | |
|---|---|---|
| **All equity, assets earn 7%** | | **7.0%** |
| **60% debt, assets earn 7%** | (7 − 5.4) ÷ 0.4 | **4.0%** |
| **All equity, assets earn 12%** | | **12.0%** |
| **60% debt, assets earn 12%** | (12 − 5.4) ÷ 0.4 | **16.5%** |

IN THE LESSON

- Debt at the company level has its own trap.
- Suppose Tennick's assets earn seven per cent before financing, and the debt costs nine per cent.
- With no debt, owners earn seven.
- Now fund sixty per cent with debt.
- Interest takes sixty per cent of nine, five point four.
- What is left is seven less five point four, earned on only the part of the money that is equity, point four of it.
- That is four per cent.
- Borrowing made the owners worse off, because the assets earned less than the debt cost.
- Now let the assets earn twelve.
- Twelve less five point four, over point four, is sixteen point five per cent.
- Leverage helps only when the assets earn more than the debt costs, and it magnifies the bad years just as much.

## 7 A story: three offers for Sedgemoor

- Sedgemoor: EBITDA 80, wants 320 of debt
- Loan: floating rate, senior secured, prepayable
- Bond: fixed rate, longer, costly to repay early
- Convertible: low coupon, plus a share option

IN THE LESSON

- Back to Sedgemoor Packaging, the company Alder Ridge is buying.
- It has E B I T D A of eighty, which is its operating profit before depreciation and amortisation, and the sponsor wants to borrow three hundred and twenty.
- Three lenders come with three offers.
- The first is a leveraged loan, a floating-rate loan secured on the company's assets.
- The second is a high-yield bond, which pays a fixed rate.
- The third is a convertible, which pays a low rate but lets the lender swap into shares.
- They are like three ways of paying for a van: a variable rate you can repay any time, a fixed rate with a penalty to leave, or a cheap rate where the lender shares in your success.

## 8 Three instruments side by side

*Compared on how the interest is paid*

| Instrument | Key feature |
|---|---|
| Leveraged loan | Floating |
| High-yield bond | Fixed |
| Convertible | Low coupon |

IN THE LESSON

- Here are the three at a glance.
- A leveraged loan is senior and secured, so lenders are paid first from the company's assets, and that makes it cheaper than a bond.
- Its rate floats with a base rate plus a spread, and it can usually be repaid early.
- A high-yield bond is usually unsecured or junior.
- It pays a fixed rate, repays everything at maturity in a single bullet, and runs for longer.
- A convertible pays a lower coupon, the interest rate printed on the bond, in exchange for an option to convert into shares.
- For a sponsor the question is always the same: what does it cost, how flexible is it, and what does it let the company do.

## 9 How the contracts differ

- Term loan A amortises; term loan B is mostly bullet
- Loans: maintenance tests, or covenant-lite
- Bonds: incurrence tests and call protection
- Loans go to banks and CLO funds; bonds to investors
- Convertibles: lower coupon, but dilute owners

**IN THE LESSON**

- Now the contract details that decide the choice.
- Leveraged loans are syndicated, meaning sold on to banks and to C L O funds, which are vehicles that pool loans.
- A term loan A amortises, so it is repaid in instalments.
- A term loan B is mostly bullet, repaid at the end.
- Loans often carry maintenance covenants, which are financial tests, such as a leverage limit, checked every quarter.
- A covenant-lite loan drops those tests.
- Bonds carry incurrence covenants, which only bite when the company takes an action, such as borrowing more, and call protection, which makes early repayment expensive.
- Bonds suit larger deals that need more debt than the loan market will give.
- Convertibles save cash interest for growth companies, but they dilute the owners.

## 10 Example 3: when the base rate rises

*Sedgemoor: EBITDA 80, debt 320, base rate 3% then 6%*

| | | |
|---|---|---|
| **Loan today (3% + 4%)** | 320 × 7% = 22.4 | **cover 3.6×** |
| **Loan, base rate at 6%** | 320 × 10% = 32.0 | **cover 2.5×** |
| **Bond at 8.5%** | 320 × 8.5% = 27.2 | **cover 2.9×** |
| **Convertible at 4.5%** | 320 × 4.5% = 14.4 | **cover 5.6×** |
| **Cash saved against the bond** | 27.2 − 14.4 | **12.8** |

**IN THE LESSON**

- Let us price Sedgemoor's debt of three hundred and twenty.
- Interest coverage is E B I T D A divided by interest.
- The loan costs the base rate of three per cent plus a spread of four, seven per cent.
- Interest is twenty two point four, and coverage is three point six times.
- Now the base rate rises to six per cent.
- The loan costs ten per cent, interest is thirty two, and coverage falls to two point five times.
- A fixed-rate bond at eight and a half per cent costs twenty seven point two, a coverage of two point nine times, whatever rates do.
- The convertible at four and a half per cent costs only fourteen point four, a coverage of five point six times.
- It saves twelve point eight against the bond, and the price is dilution.

