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The Global Drivers of Private Credit

FRM Part II

1 A story: one borrower, two lenders

- Fenmoor Logistics: mid-sized, owned by a PE sponsor
- Needs a $100m loan; too small to sell public bonds
- Harwick Bank: slower, must hold capital against it
- Brackenridge: fast, certain, tailored terms
- Who wins, and why?

IN THE LESSON

- Meet Fenmoor Logistics, a mid sized company owned by a private equity sponsor, a firm that buys companies using a lot of borrowed money.
- Fenmoor needs a one hundred million dollar loan to buy a rival warehouse business.
- It is too small to sell bonds to the public.
- Its bank, Harwick, could lend, but slowly, and the bank would have to hold capital against a loan this risky.
- Brackenridge Credit Partners, which runs private credit funds, offers a quick, certain answer and terms tailored to the deal.
- Which lender wins, and why, is the story of this lesson.
- First, we need to know exactly what Brackenridge is.

2 What defines a private credit fund

- A non-bank pool of capital
- Originates and holds loans, lending directly to firms
- Usual borrowers: mid-sized, sponsor-backed firms
- Public bonds or bank syndicates less suitable for them
- But it is defined by its structure, not its borrowers

IN THE LESSON

- A private credit fund is a non bank pool of capital that originates loans, meaning it makes them itself, and holds them, lending directly to companies.
- Its borrowers are most often mid sized firms backed by a private equity sponsor, for whom the public bond market or a bank syndicate, a group of banks that share a large loan, is less suitable.
- But the borrower is not what defines the fund.
- The defining features are its structure: who puts the money in, how long the money is locked up, and who runs it.
- A bank can lend to the same mid sized firm, and a fund can lend to a large one.
- The structure is what makes it private credit.

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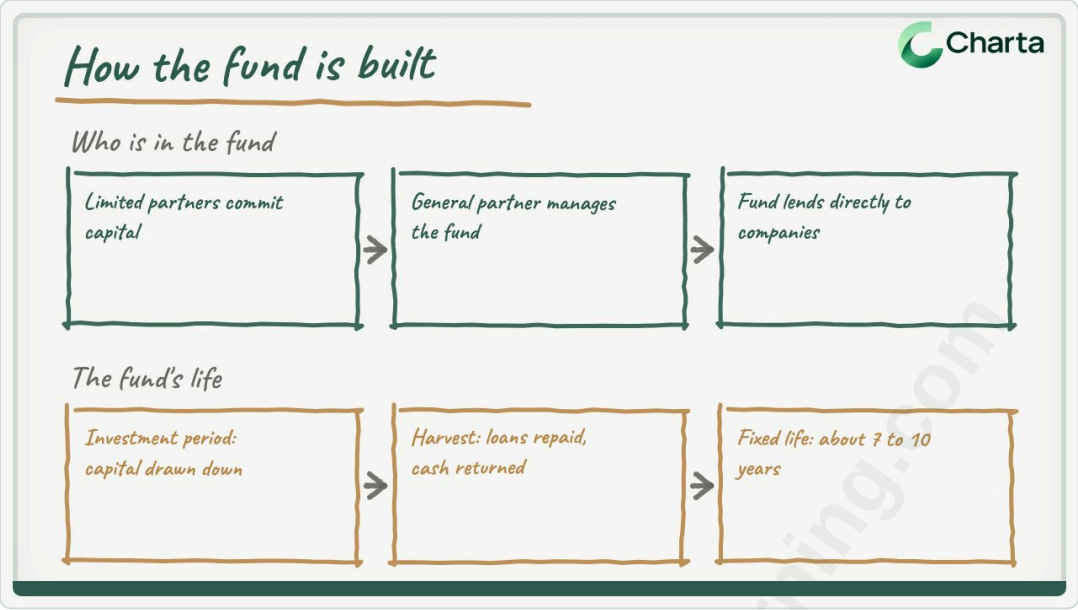
3 How the fund is built



IN THE LESSON

- Here is the structure in two rows.
- The first row shows who is in the fund.
- Limited partners, institutions such as pension funds, insurers and endowments, commit capital, a promise to pay in when asked.
- A general partner, here Brackenridge, manages the fund and chooses the loans.
- The fund then lends directly to companies such as Fenmoor.
- The second row shows the fund's life.
- In the investment period, the general partner draws down the committed capital in stages, as it finds loans to make.
- In the harvest period, loans are repaid and the cash goes back to the limited partners.
- And the life is fixed, at roughly seven to ten years.
- This is a closed end limited partnership: investors cannot ask for their money back early.

