

LM01 · ALTERNATIVE INVESTMENTS · LOS A

Alternative Investment Features, Methods & Structures

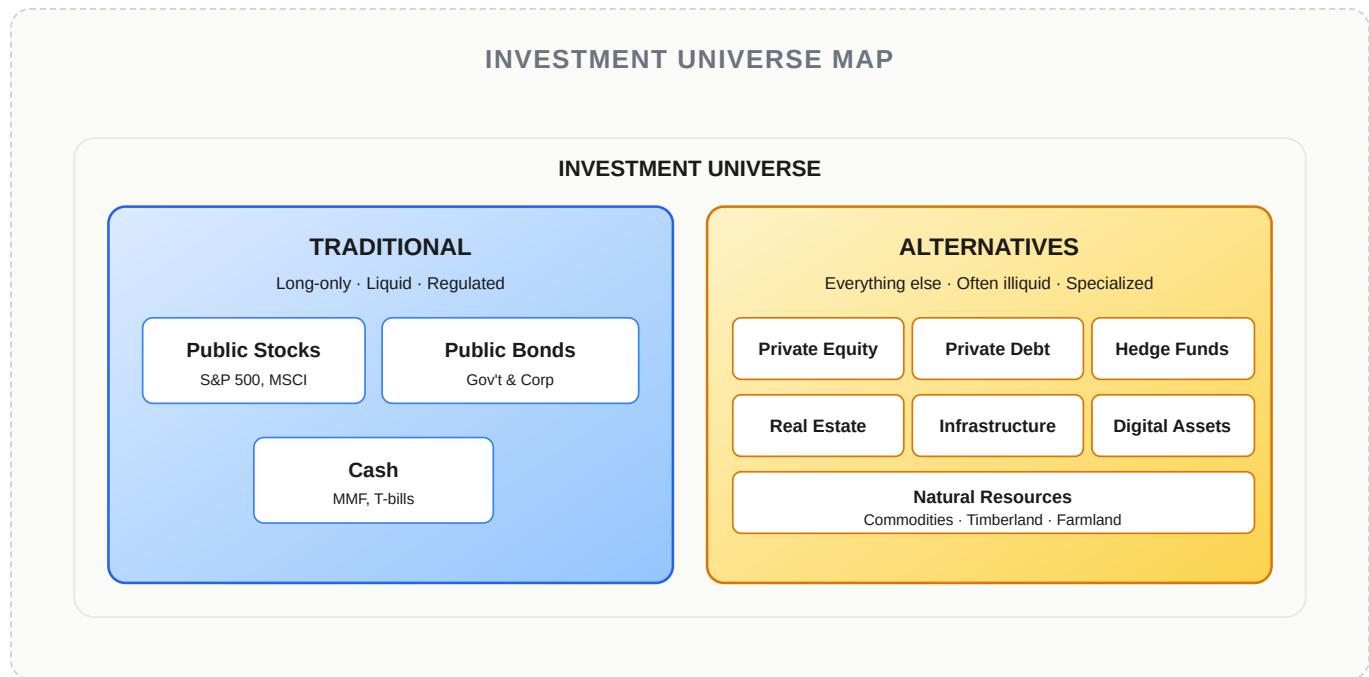
CFA Level I · 2025 Curriculum · LOS a, b, c

Core Definition

Traditional investments = long-only positions in stocks, bonds, and cash. **Alternative investments** = everything else — but this includes not just different *assets*, but also different *strategies* and *approaches*.

Key insight: A hedge fund trading only public stocks is still an "alternative" because the *strategy* (leverage, short-selling, derivatives) makes it so.

Traditional vs. Alternative — At a Glance



Why Investors Consider Alternatives — The 3 Motivations

Diversification

Low correlation with traditional asset classes reduces portfolio volatility

Enhanced Returns

Improved risk-adjusted portfolio returns via specialized strategies

Higher Yields

Illiquidity premium captured by investors able to lock up capital

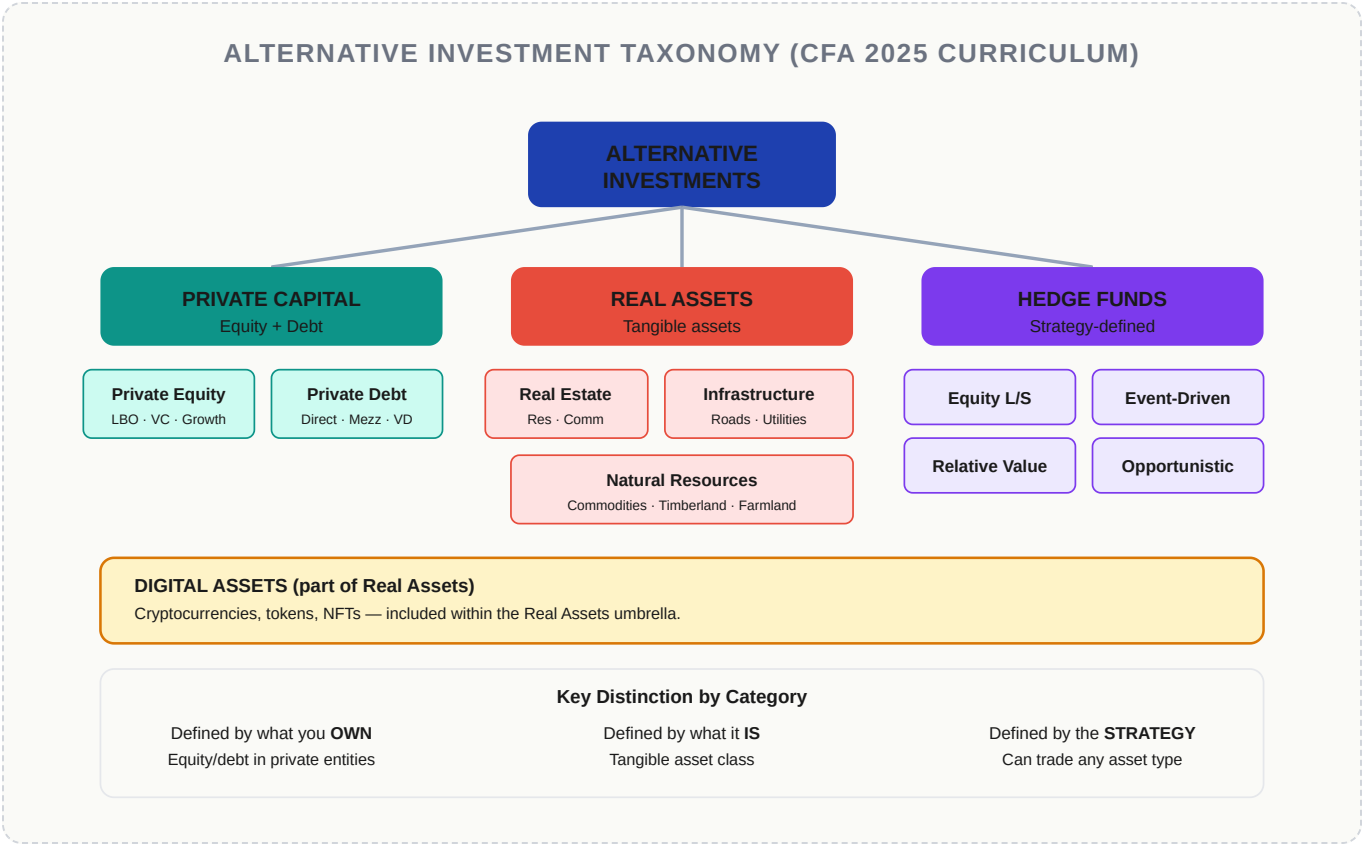
The 7 Distinguishing Features of Alternatives