## 11 Interest cover under each choice

*Interest cover (times)*

| | |
|---|---|
| **Loan today** | **3.6×** |
| **Loan, base +3** | **2.5×** |
| **Bond** | **2.9×** |
| **Convertible** | **5.6×** |

*EBITDA ÷ interest, Sedgemoor*

**IN THE LESSON**

- Here is that result as a picture.
- The vertical axis is interest cover, in times: how many times the company's earnings cover its interest bill.
- The first bar is the floating-rate loan today, at three point six times.
- The second bar is the same loan once the base rate has risen three points, and it has dropped to two point five times.
- That is the trap with floating-rate debt: the company's earnings have not changed, but its cover has shrunk, and a maintenance covenant could be breached.
- The third bar is the fixed-rate bond, two point nine times, steady whatever the central bank does.
- The fourth is the convertible, the tallest at five point six times, because its coupon is the lowest.

## 12 Which one, and why

*If the sponsor ... then it picks*

| If the sponsor... | Pick |
|---|---|
| plans to sell in 2 years | Loan |
| needs more debt than banks lend | Bond |
| wants a fixed interest cost | Bond |
| runs a growth firm, cash tight | Convertible |

IN THE LESSON

- So how should Alder Ridge choose?
- Work from the sponsor's plan.
- If it expects to sell in two years, it wants a loan, which can be repaid at par with no penalty, rather than a bond it cannot call without paying a premium.
- If it needs more debt than the loan market will provide, it turns to the bond market, which is deeper.
- If it wants a fixed cost it can plan around, it picks the bond.
- If the company is a growth business with little cash to spare, the convertible saves interest today, at the cost of handing some of the equity to the lender.
- The exam trap is to pick the cheapest coupon on the first day and ignore what happens later.

## 13 A story: filling the gap

- Tarnby Labels: EBITDA 48, wants 240 of debt
- The bank will lend only 180 on senior terms
- The gap of 60 can be filled in two ways
- A mezzanine layer, or one unitranche loan

IN THE LESSON

- Alder Ridge now looks at a smaller company, Tarnby Labels.
- Its E B I T D A is forty eight, and the sponsor wants to borrow two hundred and forty.
- The bank will lend only one hundred and eighty on senior terms.
- Think of buying a house when the bank will lend most of the price, but you are still sixty short.
- You can ask a second lender for a smaller, riskier loan on top, which costs more.
- Or you can go to one lender who provides the whole amount at one blended price.
- Those are the two choices in private markets: mezzanine, or a unitranche loan.

## 14 Two ways to borrow 240

*Senior bank loan plus mezzanine*

Senior bank loan 180 → Mezzanine 60 → Sponsor equity

*One unitranche loan of 240*

First-out piece → Last-out piece → Sponsor equity

IN THE LESSON

- The top row is the first route.
- Senior bank debt of one hundred and eighty comes first.
- Above it sits mezzanine of sixty, which ranks between the senior debt and the equity.
- It is unsecured or second-lien, with a high coupon, often partly paid in kind, which means the interest is added to the balance rather than paid in cash, and usually warrants or another equity kicker.
- The sponsor puts the rest in as equity.
- The bottom row is the second route.
- One direct lender provides the whole unitranche loan, with one blended rate and one set of documents.
- Internally the lender may split it into a first-out piece, paid first and priced lower, and a last-out piece, paid after and priced higher.
- The borrower deals with a single lender.