4 Example 1: commitments, drawdowns and fees

Fund III: $500m committed; fee 1.5% a year; $400m invested after the investment period

Committed by the LPs	promises to pay in	**$500m**
Called in year one	30% × 500	**$150m**
Fee in the investment period	1.5% × 500 committed	**$7.5m a year**
Fee after it	1.5% × 400 invested	**$6.0m a year**

IN THE LESSON

- Brackenridge Fund Three has commitments of five hundred million dollars from its limited partners.
- It charges a management fee of one point five per cent a year, and after the investment period four hundred million dollars is still invested.
- The committed amount is a promise to pay in when called.
- In year one, the general partner calls thirty per cent of commitments, which is one hundred and fifty million dollars.
- During the investment period, the fee is charged on committed capital: one point five per cent of five hundred million, seven point five million dollars a year, even though only part has been drawn.
- After the investment period, the fee is charged on invested capital: one point five per cent of four hundred million, six million dollars a year.
- Charging on commitments early pays the manager for the work of finding loans.

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5 The loans, the leverage and the lock-up

- Mostly senior secured loans
- Floating rate: base rate plus a spread; held to maturity
- Some funds borrow at fund level: leverage amplifies ROE
- Locked-up capital: no deposit-style runs

IN THE LESSON

- What does the fund hold?
- Mostly senior secured loans.
- Senior means they are repaid first if the borrower fails, and secured means they are backed by the borrower's assets.
- They are floating rate, so the coupon is a base rate that resets each period plus a fixed spread, and the fund usually holds them to maturity.
- Some funds also borrow at the fund level, for example on a bank credit line, and that leverage amplifies the return on the investors' equity, in good years and in bad.
- Finally, the capital is locked up.
- Limited partners cannot withdraw on demand, so a private credit fund cannot suffer a run like a bank's depositors can stage.

6 Example 2: leverage inside the fund

Fund Two: equity $400m; credit line $200m at 7%; loans earn 10% after losses, before fees

Total assets	400 + 200	**$600m**
Loan income	10% × 600	**$60m**
Interest on the credit line	7% × 200	**$14m**
Return on equity	(60 − 14) ÷ 400	**11.5%**

Bad year, loans earn 2%: (12 − 14) ÷ 400 = −0.5%

IN THE LESSON

- Brackenridge Fund Two has equity of four hundred million dollars and borrows two hundred million on a credit line at seven per cent.
- In a good year the loans earn ten per cent after credit losses and before fees.
- Total assets are four hundred plus two hundred, six hundred million dollars.
- Loan income is ten per cent of six hundred, sixty million.
- Interest on the credit line is seven per cent of two hundred, fourteen million.
- So the return on equity is sixty minus fourteen, divided by four hundred, which is eleven point five per cent, against ten per cent with no borrowing.
- Now a bad year, with the loans earning only two per cent.
- Income is twelve million, interest is still fourteen, so the return on equity is minus zero point five per cent.
- Leverage cuts both ways.

7 How the asset class spread worldwide

- Began mainly in the United States
- Spread to Europe, then Asia-Pacific and other regions
- The US remains the largest market
- Abroad, funds step in where banks pull back
- Investors commit capital across borders

IN THE LESSON

- Where did private credit grow?
- The asset class began mainly in the United States, where direct lending funds grew up beside the bank and bond markets.
- It has since spread to Europe, and more recently to Asia Pacific and other regions.
- Even so, the United States remains the largest market.
- Abroad, the model is the same: funds step in where banks have pulled back from lending to mid sized and sponsor backed firms.
- And the money crosses borders.
- Pension funds and insurers in one country commit capital to funds that lend in another, so the asset class is global on both sides, among investors and among borrowers.

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8 Example 3: is it a private credit fund?

Three lenders. Which are private credit funds?

Lender and borrower	Funded by	Private credit?
Harwick Bank → mid-sized, sponsor-backed	deposits	No
Fund III → a large company	committed LP capital	Yes
Bond fund buys traded bonds	daily-redeemable units	No

IN THE LESSON

- Here is the classic mistake, defining private credit by its borrowers.
- Look at three lenders.
- First, Harwick Bank lends to a mid sized, sponsor backed firm.
- The borrower is typical of private credit, but the lender is funded by deposits and bound by bank rules, so this is not a private credit fund.
- It is bank lending.
- Second, Brackenridge Fund Three lends directly to a large company.
- The borrower is not typical, but the lender is a non bank fund of committed capital that originates and holds the loan, so yes, this is private credit.
- Third, a bond fund buys traded bonds of mid sized firms.
- It does not originate loans, and its investors can redeem daily, so no.
- The rule on the board: define the fund by its structure, not by its borrowers.