FEATURE	WHY IT MATTERS
1. Specialized knowledge	Managers narrow into niches (e.g., LBO-only within PE); deep expertise required
2. Low correlation	With traditional investments — but correlations can <i>increase during crises</i>
3. Illiquidity	Cannot easily sell; creates illiquidity premium
4. Long time horizons	5–12+ year commitments; patient capital required
5. Large capital outlays	Substantial minimum commitments typically required
6. Incentive-based fees	Performance fees align manager & LP interests
7. Limited transparency	Concentrated portfolios, redemption restrictions, limited data

□ **Exam Tip:** The curriculum emphasizes alternatives are *not just assets* but also *strategies/approaches* — a hedge fund trading public stocks is "alternative" because of how it trades (leverage, shorts, derivatives), not what it holds.

LOS A · THE THREE CATEGORIES

The 3 Main Categories of Alternatives



Category 1 · Private Capital

Private Equity

Invest in equity of private companies or take public companies private.

LBO funds (established cos.)

VC funds (startups)

Growth capital

Private Debt

Loans to private entities not financed by traditional bank lending.

Direct lending

Mezzanine

Venture debt

Distressed debt

Category 2 · Real Assets

SUBTYPE	DESCRIPTION	INCOME SOURCE
Real Estate	Residential/commercial, direct or indirect, debt or equity	Rent + capital appreciation

Infrastructure	Capital-intensive, long-lived public-use assets (roads, airports, utilities)	Availability payments, usage fees
Natural Resources	Commodities, farmland, timberland	Sale of crops/wood/commodities + appreciation

Real assets include real estate, infrastructure, natural resources, and digital assets such as cryptocurrencies.

Category 3 · Hedge Funds

Private investment vehicles that manage portfolios using diverse strategies — leverage, short selling, derivatives. **Key point:** hedge funds can trade entirely traditional securities but the *strategy* makes them alternative.

Many aim for **absolute returns** independent of market performance, not relative to a benchmark.

□ **Exam Tip:** For classification questions: ask "what defines the investment?" If the answer is *asset type* (equity/debt in private), it's **private capital**. If it's the *asset class itself* (land, commodity), it's **real assets**. If it's *how the trading is done*, it's a **hedge fund**.

Sub-categories within Each Group

Private Equity — three sub-types

SUB-TYPE	WHAT IT INVESTS IN	PRIMARY RETURN DRIVER
Leveraged Buyout (LBO)	Mature, cash-flow-positive companies acquired with significant debt (typically 50–70%).	Operational improvement + debt paydown
Growth Capital	Established companies needing capital to expand.	Revenue and earnings growth
Venture Capital	Early-stage companies, often pre-profit.	Equity appreciation of successful exits

Private Debt — main forms

- **Direct lending** — senior secured loans to private companies.
- **Mezzanine debt** — subordinated debt, between senior and equity.
- **Venture debt** — loans to early-stage, VC-backed companies.
- **Distressed debt** — debt of companies in or near bankruptcy.

Real Assets — sub-categories

- **Real estate** — residential, commercial, REITs; equity or debt exposure.
- **Infrastructure** — long-lived assets (toll roads, airports, utilities, pipelines).
- **Natural resources** — commodities (via futures), timberland, farmland.

Hedge Funds — four main strategies (CFA curriculum)

STRATEGY	TYPICAL APPROACH
Equity hedge	Long/short equity, market-neutral, short-biased
Event-driven	Merger arbitrage, distressed/restructuring, activist
Opportunistic	Flexible, broad-mandate strategies that pursue attractive opportunities across markets and conditions
Relative value	Pairs trading, fixed-income arbitrage, convertible arbitrage

□ **Exam Tip:** Key distinction: hedge funds can pursue *any* of these strategies across public or private assets. What makes them "alternative" is the *strategy* (use of leverage, short-selling, derivatives), not the asset.

