eFinancialModels

FINANCIAL MODEL CASE STUDY

Private Debt Fund Financial Model Case Study

How we developed a sophisticated Financial Model for a Private Debt Fund seeking Funding from investors



To raise equity capital for a first private debt fund, the team had to explain its business model: how funds are deployed, how they turn into profit and whether investors can expect a dividend. A financial model put this into numbers before approaching investors.

KEY TAKEAWAYS

- A start-up planning its first private debt fund needed to raise equity capital from investors for short-term SME loans, with a limited fund term and no bank debt.
- Why an integrated model came first: with no track record, the business model, loan products, cash schedules and profitability had to fit together in one set of numbers, tested in a worst, base and best case.
- What mattered: the effective interest rate of each loan product, the cash schedules, overall expected profitability, whether investors can be told they will earn a dividend, and a realistic rollout plan for equity capital.
- Turning point: comparing loan products starts from the effective interest rate, not the nominal interest rate.

At a glance

INDUSTRY	Private debt fund, short-term lending to SMEs
CLIENT	Start-up launching its first fund, run by a separate management company
PURPOSE	Raise equity capital from investors; no debt financing in a first fund
MODEL SCOPE	Loan-product schedules, ramp-up and reinvestment, defaults, early repayments, fees, net asset value (NAV) and total return, scenarios, sensitivities, KPIs
DELIVERABLES	Integrated financial model and help explaining it in an investor presentation

The situation

A start-up was preparing to launch a private debt fund for short-term loans, running three to twelve months, to small and mid-sized companies, such as export, receivable and equipment financing. Partners supply the loans. As a first fund, all its funding is equity capital from investors. The fund has a limited term, must pay everything back within five years and is run by a separate management company.

How investors earn from a private debt fund

Investors commit equity capital, and the fund lends it. Each loan pays interest and usually an upfront fee, which are the fund's income. Some borrowers default, and recoveries return only part of the loss, often late. Brokers, servicing and the management company are paid from what is left. The cash waterfall, the order in which cash is used, then passes repaid capital and income to investors as distributions or lends it again. Investors judge the net result, not the quoted rate.

What was at stake: What investors needed to see

A first fund has no track record, so investors judge the expected returns, the risk and the upside. They want the business model explained, the path from deployed capital to profit, how the fund copes with losses and whether a dividend can be expected. The model answered each in numbers that can be tested.

How a private debt fund works, and where the model comes in

A private debt fund turns equity capital into short-term loans and earns interest and fees, less losses and costs. The model works loan by loan: loans differ in term, repayment pattern, fees and risk, and an average rate hides the timing of cash.

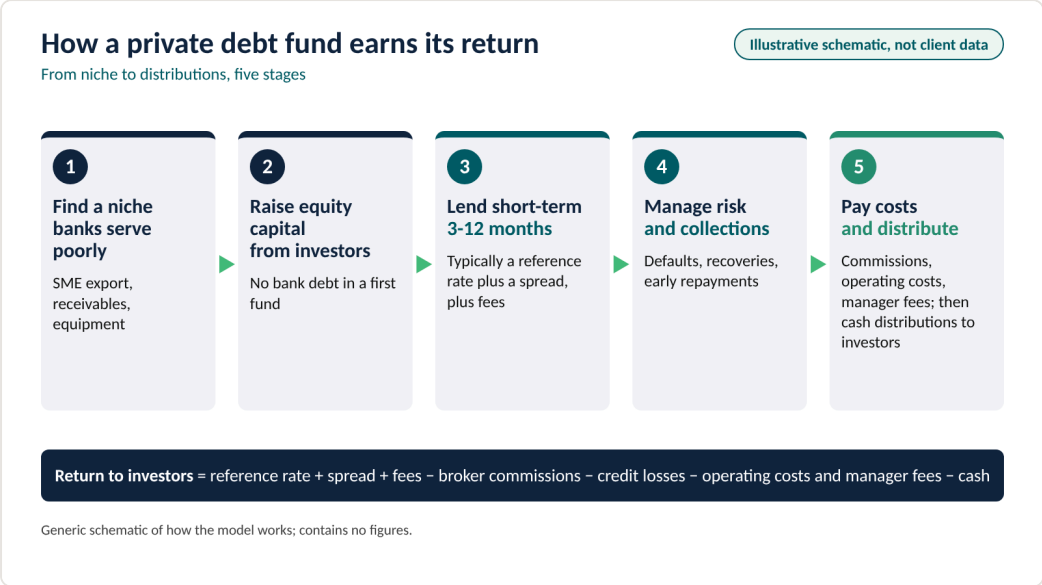
1 Find a niche
Partners and brokers source SME loans that banks serve poorly. Their commissions are a cost to the fund and reduce its yield.