9 Why private credit grew: supply and demand

- Supply: tighter post-crisis bank capital and liquidity rules
- Supply: low rates pushed investors to illiquid assets
- Demand: mid-sized, sponsor-backed borrowers
- They want speed, certainty and flexible terms

IN THE LESSON

- Why did private credit grow so fast?
- The explanations split into supply and demand.
- Supply means the forces that push lending capacity toward private credit, and there are two.
- First, after the global financial crisis, bank capital and liquidity rules became tighter, so riskier leveraged loans, loans to firms that already carry a lot of debt, became costlier for banks to hold.
- Second, years of low interest rates pushed institutional investors toward higher yielding, illiquid assets, to meet their return targets.
- Demand means why borrowers chose it.
- Mid sized and sponsor backed borrowers want speed, certainty that the deal will close on the agreed terms, and flexible terms they can negotiate with one lender.

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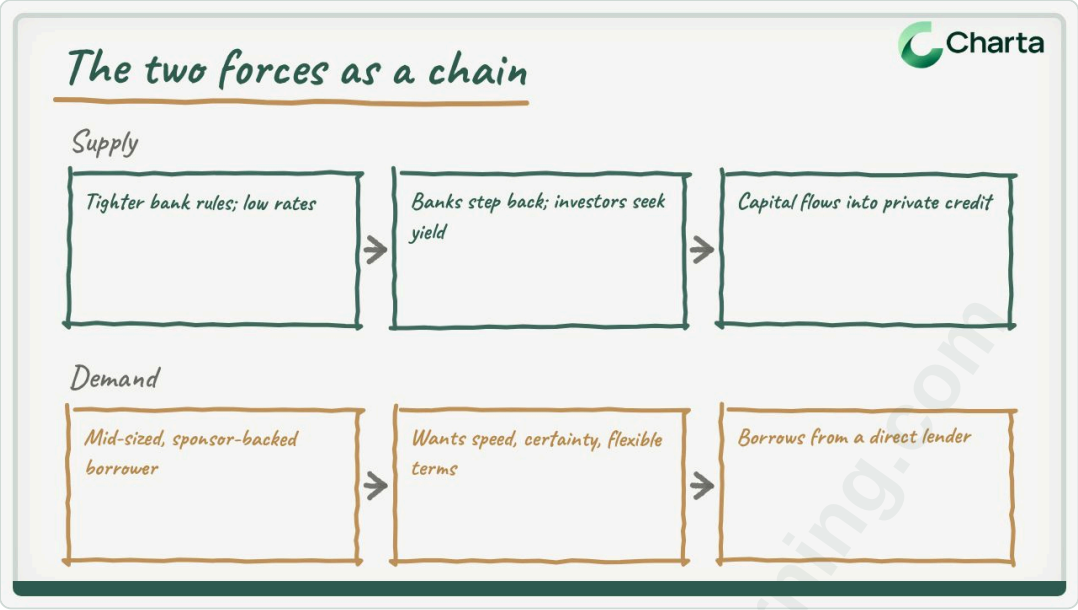
10 The two forces as a chain



IN THE LESSON

- Here are the same forces as two chains.
- The first row is supply.
- It starts with tighter bank rules and low interest rates.
- Next, banks step back from risky loans that have become dearer to hold, and investors search for yield.
- So capital flows into private credit funds, which now have money to lend where banks stepped back.
- The second row is demand.
- It starts with the mid sized, sponsor backed borrower.
- That borrower wants speed, certainty and flexible terms.
- So it borrows from a direct lender, a single fund that can agree a deal quickly and hold the whole loan.
- The two chains meet: willing lenders with money, and willing borrowers.

11 How researchers test the drivers

- Panel: many countries over many years
- Dependent variable: private credit ÷ GDP
- Factors: country-level, e.g. bank capital, rates
- Coefficient: change in Y per one-unit change in X
- Holding the other factors fixed

IN THE LESSON

- How do researchers test which forces matter?
- They use panel regressions.
- A panel is data on many countries over many years.
- The dependent variable, the thing to be explained, is private credit relative to G D P, the size of the economy, so countries of different size can be compared.
- On the right hand side are country level factors, such as bank capital ratios, interest rates and the size of pension and insurance assets.
- Each factor gets a coefficient.
- Read a coefficient as the expected change in the dependent variable for a one unit change in that factor, holding the other factors fixed.
- Two questions follow: is the coefficient significant, and how large is its effect?