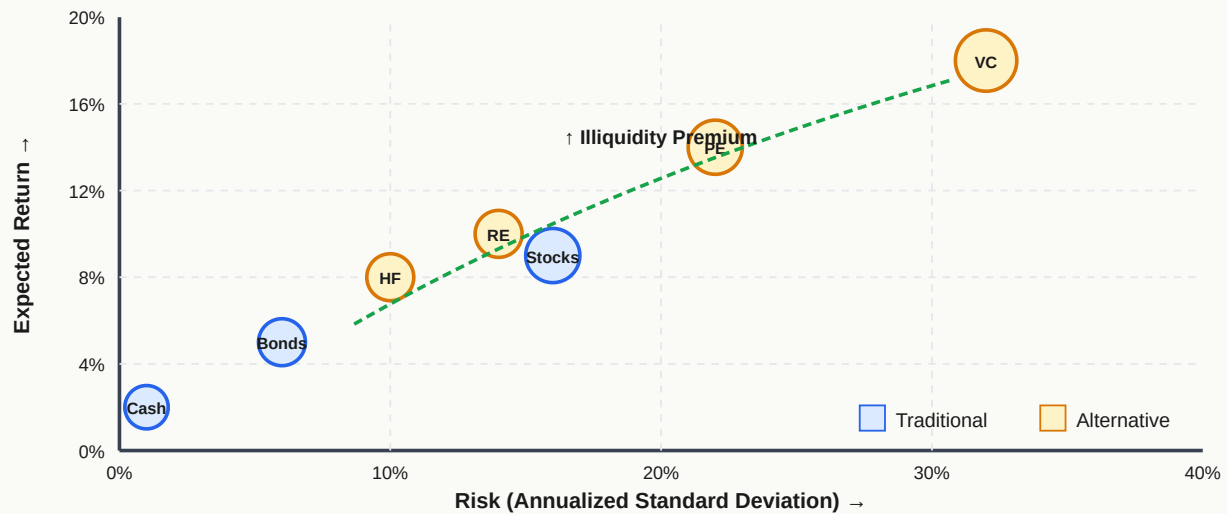
LOS A · COMPARATIVE ANALYSIS

Traditional vs. Alternative — Side-by-Side

ATTRIBUTE	TRADITIONAL	ALTERNATIVE
Liquidity	High — daily trading	Low — lockups, gates, notice periods
Minimum Investment	Low	High
Time Horizon	Flexible, short to long	Long (5–12+ years)
Fees	Low (often < 1%)	High (2%+20% typical)
Regulation	Heavily regulated	Lighter; accredited investors only
Transparency	High — daily NAV, audited	Low — quarterly or less
Correlation with stocks	High	Low (historically) — but rises in crises
Manager Access	Many managers available	Top managers often closed to new capital
Valuation	Market prices (Level 1)	Often model-based (Level 3)
Leverage	Limited (margin rules)	Often extensive

Illiquidity Premium — The Return Trade-off

RISK-RETURN POSITIONING (ILLUSTRATIVE)



Illustrative long-run expected positioning based on broad empirical ranges. Actual results vary by vintage, manager, and time period. Reported PE/RE volatility is often understated due to appraisal-based (not market) pricing — see LM02 for detail.

EXAMPLE 1 Endowment Portfolio Choice — Traditional vs. Blended

□ GIVEN

PORTFOLIO	ALLOCATION	EXPECTED RETURN	VOLATILITY (Σ)
A — Traditional	60% stocks / 40% bonds	7.0%	10.0%
B — Blended	40% stocks / 30% bonds / 30% alternatives	8.5%	11.0%

Risk-free rate: 2.5%. The endowment has a long horizon (> 10 years), no near-term liquidity needs, and can tolerate lock-ups.

□ FIND

1. Sharpe ratio of each portfolio
2. Which portfolio is risk-adjusted superior, and why
3. What assumption could undermine the apparent advantage

✓ SOLUTION

□ SOLUTION

1

Compute Sharpe ratio for Portfolio A.

$$\text{Sharpe}_A = (7.0\% - 2.5\%) / 10.0\% = 0.45$$

2

Compute Sharpe ratio for Portfolio B.

$$\text{Sharpe}_B = (8.5\% - 2.5\%) / 11.0\% = 0.55$$

3

Compare — note that B has higher σ but still higher Sharpe. This is only possible because the alternatives' *correlation* with stocks/bonds is low — the diversification benefit outweighs the volatility increase.

$$\Delta \text{Sharpe} = 0.55 - 0.45 = +0.10 \text{ } (\approx 22\% \text{ improvement})$$

4

Liquidity sanity-check. Can the endowment afford the lock-ups?

Horizon > 10 yrs, no cash drawdowns → ✓ tolerates illiquidity premium

□ ANSWER

Sharpe — Portfolio A (Traditional)	0.45
------------------------------------	------

Sharpe — Portfolio B (Blended with alts)	0.55
--	------

**Portfolio B wins on risk-adjusted basis (+10
Sharpe pts)**

□ KEY TAKEAWAY

- **Higher σ does not mean worse portfolio.** If the added asset class has low correlation with existing holdings, the *total* portfolio can become more efficient even as measured volatility rises.
- **Illiquidity must be tolerable.** For endowments, pensions, or sovereign funds with long horizons, locking up 30% of the portfolio is fine. For a retail investor with 2-year goals, it isn't.

- **Important caveat — Level 3 smoothing.** Reported PE / RE volatility is *appraisal-based*, not market-based. True economic volatility is higher, so the real Sharpe uplift may be smaller than it appears. (See LM02 for the volatility-smoothing adjustment.)
- **Diversification is a correlation story, not a variance story.** The CFA exam tests this distinction frequently — a blended portfolio can have higher individual-asset variance but lower portfolio variance because of correlation.

QUIZ 1 · CHECKPOINT

Test Your Understanding: Features & Categories

Q1. Which of the following is *least likely* a feature distinguishing alternative investments from traditional investments?