## 15 Example 4: which costs more?

*Debt 240: senior 7%, mezzanine 13%, unitranche 8.5%*

| | | |
|---|---|---|
| **Senior 180 + mezzanine 60** | 12.6 + 7.8 = 20.4 | **8.5% blended** |
| **Unitranche 240 at 8.5%** | 240 × 8.5% = 20.4 | **8.5%** |
| **Wrong: against senior alone** | 8.5 − 7.0 | **1.5 points** |
| **Right: against the stack** | 8.5 − 8.5, before warrants | **0.0 points** |
| **Fits a 4-week window?** | stack 10 weeks, unitranche 3 | **Unitranche only** |

IN THE LESSON

- Now the numbers.
- The senior bank loan is one hundred and eighty at seven per cent, interest twelve point six.
- The mezzanine is sixty at thirteen per cent, interest seven point eight.
- Together, twenty point four on two hundred and forty, a blended cost of eight and a half per cent.
- The unitranche is two hundred and forty at eight and a half per cent, also twenty point four.
- Here is the trap.
- If you compare the unitranche with senior debt alone, it looks one and a half points dearer.
- That is the wrong comparison, because senior debt alone only raises one hundred and eighty.
- Against the whole stack, the cash cost is the same, and the stack also hands over warrants.
- The unitranche closes in three weeks.
- The bank syndication takes ten, and exclusivity ends in four, so time matters.

## 16 What 240 of debt really costs

*Interest rate (%)*

| | |
|---|---|
| **Senior only (180)** | **7.0%** |
| **Senior + mezz** | **8.5%** |
| **Unitranche** | **8.5%** |

*Senior alone raises only 180 of the 240*

IN THE LESSON

- Here are the rates as bars.
- The vertical axis is the interest rate in per cent.
- The first bar is senior bank debt alone at seven per cent, and the label reminds us that it covers only one hundred and eighty of the two hundred and forty.
- That bar is a trap, because it makes the unitranche look expensive.
- The second bar is the whole stack, senior plus mezzanine, at a blended eight and a half.
- The third bar is the unitranche at eight and a half.
- The last two bars are level.
- So the choice is not decided by cash cost.
- It is decided by the value of the warrants the mezzanine lender takes, by speed and certainty of closing, and by how much the sponsor values dealing with a single lender.

## 17 When a sponsor picks each

*If the sponsor ... then it picks*

| If the sponsor... | Pick |
|---|---|
| must close within 4 weeks | Unitranche |
| wants one lender, one document | Unitranche |
| has cheap bank debt, wants more | Mezzanine |
| wants some interest paid in kind | Mezzanine |

IN THE LESSON

- So when does each win?
- A unitranche suits a mid-market deal where speed and certainty matter.
- A direct lender can commit and close quickly, with one set of documents, and no syndication risk, so a sponsor with a short exclusivity window will often pay up for it.
- It also keeps the deal simple, with one lender to negotiate with.
- Mezzanine suits a deal where cheap senior bank debt is available and the sponsor wants extra leverage on top.
- Its payment in kind feature eases the cash burden in early years.
- But mezzanine is costly and dilutive, because of the warrants.
- The exam asks you to name the circumstance, so match the sponsor's need to the instrument.

## 18 Mistakes to avoid so far

- A subscription line lifts IRR but creates no value
- Leverage hurts when assets earn less than the debt costs
- Floating-rate loans squeeze cover when rates rise
- Cheapest coupon today may mean dilution later
- Compare unitranche with the whole stack

IN THE LESSON

- Let us collect the common mistakes from the first three topics.
- One: treating a subscription line as if it created value, when it only shortens the time investors' money is in, and so lifts the reported I R R.
- Two: assuming leverage always raises the owners' return, when it helps only if the assets earn more than the debt costs.
- Three: ignoring floating rates, so that interest cover shrinks when the base rate rises.
- Four: picking the cheapest coupon and forgetting dilution or call protection.
- Five: comparing a unitranche with senior debt alone, instead of with the senior debt plus the junior layer it replaces.

## 19 A story: lending with no price tag

- Seniority and security: paid first, from what
- Covenants, maturity and amortisation
- Sponsor support and business risk
- Stability of the cash flow

IN THE LESSON

- A listed bond has a price that changes every second, and that price tells you what the market thinks of the risk.
- A private loan has no such price.
- So a private lender, like Marrick Credit, must work out for itself whether the interest is paying enough for the risk.
- It starts by asking who gets paid first, and from what.
- Then it asks how long the loan runs and how fast it is repaid, what covenants protect the lender, and whether the sponsor will put in more money if things go wrong.
- Finally it asks how risky the business is, and how stable its cash flow is.
- Only then do the ratios come out.