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12 Testing and comparing factors

t = coefficient ÷ standard error
Effect = coefficient × standard deviation

Coefficient	Change in Y per unit of X
Standard error	Uncertainty of the estimate
t-statistic	Significant at 5% if |t| > 1.96
Standard deviation	A typical move in the factor

IN THE LESSON

- Two rules do the work.
- The first tests a factor: the t statistic equals the coefficient divided by its standard error.
- The second compares factors: the effect equals the coefficient times the factor's standard deviation.
- Now take the four terms in turn.
- The coefficient is the estimated change in the dependent variable per unit of the factor, holding the others fixed.
- The standard error measures how uncertain that estimate is.
- The t statistic is the ratio of the two, and at a five per cent two sided level, the coefficient is significant if the t statistic is bigger than about one point nine six in absolute size.
- The standard deviation is the factor's typical move in the data.
- Multiplying by it puts every factor on the same scale: the effect of a typical move, whatever the units.

13 Example 4: a regression output

Illustration. Dependent variable: private credit, % of GDP

Factor (unit)	Coefficient	Std error
Bank capital ratio (pp)	0.30	0.10
Long-term interest rate (pp)	−0.50	0.20
Pension and insurance assets (% GDP)	0.02	0.005
Sponsor buyout volume (% GDP)	0.80	0.50

IN THE LESSON

- Here is a made up regression output, not from any real study.
- The dependent variable is private credit as a percentage of G D P.
- The bank capital ratio, in percentage points, has a coefficient of zero point three zero and a standard error of zero point one zero.
- The long term interest rate, in percentage points, has a coefficient of minus zero point five zero and a standard error of zero point two zero.
- Pension and insurance assets, as a percentage of G D P, have a coefficient of zero point zero two and a standard error of zero point zero zero five.
- Sponsor buyout volume, as a percentage of G D P, has a coefficient of zero point eight zero and a standard error of zero point five zero.
- Over the next few slides we read it.

14 Example 5: reading the coefficients

Same output. Each change holds the other factors fixed

Bank capital ratio up 2 pp	0.30 × 2	**+0.6 pp of GDP**
Long-term rate down 1 pp	−0.50 × (−1)	**+0.5 pp of GDP**
Pension assets up 10 pp of GDP	0.02 × 10	**+0.2 pp of GDP**

IN THE LESSON

- First, read each coefficient as a what if, holding the other factors fixed.
- Suppose the bank capital ratio rises by two percentage points.
- Private credit is expected to rise by zero point three times two, zero point six percentage points of G D P.
- That fits the supply story: costlier bank capital, more private credit.
- Suppose the long term interest rate falls by one percentage point.
- The coefficient is minus zero point five, times minus one, so private credit rises by zero point five points.
- That fits the search for yield.
- Suppose pension and insurance assets grow by ten points of G D P.
- Then private credit rises by zero point zero two times ten, zero point two points.
- Each answer is in percentage points of G D P, because that is the unit of the dependent variable.

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15 Example 6: which factors are significant?

t = coefficient ÷ standard error. Critical value at 5%, two-sided: 1.96

Bank capital ratio	0.30 ÷ 0.10 = 3.0	**significant**
Long-term interest rate	−0.50 ÷ 0.20 = −2.5	**significant**
Pension and insurance assets	0.02 ÷ 0.005 = 4.0	**significant**
Sponsor buyout volume	0.80 ÷ 0.50 = 1.6	**not significant**

IN THE LESSON

- Next, test each factor with the t statistic, the coefficient over its standard error, against the critical value of one point nine six.
- Bank capital: zero point three zero over zero point one zero is three point zero, above one point nine six, so it is significant.
- The interest rate: minus zero point five zero over zero point two zero is minus two point five.
- Its absolute size, two point five, is above one point nine six, so it is significant too.
- The sign just says the effect is negative.
- Pension assets: zero point zero two over zero point zero zero five is four point zero, significant.
- Sponsor buyouts: zero point eight zero over zero point five zero is only one point six, below one point nine six, so it is not significant at the five per cent level, despite having the biggest coefficient.

16 Example 7: ranking the factors, a classic mistake

Standard deviations: bank capital 2.0, rate 1.5, pension assets 40, buyouts 0.5

Pension and insurance assets	0.02 × 40	**0.80**
Long-term interest rate	−0.50 × 1.5	**−0.75**
Bank capital ratio	0.30 × 2.0	**0.60**
Sponsor buyout volume	0.80 × 0.5	**0.40**

Effects in pp of GDP for a one-standard-deviation move

IN THE LESSON

- The grey line gives each factor's standard deviation: two for bank capital, one point five for the rate, forty for pension assets and zero point five for buyouts.
- Now the classic mistake: ranking factors by the size of the raw coefficient.
- On that basis, ignoring signs, sponsor buyouts, at zero point eight zero, would come first and pension assets, at zero point zero two, last.
- But the units differ.
- So multiply each coefficient by its standard deviation.
- Pension assets: zero point zero two times forty is zero point eight zero, the largest effect.
- The rate: minus zero point five times one point five, minus zero point seven five.
- Bank capital: zero point three times two, zero point six zero.
- Buyouts: zero point eight times zero point five, only zero point four zero.
- The smallest coefficient has the largest effect, and first and last place swap.
- All these effects are in percentage points of G D P for a one standard deviation move.