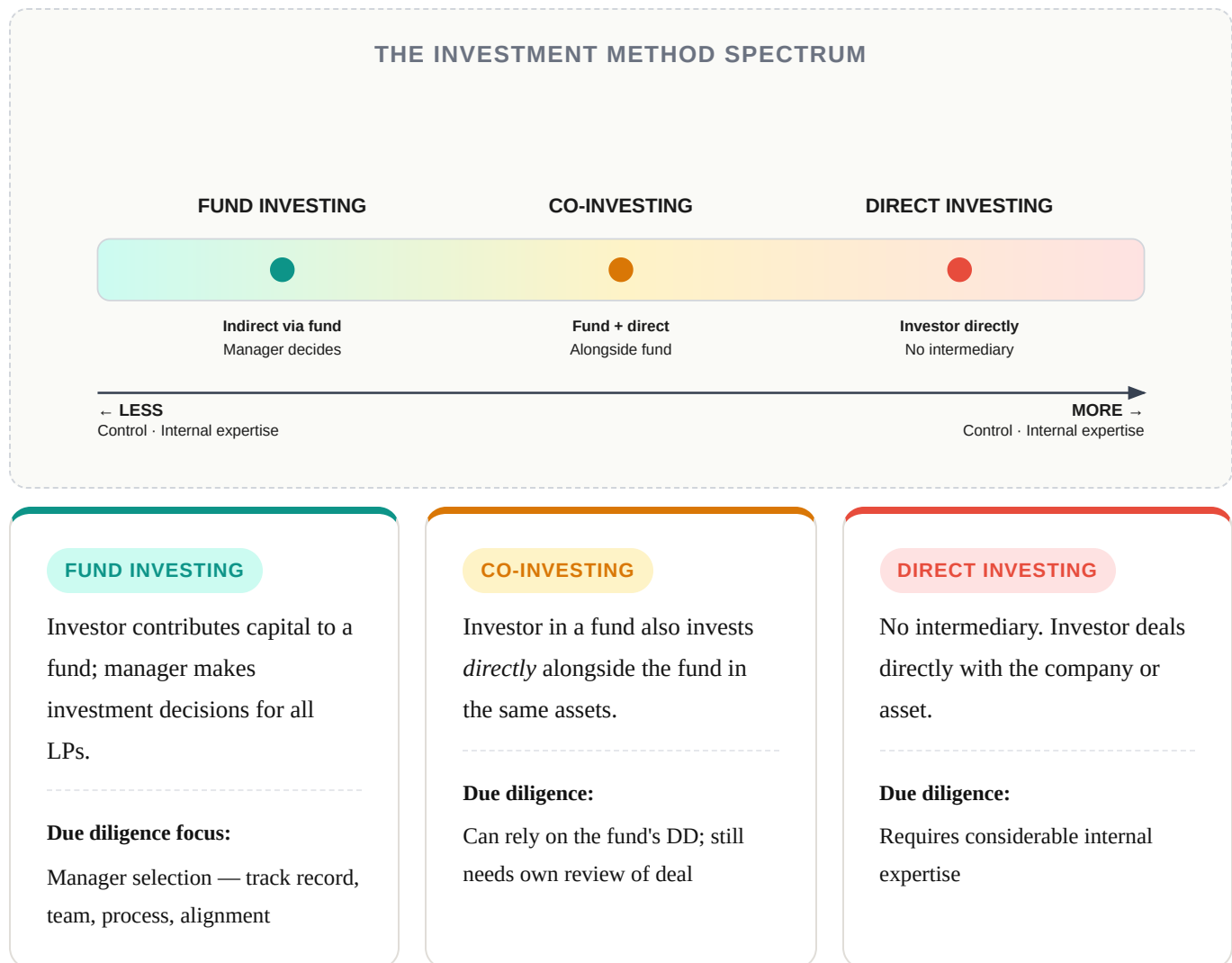
Q2. A hedge fund that uses leverage and short selling on publicly traded stocks is best classified as:

Q3. Private debt includes all of the following *except*:

Q4. An institutional investor argues that alternatives provide "true diversification because they have zero correlation with equities." The *most accurate* critique is:

LOS B · INVESTMENT METHODS

Three Methods of Investing in Alternatives



Advantages & Disadvantages — Full Comparison

METHOD	ADVANTAGES	DISADVANTAGES
Fund	• Manager expertise • Lower investor involvement • Access without deep expertise • Lower minimum capital • Built-in diversification	• Costly mgmt & performance fees • Wide return dispersion → DD critical • Lock-ups & redemption restrictions
Co-invest	• Learn from fund's process • Reduced management fees	• Reduced control vs. direct • <i>Adverse selection risk</i> • More involvement than fund alone

	• More active participation • Deeper manager relationship	
Direct	• No ongoing external fees • Greatest flexibility • Highest level of control	• Requires most expertise → higher internal costs • Less access to fund diversification • Most complex DD • Highest minimum capital

Adverse Selection Bias in Co-investing

What it is: The GP may selectively offer co-investment opportunities. The *best* deals stay entirely within the fund (where the GP earns full economics). Deals offered as co-investments may be the *less attractive* ones.

Mitigation: Side letters giving "first right of refusal" for co-investments, or co-investment rights tied to fund commitment size.

□ **Exam Tip:** The three methods sit on a spectrum: *fund* = lowest involvement/capital; *direct* = highest control/flexibility/cost. Adverse selection is a unique risk of **co-investing** specifically.

QUIZ 2 · CHECKPOINT

Test Your Understanding: Investment Methods

Q5. An investor who wants the most control over their alternative investments and has significant internal expertise would most likely choose:

Q6. Adverse selection bias is a risk most associated with which method?