## 20 The ratios lenders rely on

**Leverage = Debt ÷ EBITDA LTV = Debt ÷ Value**
**Cover = EBITDA ÷ Interest**
**After capex = (EBITDA − Capex) ÷ Interest**

| | |
|---|---|
| **Debt** | All borrowing owed |
| **EBITDA** | Operating profit before D&A |
| **Interest expense** | Cash interest each year |
| **Capex** | Spending to keep the assets |
| **Value** | Business or collateral value |

IN THE LESSON

- Here are the ratios.
- Leverage is total debt divided by E B I T D A: how many years of operating profit it would take to repay the debt.
- Interest coverage is E B I T D A divided by interest expense.
- The stricter version takes capital expenditure off first, because a company must keep spending on equipment to stay in business.
- Fixed charge coverage is stricter still, because it also counts other fixed payments.
- Loan to value is debt divided by the value of the business or the collateral.
- Then you judge the results against the covenant levels, against peer deals, and against where your tranche sits in the capital structure.
- A tranche that sits higher up is safer, and so earns less.

## 21 Example 5: Tarnby as marketed

*Debt 240 at 8.5%, interest 20.4, capex 12, EBITDA as marketed 48*

| | | |
|---|---|---|
| **Leverage** | 240 ÷ 48 | **5.0×** |
| **Interest cover** | 48 ÷ 20.4 | **2.35×** |
| **Cover after capex** | (48 − 12) ÷ 20.4 | **1.76×** |
| **Loan-to-value at 9×** | 240 ÷ (9 × 48) | **55.6%** |

IN THE LESSON

- Marrick is asked to provide the unitranche for Tarnby: debt of two hundred and forty at eight and a half per cent, so interest of twenty point four.
- Capital expenditure is twelve.
- The sponsor markets E B I T D A of forty eight.
- On those figures, leverage is two hundred and forty over forty eight, five times.
- Interest coverage is forty eight over twenty point four, two point three five times.
- Coverage after capex is forty eight less twelve, over twenty point four, one point seven six times.
- Comparable deals are valued at nine times E B I T D A, so loan to value, two hundred and forty over nine times forty eight, is fifty five point six per cent.
- Comfortable numbers.
- But now ask what is hiding inside that earnings figure.

## 22 Example 6: without the add-backs

*Of the 48, 6 is savings not yet achieved: EBITDA is 42*

| | | |
|---|---|---|
| **Leverage** | 240 ÷ 42 | **5.71×** |
| **Interest cover** | 42 ÷ 20.4 | **2.06×** |
| **Cover after capex** | (42 − 12) ÷ 20.4 | **1.47×** |
| **Loan-to-value at 9×** | 240 ÷ (9 × 42) | **63.5%** |
| **Against the limits** | 5.5× max, 1.5× min, 60% max | **All breached** |

**IN THE LESSON**

- Six of the forty eight is an add-back: cost savings the sponsor expects, but has not yet achieved.
- A careful lender measures E B I T D A without unrealised add-backs, so it is forty two.
- Now rerun.
- Leverage is two hundred and forty over forty two, five point seven one times.
- Interest coverage is two point oh six.
- Coverage after capex is forty two less twelve, over twenty point four, one point four seven times.
- Loan to value, two hundred and forty over nine times forty two, rises to sixty three point five per cent.
- Marrick's limits are leverage of at most five and a half times, cover after capex of at least one and a half times, and loan to value of at most sixty per cent.
- All three are breached.

## 23 Leverage against the covenant

*Debt ÷ EBITDA (times)*

| | |
|---|---|
| **Marketed** | **5.0×** |
| **No add-backs** | **5.7×** |
| **Covenant limit** | **5.5×** |

*Same loan, two views of EBITDA*

**IN THE LESSON**

- The picture shows the leverage story.
- The vertical axis is debt divided by E B I T D A, in times.
- The first bar is leverage on the marketed figure, five times.
- It looks well inside the covenant.
- The second bar is leverage on the E B I T D A without add-backs, five point seven times, and it is taller.
- The third bar is the covenant limit, five and a half times.
- The second bar pokes through it.
- One adjustment, labelled expected savings, was enough to turn a loan that fits into a loan that breaks its own limit on day one.
- Add-backs flatter every ratio at once, because every ratio starts from the same earnings figure.
- Question them first.