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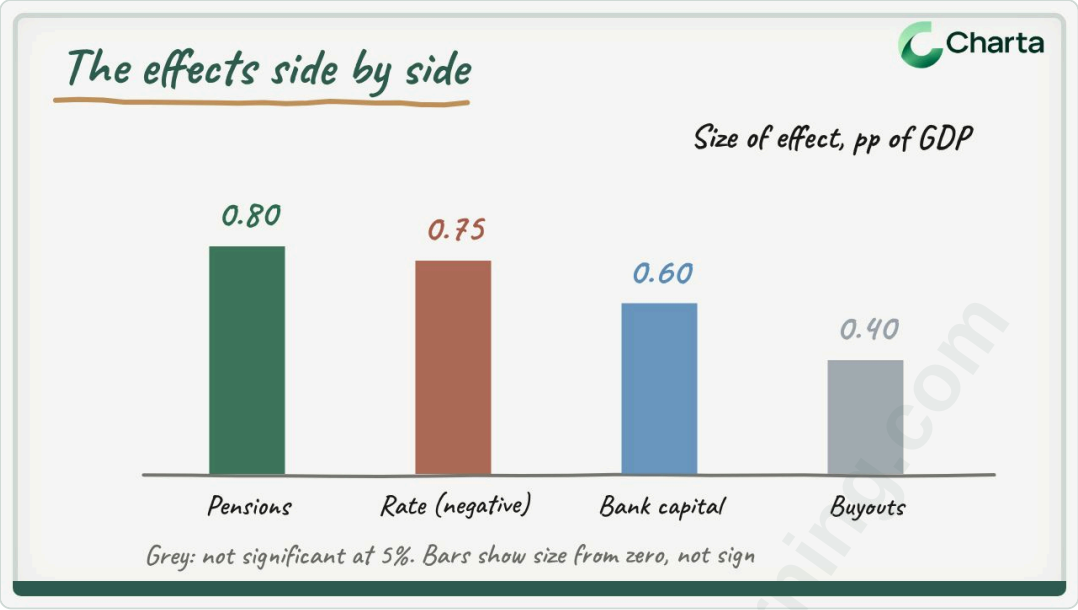
17 The effects side by side



IN THE LESSON

- Here are the same effects as bars, each the size of the effect of a one standard deviation move, in percentage points of G D P.
- Every bar starts from zero and shows size only.
- Pension and insurance assets come first at zero point eight zero.
- The long term interest rate is next, with a size of zero point seven five.
- Its effect is negative, which is why its name says negative.
- The bank capital ratio follows at zero point six zero.
- Sponsor buyouts come last at zero point four zero.
- Compare this order with the raw coefficients, where buyouts led and pension assets came last.
- Only the scaled effects can be ranked.
- The note at the bottom repeats two points: the grey bar marks a factor that was not significant at five per cent, and bars show size, not sign.

18 What a regression can and cannot tell you

- Significance shows association, not causation
- Reverse causality or an omitted factor may be behind it
- A raw coefficient depends on the unit of the variable
- Significant does not always mean important
- Exam point: test with t; rank by coefficient × SD

IN THE LESSON

- Three cautions before we leave the regressions.
- First, significance shows association, not proof of causation.
- Private credit may grow where pension money is large, but a booming private credit market might also draw pension money in, and some factor left out of the regression could drive both.
- Second, a raw coefficient depends on the unit of the variable.
- Measure pension assets in tenths of a point, and the coefficient changes, while the economics does not.
- Third, significant does not always mean important: significance is about how precisely an effect is measured, not how large it is.
- So the exam point is this: test each factor with its t statistic, and rank factors by the coefficient times the standard deviation, never by the size of the coefficient.

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19 Banks against funds: the rivalry

- Same borrowers: compete on funding cost and leverage
- Break-even yield: the lowest yield a lender can accept
- Banks: cheap deposits and debt, but capital rules
- Funds: costlier equity, different regulation

IN THE LESSON

- Now back to Fenmoor's loan.
- Harwick Bank and Brackenridge compete for the same borrowers, and they compete on two things: funding cost and leverage.
- A lender cannot lend below its break even yield, the loan yield that just covers what the money costs it, plus the losses it expects, plus the costs of running the loan.
- So the cheaper a lender's funding, the lower the yield it can offer.
- Banks fund mostly with cheap deposits and debt, but must hold capital.
- Funds rely mostly on costlier equity, but are less tied by regulation.
- To compare them, we need one simple model that treats both the same way.