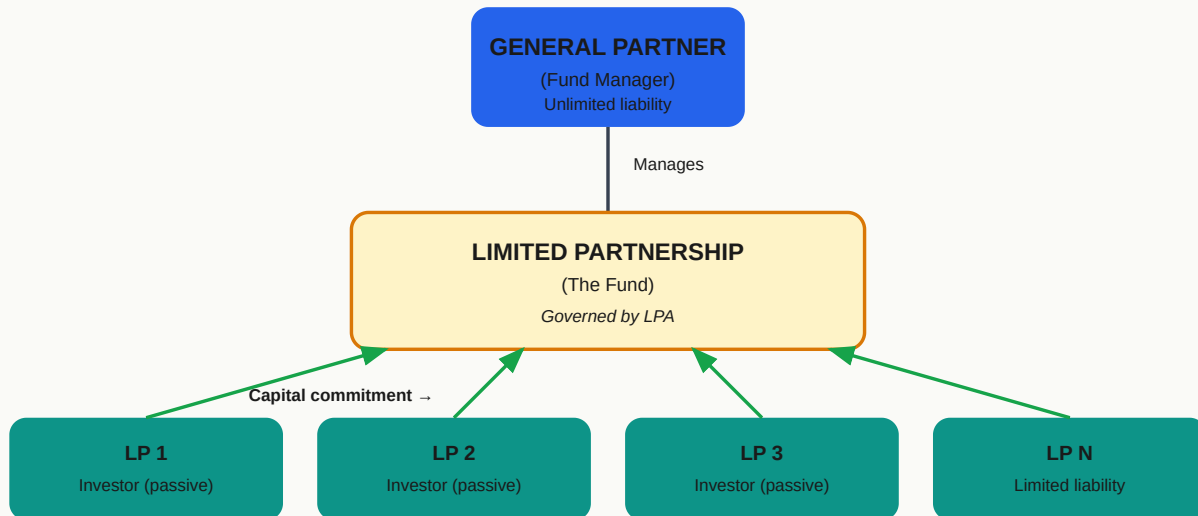
Q7. A family office with a \$50M commitment to a PE fund and a dedicated deal team decides to start making select direct investments alongside the fund. This approach is *best* described as:

LOS C · PARTNERSHIP STRUCTURES

Partnership Structures & the LPA

The most common structure for alternative investments is a **limited partnership**, governed by a **Limited Partnership Agreement (LPA)**.

GP / LP PARTNERSHIP STRUCTURE

**General Partner (GP)**

The **fund manager**. Responsible for:

- Identifying & executing investments
- Portfolio management day-to-day
- Reporting to LPs
- Fund administration & wind-down

⚠ **Bears unlimited liability**

Limited Partners (LPs)

The **investors**. Responsibilities:

- Provide capital (fund commitments)
- Passive role in fund operations

✓ **Limited liability (capped at commitment)**

Side Letters — The "Side Deals"

Agreements between the GP and *certain* LPs that exist **outside the LPA**. May include:

Extra reporting

First right-of-refusal (for co-investments)

Fee matching

□ **Exam Tip:** Remember the liability asymmetry: **GP = unlimited, LP = limited**. Limited liability for LPs is contingent on them NOT getting involved in day-to-day operations — if they do, they can lose limited partner status.

LOS C · COMPENSATION STRUCTURES

The "2 and 20" Fee Structure

1–2%

MANAGEMENT FEE

Based on **AUM** (hedge funds) or **committed capital** (private equity)

20%

PERFORMANCE FEE

Also called **incentive fee** or **carried interest**. Based on realized profits.

Key Difference: HF vs. PE Base Fee

	HEDGE FUNDS	PRIVATE EQUITY
Mgmt Fee Base	AUM (asset value)	Committed capital (total pledged)
Why?	HFs continuously trade; AUM changes daily	PE has long drawdown periods; committed $\neq$ invested
Example	$200M\ AUM \times 24M/yr$	$500M\ committed \times 210M/yr$ (even if only \$100M deployed)

Hurdle Rate (a.k.a. Preferred Return)

A minimum return the fund must earn *before* the GP collects any performance fee. Typically 6–10%.

HARD HURDLE

GP earns fees **ONLY** on returns in excess of the hurdle

$$Fee = 20$$

More LP-friendly. GP must "earn above" the hurdle to be paid.

SOFT HURDLE

GP earns fees on the **ENTIRE** return, if hurdle is exceeded

$$Fee = 20$$

More GP-friendly. If hurdle met, fee applies to all gains.

EXAMPLE 2

Hard vs. Soft Hurdle — Same Performance, Different Fees

□ GIVEN

INPUT	VALUE
Fund size (starting AUM)	\$100M
Gross return for the year	15%
Hurdle rate (preferred return)	8%
Performance fee (carry rate)	20%

The fund *has* beaten the hurdle ($15\% > 8\%$), so carry will be paid in either case. The only question is: *what base* does the 20% apply to?

□ FIND

1. Performance fee **under a hard hurdle** (carry only on return above 8%)
2. Performance fee **under a soft hurdle** (carry on entire return, once hurdle is cleared)
3. The dollar impact of the hurdle-type choice on a \$100M fund

✓ SOLUTION

□ SOLUTION · HARD HURDLE

1

Identify the carry base. Hard hurdle means carry applies *only* to the excess return above 8%.

$$\text{Excess return} = 15\% - 8\% = 7\%$$

2

Apply the 20% carry rate to the excess.

$$\text{Fee}_{\text{hard}} = 20\% \times 7\% = \mathbf{1.40\%} \text{ of AUM}$$

3

Translate to dollars.

$$\$100\text{M} \times 1.40\% = \text{\textbf{\$1.40M}} \text{ paid to the GP}$$

✓ SOLUTION

□ SOLUTION · SOFT HURDLE

1

Check the hurdle gate. Soft hurdle requires the fund to *exceed* 8% before any carry is paid.

$$15\% > 8\% \checkmark - \text{gate passes, GP earns carry on the full return}$$

2

Apply 20% carry to the ENTIRE return.

$$\text{Fee}_{\text{soft}} = 20\% \times 15\% = \text{\textbf{3.00\%}} \text{ of AUM}$$

3

Translate to dollars.

$$\$100\text{M} \times 3.00\% = \text{\textbf{\$3.00M}} \text{ paid to the GP}$$

□ ANSWER

METRIC	HARD HURDLE (LP-FRIENDLY)	SOFT HURDLE (GP-FRIENDLY)
Carry base	7% (excess only)	15% (entire return)
Performance fee (% of AUM)	1.40%	3.00%
Dollar fee on \$100M fund	\$1.40M	\$3.00M
LP net return (after 2% mgmt + carry)	$15\% - 2\% - 1.4\% = \text{\textbf{11.6\%}}$	$15\% - 2\% - 3.0\% = \text{\textbf{10.0\%}}$

GP earns extra under soft hurdle

+\$1.60M

1.6 percentage points — the "soft-hurdle premium"

□ KEY TAKEAWAY

- **Hard hurdle is LP-friendly:** GP only gets paid on the *alpha* they generated (return above the hurdle, a proxy for beta).
- **Soft hurdle is GP-friendly:** Once the fund clears the hurdle, GP gets carry on the *full* return — including the hurdle itself.
- **Watch for the "catch-up" variant.** A soft hurdle with catch-up lets the GP eventually earn 20% of the full return, but LP still gets their preferred-return layer first (see Example 3).
- **CFA exam cue:** "Excess return above hurdle" = hard hurdle. "Total return if hurdle is exceeded" = soft hurdle. The wording is deliberately subtle.