## 24 Example 7: repair the loan

*Cut the loan until leverage is 5.0× on EBITDA of 42*

| | | |
|---|---|---|
| **Debt allowed** | 5.0 × 42 | **210** |
| **Interest at 8.5%** | 210 × 8.5% | **17.85** |
| **Cover after capex** | (42 − 12) ÷ 17.85 | **1.68×** |
| **Loan-to-value** | 210 ÷ 378 | **55.6%** |
| **Extra equity from the sponsor** | 240 − 210 | **30** |

**IN THE LESSON**

- What should Marrick do?
- It could decline.
- Or it could change the terms so that the price pays for the risk.
- One repair is to cut the loan until leverage is five times on forty two, which is two hundred and ten.
- Interest at eight and a half per cent is seventeen point eight five.
- Coverage after capex is forty two less twelve, over seventeen point eight five, one point six eight times, above the floor.
- Loan to value is two hundred and ten over three hundred and seventy eight, fifty five point six per cent, inside the limit.
- The sponsor must add thirty more in equity.
- Other repairs are a higher spread, tighter covenants, or a sponsor promise to support the company.
- In each case the lender asks the same thing: does the spread pay for the risk.

## 25 The private credit ladder

- Senior direct lending
- Unitranche
- Mezzanine
- Venture debt
- Distressed debt

**IN THE LESSON**

- Now to the investor's side.
- Private credit is not one thing.
- Place the strategies on one line, from low risk on the left to equity-like on the right.
- On the far left is senior direct lending: floating-rate, contractual income, secured, and the lowest risk of the group.
- Next comes unitranche, with a little more risk and a little more yield.
- In the middle is mezzanine, which is junior to senior debt, with a high coupon and the equity kicker.
- Further right is venture debt, lent to young companies that may need another round.
- At the far right is distressed debt, bought at a discount from troubled borrowers.
- Its return depends on a court process and a recovery, so it behaves like equity.

## 26 From promised yield to expected return

**Promised yield = Base rate + Spread + Fees**
**Expected loss = PD × LGD**
**Expected return = Yield − Expected loss**

| | |
|---|---|
| **Promised yield** | What the loan promises |
| **Default probability** | Chance of default in a year |
| **Loss given default** | Share of the loan not recovered |
| **Expected loss** | Probability × loss given default |
| **Expected return** | What the investor should expect |

IN THE LESSON

- What does an investor earn?
- The promised yield is built from layers: the base rate, a credit spread for the borrower's risk, a premium for illiquidity and complexity, and origination fees.
- But a promise is not a forecast.
- Some borrowers will default, and when they do the lender recovers only part.
- Expected loss is the probability of default times the loss given default, which is the share of the loan that is not recovered.
- Expected return is the promised yield minus the expected loss.
- The main risks to remember are default, recovery, concentration in a few borrowers, illiquidity, and weak documentation.
- The further down the capital structure you go, the larger the deduction.

## 27 Example 8: promised against expected

*Illustrative figures for two private credit funds*

| | | |
|---|---|---|
| **Senior: promised yield** | 4.0 + 5.0 + 0.5 | **9.5%** |
| **Senior: expected return** | 9.5 − 0.7 (2% × 35%) | **8.8%** |
| **Mezzanine: promised yield** | | **12.5%** |
| **Mezzanine: expected return** | 12.5 − 2.6 (4% × 65%) | **9.9%** |
| **Extra expected over senior** | 9.9 − 8.8 (promised gap 3.0) | **1.1 points** |

IN THE LESSON

- Kinloch Pension is a fictional pension fund choosing between two funds, and these figures are illustrations.
- The senior fund promises a base rate of four, a spread of five and fees of half a point, a yield of nine and a half per cent.
- It has a two per cent chance of default each year and loses thirty five per cent when it does, an expected loss of point seven.
- Expected return is eight point eight per cent.
- The mezzanine fund promises twelve and a half per cent.
- With a four per cent chance of default and sixty five per cent lost, the expected loss is two point six, so the expected return is nine point nine per cent.
- Mezzanine promises three points more, but is expected to deliver only one point one.
- That is the gap that matters.

## 28 Promised yield against expected return

*Yield or return (%)*

| | |
|---|---|
| **Senior promised** | **9.5%** |
| **Senior expected** | **8.8%** |
| **Mezz promised** | **12.5%** |
| **Mezz expected** | **9.9%** |

*Illustrative figures*

IN THE LESSON

- Here are those four figures as bars.
- The vertical axis is yield or return, in per cent.
- Take the senior fund first.
- The first bar is the promised nine and a half, and the second bar is the expected eight point eight.
- They are close, because the losses are small.
- Now the mezzanine fund.
- The third bar is the promised twelve and a half, which is the tallest and the one the marketing brochure shows.
- The fourth bar is the expected nine point nine, much shorter.
- The gap between the third and fourth bars is much bigger than the gap for senior.
- And in a recession the losses arrive together, so the real experience can be far worse than an average.
- Judge the fund by the expected bars, not the promised ones.