20 The break-even loan yield

Break-even yield = WACC + expected loss + operating cost
WACC = (E ÷ V) × cost of equity + (D ÷ V) × cost of debt
E = equity, D = debt, V = E + D

WACC	Blended cost of the funding
Cost of equity	Return owners demand
Cost of debt	Deposits or borrowing
Expected loss	Average yearly credit loss
Operating cost	Making and running the loan

IN THE LESSON

- Here is the model, simplified and before tax.
- The break even yield equals the W A C C, plus expected loss, plus operating cost, all as percentages of the same loan balance over the same period.
- The W A C C, the weighted average cost of capital, equals E over V times the cost of equity, plus D over V times the cost of debt, where E is equity, D is debt and V is their total.
- Take the five terms in turn.
- The W A C C is the blended cost of the money funding the loan.
- The cost of equity is the return the owners demand.
- The cost of debt is what deposits or borrowing cost.
- Expected loss is the average yearly credit loss.
- Operating cost is the cost of making and managing the loan.

21 Bank and fund compared

How the two lenders are funded and regulated

	Bank	Private credit fund
Funding	deposits and debt	locked-up LP capital
Leverage	high	low to moderate
Cost of equity	lower	usually higher
Cost of debt	cheap deposits	often higher
Regulation	capital, liquidity rules	different regime

IN THE LESSON

- Before the numbers, here is how the two lenders differ.
- Funding: the bank uses deposits and debt, while the fund uses capital locked up by its limited partners for years.
- Leverage: the bank is highly levered, with a thin slice of equity, while the fund carries low to moderate leverage.
- Cost of equity: the bank's is lower, and the fund's is usually higher, because its investors expect a higher return for illiquid lending.
- Cost of debt: the bank's deposits are cheap, while the fund's borrowing is often dearer.
- Regulation: the bank faces capital and liquidity rules, while the fund sits under a different regime, which together with its locked up capital can support loans that banks find less attractive.

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22 Example 8: Harwick's break-even yield

Harwick: $100m loan, risk weight 150%, capital 12% of RWA; equity costs 10%, debt 5%

Risk-weighted assets	150% × 100	**$150m**
Equity needed	12% × 150	**$18m**
WACC	0.18 × 10% + 0.82 × 5%	**5.90%**
Add expected loss and costs	5.90 + 1.50 + 1.00	**8.40%**

IN THE LESSON

- Harwick prices the one hundred million dollar loan to Fenmoor.
- The loan has a risk weight of one hundred and fifty per cent, Harwick holds capital of twelve per cent of risk weighted assets, its equity costs ten per cent and its deposits and debt five per cent.
- Risk weighted assets are one hundred and fifty per cent of one hundred, one hundred and fifty million dollars.
- Equity needed is twelve per cent of one hundred and fifty, eighteen million.
- So E over V is zero point one eight, and D over V is zero point eight two.
- The W A C C is zero point one eight times ten, plus zero point eight two times five, which is five point nine zero per cent.
- Add an expected loss of one point five zero and an operating cost of one point zero zero, and the break even yield is eight point four zero per cent.

23 Example 9: Brackenridge's break-even yield

Same loan: loss 1.50%, cost 1.00%. Fund: $50m equity at 11%, $50m debt at 6%

Weights E ÷ V and D ÷ V	50 ÷ 100 and 50 ÷ 100	**0.5 and 0.5**
WACC	0.5 × 11% + 0.5 × 6%	**8.50%**
Add expected loss and costs	8.50 + 1.50 + 1.00	**11.00%**
Gap above Harwick	11.00 − 8.40	**2.60%**

IN THE LESSON

- Now Brackenridge prices the same loan.
- It funds it with fifty million dollars of equity, on which its investors expect eleven per cent, and fifty million of fund level borrowing at six per cent.
- The weights are fifty over one hundred for equity and fifty over one hundred for debt, so zero point five each.
- The W A C C is zero point five times eleven, plus zero point five times six, which is eight point five zero per cent.
- Same borrower, so the same expected loss of one point five zero and operating cost of one point zero zero.
- The break even yield is eleven point zero zero per cent.
- That is two point six zero percentage points above Harwick's, so on cost alone the bank wins, and the fund must win on speed, certainty and terms.