Alternative Fee Structures

STRUCTURE	MGMT	INCENTIVE	LOGIC
Classic	2%	20%	Industry standard
"1 and 30"	1%	30%	Lower base, higher incentive — better alignment
Founder's Shares	1.5%	10%	Discounted fees for early-stage fund investors
Either/Or	Manager gets the <i>higher</i> of mgmt fee OR incentive fee (not both)		Mutually exclusive; investor-friendly in flat years

□ **Exam Tip:** Remember the mgmt fee base: HF on AUM, PE on *committed* capital. This distinction is frequently tested. Also: hard hurdle is more *LP*-favorable; soft hurdle more *GP*-favorable.

INTERACTIVE TOOL

Fee Calculator — Hard vs. Soft Hurdle

Adjust the inputs to see how hurdle type affects GP & LP economics.

Starting AUM (\$M):

100

Gross Return (%):

15

Management Fee (%):

2

Performance Fee (%):

20

Hurdle Rate (%):

8

HARD HURDLE

\$1.40M

SOFT HURDLE

\$3.00M

Investor Net Return Summary

	HARD HURDLE	SOFT HURDLE
Gross Profit	\$15.00M	\$15.00M
Management Fee	\$2.00M	\$2.00M
Performance Fee	\$1.40M	\$3.00M
Total Fees	\$3.40M	\$5.00M
Investor Net Return	11.60%	10.00%

□ **Exam Tip:** With a soft hurdle, once the fund exceeds the hurdle, carry applies to the entire return. With a hard hurdle, only the excess above the hurdle is ever fee-bearing.

LOS C · INVESTMENT CLAUSES

4 Critical Investment Clauses

① Catch-Up Clause

Allows the GP to receive **100% of distributions above the hurdle** until they've earned 20% of *total* profits. After catch-up, remaining profits split 80/20 (LP/GP).

Purpose: Makes the GP's fee a function of the *total* return, not just the excess — economically equivalent to soft hurdle with a different mechanics.

Benefits the GP.

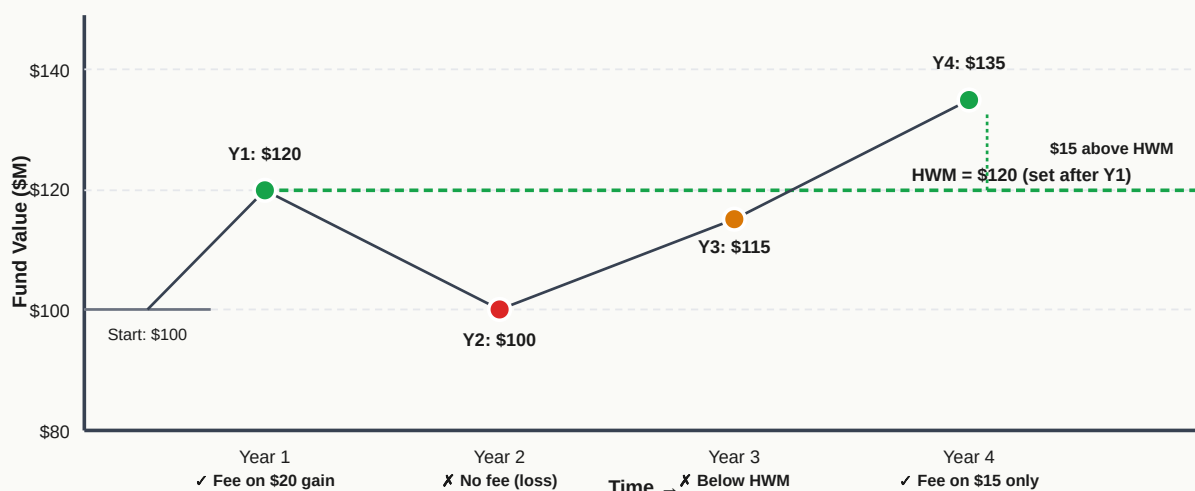
② High-Water Mark (HWM)

The **highest value net of fees** the fund has ever achieved for an investor. Incentive fees only apply to gains *above* the HWM.

Purpose: Ensures investors don't pay performance fees twice for the same dollar of performance.

Protects the LP.

HIGH-WATER MARK VISUALIZATION (4-YEAR FUND EXAMPLE)



Gross fund values shown for clarity. In practice, HWM is set at the peak **net-of-fees** investor value and only resets upward.

③ Waterfall (Distribution Method)

The rules for how profits are split between LPs and GP. Two main structures:

Whole-of-Fund (European)

All distributions go to LPs until they have received initial investment + hurdle rate. Only then does the GP start earning carried interest.

→ **More LP-friendly**

Deal-by-Deal (American)

Performance fees collected on each profitable deal as it exits. GP can earn carried interest before LPs are made whole on the entire fund.

→ **More GP-friendly**

④ Clawback Provision

Allows LPs to **reclaim** part of the GP's performance fees if early profitable exits are followed by later losses. Ensures the overall profit split matches the fund prospectus.

Most common with: deal-by-deal (American) waterfalls, since the GP may have collected fees on early wins that are offset by later losses.