## 29 Private credit beside other private assets

*The role each private asset plays in a portfolio*

| | | |
|---|---|---|
| **Private equity** | highest return, deep J-curve | **Growth** |
| **Real estate** | income plus growth, appraised | **Income, growth** |
| **Infrastructure** | long-lived, steady cash | **Steady cash** |
| **Private debt** | steady, early cash, seniority | **Income** |

IN THE LESSON

- Now set private credit against the other private assets.
- Private equity offers the highest expected return, but cash arrives late, and its J-curve is deepest: fees are paid early, so returns are negative for the first years.
- Real estate gives income plus growth, valued by appraisal.
- Infrastructure holds long-lived assets with steady cash flows.
- Private debt offers lower but steadier returns than any of them, earlier cash yield, a shallower J-curve, and the protection of seniority.
- It also sits between public credit and private equity, a little less liquid and a little higher in yield than the first, and much safer than the second.
- Its floating-rate income also protects when interest rates and yields rise.

## 30 Example 9: a strategic allocation

*Kinloch Pension: 2,000m portfolio, wants income and rate protection*

| | | |
|---|---|---|
| **Private credit sleeve** | 10% × 2,000m | **200m** |
| **Senior direct lending** | 70% of the sleeve | **140m** |
| **Mezzanine** | 30% of the sleeve | **60m** |
| **Blended expected return** | 0.7 × 8.8 + 0.3 × 9.9 | **9.13%** |
| **Expected income each year** | 200m × 9.13% | **18.3m** |

IN THE LESSON

- Now propose and defend.
- Kinloch Pension has two thousand million and wants income and protection if yields rise.
- We propose ten per cent in private credit, a sleeve of two hundred million.
- Seventy per cent goes to senior direct lending, one hundred and forty, and thirty per cent to mezzanine, sixty.
- The blended expected return is point seven times eight point eight plus point three times nine point nine, nine point one three per cent, or about eighteen point three million a year.
- Why: contractual income, floating-rate protection and seniority.
- What could go wrong: the money is locked up, defaults cluster in a recession, and the promised yield is not the expected return.
- So the plan caps the sleeve, favours senior loans, and plans for losses.

## 31 Recap: the lesson in five lines

- Debt at every stage; funds borrow too
- Loan, bond or convertible: cost, flexibility, size
- Mezzanine or unitranche: compare the whole stack
- Credit ratios: strip out add-backs first
- Allocate on expected return, not promised yield

IN THE LESSON

- Let us pull the lesson together.
- First, debt appears at every stage, from venture debt to rescue loans and construction loans, and the funds borrow too, through subscription lines and net asset value facilities, which lift reported returns without creating value.
- Second, loans are floating, senior and prepayable, bonds are fixed and larger, and convertibles trade a low coupon for dilution.
- Third, compare mezzanine and unitranche against the whole stack, not senior debt alone.
- Fourth, strip out add-backs before computing leverage, cover and loan to value.
- Fifth, judge private credit on expected return, the promised yield less expected loss.

## 32 Try three quick questions

1. Debt 300, EBITDA 60, interest 24, capex 12. Leverage? Cover after capex?
   **Answer:** 300 ÷ 60 = 5.0×; (60 − 12) ÷ 24 = 2.0×.
2. Loan yields 11%; default chance 3%, loss given default 50%. Expected return?
   **Answer:** 11 − 3% × 50% = 11 − 1.5 = 9.5%.
3. Assets earn 6%, debt costs 8%, half borrowed. Owners' return?
   **Answer:** (6 − 0.5 × 8) ÷ 0.5 = 4.0%, below 6%.

**IN THE LESSON**

- Now try three quick questions yourself.
- Pause after each one.
- Question one.
- A company has debt of three hundred, E B I T D A of sixty, interest of twenty four and capex of twelve.
- What are leverage and cover after capex?
- Leverage is three hundred over sixty, five times.
- Cover after capex is sixty less twelve, over twenty four, two times.
- Question two.
- A loan promises eleven per cent, with a three per cent chance of default and half the loan lost if it defaults.
- What is the expected return?
- Expected loss is one and a half, so the expected return is nine and a half per cent.
- Question three.
- Assets earn six per cent, debt costs eight, and half the money is borrowed.
- What do the owners earn?
- Six less four, over point five, is four per cent, so borrowing made the owners worse off.