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24 Example 10: the wrong weights

Same two loans. Weights must be shares of the same loan, summing to one

Wrong: E ÷ V = capital ratio	0.12 × 10% + 0.88 × 5%	**5.60%**
Right: E ÷ V = 12% × 150%	0.18 × 10% + 0.82 × 5%	**5.90%**
Bank cost understated by	5.90 − 5.60	**0.30%**
Wrong: D ÷ E as debt weight	0.5 × 11% + 1.0 × 6%	**11.50%**
Right: weights sum to one	0.5 × 11% + 0.5 × 6%	**8.50%**

IN THE LESSON

- Same two loans, and one rule: the weights must be shares of the same loan, summing to one.
- Now two classic mistakes with the weights.
- First, using Harwick's capital ratio of twelve per cent as E over V.
- That gives zero point one two times ten, plus zero point eight eight times five, five point six zero per cent.
- But capital is twelve per cent of risk weighted assets, and the loan's risk weight is one hundred and fifty per cent, so equity is eighteen per cent of the loan.
- The right W A C C is five point nine zero, so the mistake understates the bank's funding cost by zero point three zero percentage points.
- Second, using D over E, the debt to equity ratio, as the weight on Brackenridge's debt.
- It is one, so the answer is zero point five times eleven plus one times six, eleven point five zero per cent.
- The weights must sum to one: the right answer is eight point five zero.

25 Example 11: two shifts narrow the gap

Bank: equity 10%, debt 5%. Risk weight to 200%; fund debt 6% to 5%. Loss + cost 1.50 + 1.00

Harwick equity needed	12% × 200	**$24m**
Harwick WACC	0.24 × 10% + 0.76 × 5%	**6.20%**
Harwick break-even	6.20 + 1.50 + 1.00	**8.70%**
Fund WACC, cheaper debt	0.5 × 11% + 0.5 × 5%	**8.00%**
Fund break-even	8.00 + 1.50 + 1.00	**10.50%**

The gap narrows from 2.60 to 10.50 − 8.70 = 1.80 points

IN THE LESSON

- Now two shifts of the kind that changed the rivalry.
- First, heavier bank capital rules raise the loan's risk weight from one hundred and fifty to two hundred per cent.
- Harwick's equity needed rises to twelve per cent of two hundred, twenty four million dollars.
- Its cost of equity stays ten per cent: more equity changes the funding mix, not the cost of equity.
- Its W A C C is zero point two four times ten, plus zero point seven six times five, six point two zero per cent, so its break even yield, adding the same two point five zero of loss and cost, is eight point seven zero per cent.
- Second, the fund's borrowing gets cheaper, falling from six to five per cent.
- Its W A C C becomes eight point zero zero, and its break even yield ten point five zero per cent.
- The gap narrows from two point six zero to one point eight zero percentage points.
- The bank is still cheaper.

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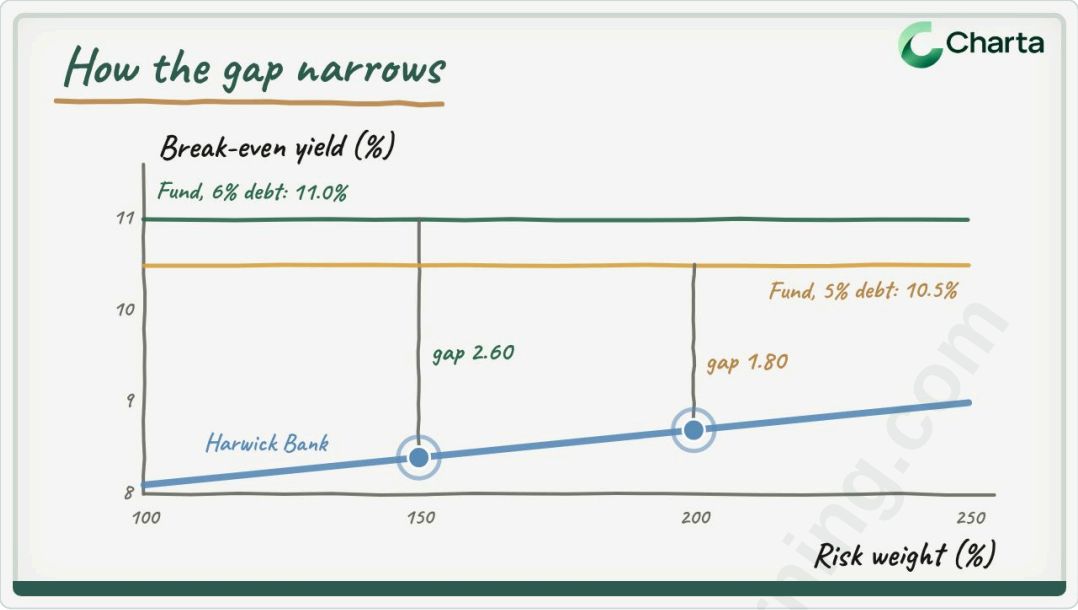
26 How the gap narrows



IN THE LESSON

- Here is the same contest as a picture.
- Along the bottom is the loan's risk weight, from one hundred to two hundred and fifty per cent.
- Up the side is the break even yield, from eight to eleven per cent.
- The rising blue line is Harwick's break even yield, which climbs as the risk weight rises, because each extra point of risk weight swaps cheap deposits for costly equity.
- The upper flat line is the fund with debt at six per cent: eleven per cent, whatever the risk weight.
- At a risk weight of one hundred and fifty, the first gap is two point six zero percentage points.
- The lower flat line is the fund after its debt got cheaper, with debt at five per cent: ten point five per cent.
- At a risk weight of two hundred, the second gap is one point eight zero.
- The gap narrows, but it does not close.
- The fund is still dearer, so it must win on speed, certainty and terms.