2 Raise equity capital
Investors pay in or commit capital, which the fund draws down as loans are found. Cash not yet lent earns nothing. A first fund has no bank debt.

3 Lend short-term
Loans of three to twelve months are typically priced at a reference rate plus a spread, plus fees. The quoted rate is the nominal rate; cash flows give the effective rate.

4 Manage risk
Servicing and collections chase late payers. After a default, part of the balance is usually recovered, with a delay. Early repayment leaves cash idle.

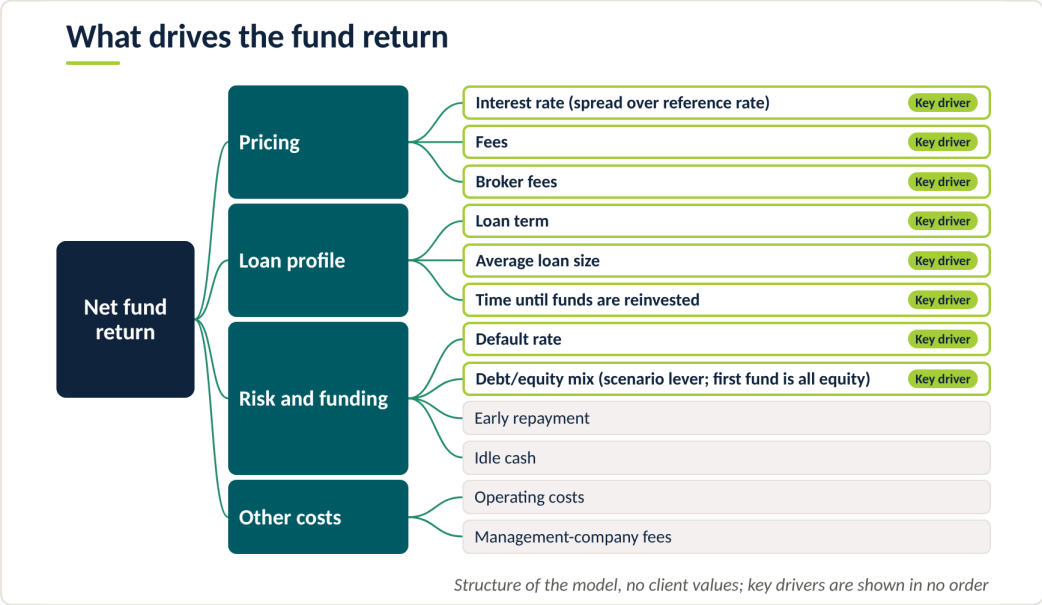
5 Pay costs and distribute
Costs and management company fees come out of the income. The cash waterfall passes the rest to investors or reinvests it. Total return is NAV growth plus distributions.



Illustrative schematic: how a private debt fund earns its return, from niche to distributions (no client figures).

What drives the value?

Eight key drivers shape the fund return, in three groups: pricing (interest rate, fees, broker fees), loan profile (loan term, average loan size, time until funds are reinvested) and risk and funding (default rate, debt/equity mix). No order is implied. Operating costs and management company fees form a separate group.



Driver tree: eight key drivers in three groups, plus secondary items; no order implied (structure only, no client values).

What made it hard to model?

1 Deploying equity capital within a five-year term

DIFFICULTY All capital must go back to investors within the term: deployed over a ramp-up, reinvested for a while, then paid back.

OUR SOLUTION We modeled the ramp-up, reinvestment and a cut-off after which repayments go back to investors.

2 Loan products that pay differently

DIFFICULTY Loans repay in equal instalments or as balloon payments, and some pay interest in cash while others accrue it. The nominal interest rate does not show what each earns.

OUR SOLUTION After discussions with the management, we modeled a schedule per product and compared effective interest rates.

3 Defaults, recoveries and early repayment

DIFFICULTY Some loans default, and recoveries take time. Early repayment ends interest sooner and leaves cash idle.

OUR SOLUTION We modeled default and recovery rates and timing by product, an early-repayment fee and reinvestment of recovered cash.

4 Payouts to investors and idle cash

DIFFICULTY Investors expect capital to be put to work quickly and paid out regularly. Deployment speed is an assumption, and idle cash earns nothing.

OUR SOLUTION We set deployment assumptions, built a payout schedule for distributions and tracked idle cash as a drag on return.

5 Loans sourced through partners and brokers

DIFFICULTY Brokers bring in the loans and are paid for it. Commissions, origination costs and incentives reduce what the fund keeps.

OUR SOLUTION We built them into the product schedules, so profit is shown after the cost of sourcing.