LP vs. GP-Friendly Feature Scorecard

FEATURE	LP-FRIENDLY	GP-FRIENDLY
Hard hurdle	✓	
Soft hurdle		✓
Catch-up clause		✓
High-water mark	✓	
European waterfall	✓	
American waterfall		✓
Clawback provision	✓	

□ **Exam Tip:** LP-friendly: hard hurdle, HWM, European waterfall, clawback. GP-friendly: soft hurdle, catch-up clause, American waterfall. The relationship between American waterfalls and clawback is especially testable.

LOS C · WORKED EXAMPLE

Catch-Up Clause — Detailed Walkthrough

EXAMPLE 3 Catch-Up Clause: Splitting a 18% Return Between GP & LP**GIVEN**

PARAMETER	VALUE
Fund IRR on investment	18%
Hurdle rate (preferred return)	8%
Performance fee (carried interest)	20%
Catch-up clause	Yes — 100% to GP
Waterfall type	European (whole-of-fund)

FIND

- (a) The split of the 18% return between LPs and GP after applying the catch-up clause.
 (b) How the split differs from a *hard-hurdle* structure (no catch-up).

SOLUTION**SOLUTION**

A catch-up waterfall distributes returns in three sequential "layers":

1 Layer 1 — The Hurdle (first 8%):

100% → LPs · GP receives \$0

The LP must earn the preferred return before the GP receives anything. Running total — LP: 8.0% | GP: 0.0%

2 Layer 2 — The Catch-Up (next 2%):

100% → GP · LP receives \$0 on this layer

GP takes the next 2 percentage points until they've received 20% of the first 10% in total ($2\% \div 10\% = 20\%$).

Running total — LP: 8.0% | GP: 2.0%

3

Layer 3 — The Standard Split (remaining 8%):

80% → LPs · 20% → GP

Once the GP has "caught up," all further profits are split 80/20. LP gets $0.80 \times 8\% = 6.4\%$. GP gets $0.20 \times 8\% = 1.6\%$. Running total — LP: 14.4% | GP: 3.6%

4

Sanity check — GP share as % of total:

GP / Total = $3.6\% / 18.0\% = \text{exactly } 20.0\%$

Catch-up makes the GP's economics equivalent to "20% of the entire return" once the hurdle is cleared — it simply front-loads the catch-up layer to achieve that math.

5

Compare to a hard-hurdle structure (no catch-up):

GP's fee = $20\% \times (\text{Return} - \text{Hurdle}) = 20\% \times (18\% - 8\%) = 2.0\%$

LP's return = $18\% - 2\% = 16.0\%$

Value of catch-up clause to GP = $3.6\% - 2.0\% = 1.6 \text{ percentage points}$ of return on this deal.

ANSWER

GP: 3.6% · LP: 14.4% · Total: 18.0%

With catch-up clause → GP earns	3.6% (20% of total)
With catch-up clause → LP earns	14.4%
Hard hurdle (no catch-up) → GP earns	2.0% (20% of excess)
Hard hurdle (no catch-up) → LP earns	16.0%
Value of catch-up clause to GP	1.6 pp

KEY TAKEAWAY & SHORTCUT

The shortcut: When a catch-up is fully effective (return > hurdle + catch-up band), the GP earns exactly **20% of the total return** — economically identical to a soft hurdle. The LP gets the remaining 80%.

Fast-check recipe for exam problems:

1. Is Return > Hurdle? If NO → GP earns 0. Stop.
2. If YES (with catch-up) → $GP \approx 20\% \times \text{Total Return}$.
3. If YES (hard hurdle, no catch-up) → $GP = 20\% \times (\text{Return} - \text{Hurdle})$.
4. Subtract the two to find the catch-up's value to the GP.

LOS C · WORKED EXAMPLE

American vs. European Waterfall — Side-by-Side

EXAMPLE
4

Comparing American (Deal-by-Deal) vs. European (Whole-of-Fund) Waterfalls

□ GIVEN

Fund structure: 300M PE fund investing in 3 deals of 100M each. No catch-up clause.

PARAMETER	VALUE
Hurdle rate	8% (hard hurdle, simplified to \$8M per deal)
Carried interest	20% of profit above hurdle
Clawback provision	Yes (fully enforced)

Deal outcomes:

DEAL	YEAR EXITED	INVESTMENT	EXIT VALUE	PROFIT
Deal 1	Year 2	\$100M	\$200M	+\$100M
Deal 2	Year 4	\$100M	\$180M	+\$80M
Deal 3	Year 6	\$100M	\$50M	−\$50M
Fund totals		\$300M	\$430M	+\$130M

□ FIND

- GP's retained carry under each waterfall (American vs. European).
- The **timing** of GP's cash receipts and the implied value of that timing.
- The **clawback amount** triggered under the American waterfall.

✓ SOLUTION

□ SOLUTION — AMERICAN (DEAL-BY-DEAL) WATERFALL

1 Deal 1 exits Year 2 (+\$100M profit, exceeds hurdle):

$$\text{Carry} = 20\% \times (100M - 8M \text{ hurdle}) = 20\% \times \$92M = \mathbf{\$18.4M}$$

GP receives \$18.4M in Year 2 immediately after the exit.

2 Deal 2 exits Year 4 (+\$80M profit, exceeds hurdle):

$$\text{Carry} = 20\% \times (80M - 8M \text{ hurdle}) = 20\% \times \$72M = \mathbf{\$14.4M}$$

Cumulative GP receipts through Year 4: $18.4M + 14.4M = \$32.8M$

3 Deal 3 exits Year 6 (-\$50M LOSS):

No performance fee on losses. GP receives **\$0**.

But the loss reveals that GP was overpaid earlier — clawback is triggered.