27 Example 12: leverage is not a free lunch

Fund WACC 8.00% (50/50 at 11%, 5%). Now 40% equity, 60% debt at 5%; equity then costs 12%

Naive: equity still costs 11%	0.4 × 11% + 0.6 × 5%	**7.40%**
Claimed gain	8.00 − 7.40	**0.60%**
Right: equity costs 12%	0.4 × 12% + 0.6 × 5%	**7.80%**
Real gain	8.00 − 7.80	**0.20%**

IN THE LESSON

- Can Brackenridge cut its cost further by borrowing more?
- Suppose it moves from half equity to forty per cent equity and sixty per cent debt, at five per cent.
- More leverage makes the equity riskier, so investors then demand twelve per cent on equity.
- The classic mistake is to keep the cost of equity at eleven per cent.
- Then the W A C C is zero point four times eleven plus zero point six times five, seven point four zero per cent, a claimed gain of zero point six zero against eight point zero zero.
- The right W A C C is zero point four times twelve plus zero point six times five, seven point eight zero per cent.
- The real gain is only zero point two zero.
- Holding the cost of equity fixed tripled the gain.

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28 What reshaped the rivalry

- Heavier bank capital charges raise banks' break-even
- Cheaper fund debt lowers funds' break-even
- More fund leverage helps, but less than it seems
- Locked-up capital supports loans banks find less attractive
- Exam point: right weights; equity cost moves with leverage

IN THE LESSON

- So what has reshaped the contest between banks and funds?
- Heavier capital charges on banks raise the equity a bank needs for a risky loan, and so its break even yield.
- Cheaper fund debt lowers the fund's break even yield, so together the two shifts narrow the gap.
- More fund leverage helps too, but by less than it seems, because the cost of equity rises with leverage.
- Underneath it all, the fund's long dated, locked up capital, under a different regime, lets it make loans that banks find less attractive to hold.
- The exam point: weight each source of funds by its share of the same loan, and let the cost of equity move with leverage.

29 Mistakes to avoid

- Defining private credit by its borrowers
- Ranking factors by raw coefficient size
- Reading significance as proof of causation
- Capital ratio, or D ÷ E, used as a WACC weight
- Holding the cost of equity fixed as leverage rises

IN THE LESSON

- Before the quiz, here are the mistakes to avoid across the whole topic.
- Do not define private credit by its borrowers.
- A fund is defined by its structure: committed, locked up capital in a closed end partnership, lending directly.
- Do not rank regression factors by the raw size of their coefficients.
- Multiply each by its standard deviation first.
- Do not read a significant coefficient as proof of cause and effect.
- In the funding comparison, do not use the capital ratio, or debt over equity, as a weight: use each source's share of the same loan.
- And do not hold the cost of equity fixed when a fund adds leverage, because that overstates the gain.

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30 Try three quick questions

1. Coefficient 0.6, standard error 0.4. Significant at 5%?
   Answer: t = 1.5, below 1.96: not significant.
2. A: coefficient 2, SD 0.1. B: coefficient 0.05, SD 10. Larger effect?
   Answer: A: 0.2; B: 0.5. B has the larger effect.
3. Risk weight 100%, capital 10% of RWA, equity 14%, debt 4%. WACC?
   Answer: 0.1 × 14% + 0.9 × 4% = 5.0%.

IN THE LESSON

- Try three quick questions, then listen to the answers.
- Question one.
- A factor has a coefficient of zero point six and a standard error of zero point four.
- Is it significant at five per cent?
- The t statistic is zero point six over zero point four, one point five, below one point nine six, so no.
- Question two.
- Factor A has a coefficient of two and a standard deviation of zero point one.
- Factor B has a coefficient of zero point zero five and a standard deviation of ten.
- Which has the larger effect?
- A gives zero point two, B gives zero point five, so factor B.
- Question three.
- A loan has a risk weight of one hundred per cent, capital is ten per cent of risk weighted assets, equity costs fourteen per cent and debt four per cent.
- What is the W A C C?
- Zero point one times fourteen, plus zero point nine times four, which is five per cent.

Summary notes for the Charta whiteboard lesson. Figures are from the lesson's made-up examples.

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