6 NAV, total return and compliance KPIs

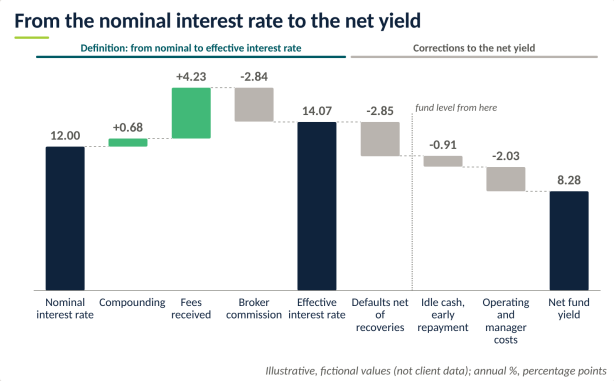
DIFFICULTY Annual return is NAV growth, adjusted for capital flows, plus distributions. Depending on regulation and investors, risk KPIs may also be required.

OUR SOLUTION We projected NAV, distributions, total return, yield on earning assets and risk indicators.

THE TURNING POINT

Comparing loan products starts from the effective interest rate

A loan quote starts from the nominal interest rate, the rate stated in the agreement. What a loan earns is its effective interest rate: the annual yield implied by its actual cash flows (its internal rate of return), including payment timing, fees received and broker commissions. Because products pay differently, the comparison starts there. Defaults net of recoveries, idle cash, early repayment and costs then reduce it to the net yield for investors.



Illustrative bridge, fictional values (not client data): from the nominal interest rate to the effective interest rate of a loan, then the corrections to the net fund yield.

What the scenarios showed

The model recomputes the whole forecast when an assumption changes. Three cases frame the range of outcomes for investors: what they can lose, what they can expect and what they can gain.

Worst case
Higher defaults, slower recoveries, more early repayments and longer idle periods: the net return falls, and the model shows whether a dividend can still be paid and from when. This is the downside investors weigh first.

Base case
Expected allocation, defaults and reinvestment times: the expected net return and the payout schedule that investors can plan with.

Best case
Fewer defaults, quicker reinvestment and less idle cash: the upside for investors if the plan runs better than expected.

Scenario logic described without client values; the cases show how the fund could work out and do not prove the assumptions.

What we built

INPUTS

- Loan products and expected allocation
- Deployment speed, reinvestment and payout targets
- Default, recovery and early-repayment assumptions
- Commissions, fees and operating budget

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CALCULATION MODULES

- Schedules by loan product
- Ramp-up, reinvestment and cut-off
- Defaults, recoveries and early repayment
- Fees and costs, incl. management company
- NAV, distributions and KPIs

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OUTPUTS

- Effective interest rate by product
- NAV, distributions and total return
- Risk and compliance KPIs
- Worst, base and best case scenarios

How we worked together

Step 1

Analysis and discussion

We analysed the business model and loan products and discussed them with the management in several rounds.

Step 2

Plan

Agreed the allocation, the equity capital rollout, the scenarios and the model structure.

Step 3

Build

Built product schedules, fund cash flows, NAV and return reporting, scenarios and sensitivities.

Step 4

Explain to investors

Helped present the model to investors.

What came out of it?

The management received an integrated model showing how equity capital is deployed, what each loan product earns and what returns to expect in the worst, base and best case.

- Schedules by loan product: drawdowns, repayments, cash and accrued interest, defaults and recoveries.
- Projected NAV, cash schedules, distributions and annual total return, with KPIs and compliance indicators.
- A comparison of the effective interest rate and profitability by product, from the fund's point of view.
- Worst, base and best case scenarios and sensitivities.

Lessons for private debt funds

1. Compare loan products by their effective interest rate, not the nominal interest rate. Timing, fees and losses change what the fund earns.
2. Model cash, not only interest. Idle cash and early repayments cost return even when no loan defaults, and a dividend can only be paid from cash actually received.
3. Test the worst and best case. Investors judge expected return, risk and upside, so show total return, NAV growth plus distributions, in all three.

Questions your model must answer

1. What return can investors expect in the worst, base and best case?
2. How is equity capital deployed, and how quickly does it start to earn?
3. How does the business model turn deployed funds into profit?
4. Can investors expect a dividend, and from when?
5. What does each loan product earn, measured by its effective interest rate?
6. How much return do defaults, early repayments and idle cash take away?
7. Which assumptions move the annual fund return most?
8. Does the fund stay within the risk and compliance KPIs that apply?

Client details are anonymised to protect confidentiality. Charts, schematics and worked examples are illustrative and contain no client data.

Planning a private debt fund project?

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