4 Apply clawback — recalculate on whole-of-fund basis:

True fund-level profit = $130M$ (*vs.* $180M$ in "winners only" view)

Hurdle across 3 deals = $3 \times 8M = 24M$

Correct carry = $20\% \times (130M - 24M) = 20\% \times \$106M = \mathbf{\$21.2M}$

Clawback amount = $32.8M \text{ received} - 21.2M \text{ due} = \mathbf{\$11.6M \text{ returned to LPs}}$

✓ SOLUTION

□ SOLUTION — EUROPEAN (WHOLE-OF-FUND) WATERFALL

1 Deal 1 exits Year 2:

GP carry = \$0 (LPs not yet whole on total committed capital + hurdle)

2 Deal 2 exits Year 4:

GP carry = \$0 (LPs still not fully reimbursed including hurdle)

3 Deal 3 exits Year 6 (fund complete):

Now compute carry on total fund performance:

$$\text{GP carry} = 20\% \times (130M - 24M \text{ hurdle}) = \$21.2M \text{ (received in Year 6)}$$

No clawback needed — the GP never received carry prematurely.

ANSWER — SIDE-BY-SIDE COMPARISON

METRIC	AMERICAN	EUROPEAN
Total GP carry (after clawback)	\$21.2M	\$21.2M
GP cash received by Year 4	\$32.8M (pre-clawback)	\$0
GP cash received by Year 6	\$21.2M (net)	\$21.2M
Clawback triggered?	Yes — \$11.6M returned	No
Who does this favor?	GP (earlier cash)	LP (no clawback risk)

Bottom-line total carry under both structures \$21.2M (identical)

The only difference Timing of cash flows

KEY TAKEAWAY

- **Total carry is identical** under both structures *when clawback is fully enforced*.
- **Timing differs dramatically:** American front-loads GP cash; European waits for fund-end.
- **Time value of money** → **GP prefers American.** Receiving *32.8M in Year 4 (even with 11.6M clawback)* is worth more than \$21.2M in Year 6.
- **Clawback risk:** If a GP has spent early carry, a large clawback can cause cash-collection disputes — some LPs require escrow of ~50% of early carry.
- **LP defense:** Either insist on European waterfall or require an escrow account for early American-waterfall carry.

LOS C · J-CURVE CONCEPT

The PE Fund J-Curve — Qualitative Overview

Why it matters: The "J-curve" is one of the most counter-intuitive features of PE fund returns for new investors. In the fund's early years, interim IRRs are typically *negative* — not because the fund is losing money in any meaningful economic sense, but because management fees are being paid while portfolio investments have not yet been realized. As exits occur in later years, the cumulative IRR recovers and (for successful funds) turns sharply positive, producing the characteristic "J" shape.

Why the Shape Forms

- **Early years (investment period):** Capital is being called and deployed, management fees are being paid, and most portfolio investments are held at cost or marked conservatively. Reported interim returns dip below zero.
- **Middle years (value-creation phase):** Portfolio companies execute their operating plans. Unrealized gains begin to accumulate on the balance sheet, but cash has not yet been returned to LPs.
- **Later years (harvest period):** Exits generate distributions to LPs. Cumulative IRR rises and — for top-performing funds — turns strongly positive.

Implication: PE fund performance should not be judged on early-year IRRs. The J-curve is a timing artifact, not a signal of manager skill.

□ **Exam Tip:** The J-curve concept is introduced here qualitatively; quantitative performance measurement for PE funds (including DPI, TVPI, and net IRR calculation) is covered in LM02.

QUIZ 3 · CHECKPOINT

Test Your Understanding: Structures & Fees

Q8. A hedge fund with a 2% management fee and 20% performance fee using a **hard hurdle rate of 8%** generates a 15% gross return. The performance fee is based on:

Q9. Side letters in alternative investment funds are best described as:

Q10. A clawback provision is *most likely* triggered when:

Q11. Which waterfall structure is *more advantageous for the GP*?

Q12. A PE fund charges a 2% management fee on committed capital of $500M$. *Only* $200M$ has been deployed. Annual management fee =

MODULE COMPLETE

Your Scorecard

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LM01 Key Takeaways — Exam-Ready Cheat Sheet

Core Concepts

- 1 **Alternatives = anything beyond long-only stocks/bonds/cash.** Can be asset types OR strategies/approaches. A hedge fund using only public stocks is still alternative because of *how* it trades.
- 2 **Three categories:** private capital (PE + PD), real assets (RE, infrastructure, natural resources, digital), hedge funds.
- 3 **7 distinguishing features:** specialized knowledge, low correlation (rises in crises), illiquidity, long horizons, large capital, incentive fees, limited transparency.

Investment Methods

- 4 **Fund** (least involvement, lowest capital) → **Co-invest** (middle ground) → **Direct** (most control, highest expertise needed).
- 5 **Adverse selection bias** is unique to co-investing — fund may offer only less-attractive deals as co-invest opportunities.

Partnership & Fees

- 6 **Limited partnership** is the most common structure. GP = unlimited liability, manages fund. LPs = limited liability, provide capital. Governed by **LPA**.
- 7 **Side letters** = special agreements outside LPA; can include extra reporting, first right-of-refusal for co-investments, and fee matching.

- 8 "2 and 20": 2% mgmt fee + 20% performance fee. *HF: mgmt fee on AUM. PE: mgmt fee on committed capital.*
- 9 **Hard hurdle** = fee only on excess above hurdle (LP-friendly). **Soft hurdle** = fee on entire return if hurdle exceeded (GP-friendly).

Clauses

- 10 **Catch-up clause:** GP gets 100% of distributions above hurdle until they've earned 20% of total profits. Benefits GP.
- 11 **High-water mark:** incentive fee only on new highs; prevents double-charging. Benefits LP.
- 12 **Waterfall: American (deal-by-deal) = GP-friendly; European (whole-of-fund) = LP-friendly.** Clawback most relevant with American.

⚡ Last-Minute Exam Checklist

HF vs PE fee base: HF on AUM; PE on committed capital

LP-friendly: hard hurdle, HWM, European waterfall, clawback

GP-friendly: soft hurdle, catch-up clause, American waterfall

GP liability: unlimited. **LP liability:** limited (if passive)

Adverse selection: unique to co-investing

Correlation alert: rises in crises — undermines diversification