

## **Learning Module 1: Alternative Investment Features, Methods and Structures**

### **LOS 1a: describe features and categories of alternative investments**

Alternative investments represent a category of investments that do not fit into the traditional asset classes of public equity securities, fixed-income instruments, or cash. The term 'alternative' is used to describe these investments due to their unique characteristics and structure.

## **Alternative Investment Features**

Alternative investments, unlike traditional public debt and equity securities, possess unique features that set them apart. These features include:

- **The requirement for specialized knowledge to value cash flows and risks:** For instance, investing in a private equity fund requires an understanding of the specific industry, the company's financials, strategies such as short selling and leverage, and the overall market conditions.
- **Typically low correlation of returns with more traditional asset classes:** For example, real estate investments may not follow the same market trends as stocks and bonds, providing a diversification benefit.
- **Illiquidity, long investment time horizons, and large capital outlay:** For instance, investing in a start-up company may require a significant initial investment and a long-term commitment, as the company may not go public or be sold for several years.

## **Alternative Investment Characteristics**

The unique features of alternative investments lead to certain characteristics:

- **Different investment structures due to the challenges of direct investment:** For example, a hedge fund might use a limited partnership structure, where the fund

manager is the general partner and the investors are the limited partners.

- **Incentive-based fees to address or minimize information asymmetry between managers and investors:** For instance, a private equity fund manager might receive a performance fee based on the fund's profits, aligning the manager's interests with those of the investors.
- **Performance appraisal challenges:** Due to the unique nature and complexity of alternative investments, evaluating their performance can be challenging. For example, how do you accurately measure the performance of a private equity investment in a company that is not publicly traded?

Many alternative investments have equity or debt characteristics, but they often require a larger or longer financial commitment due to an underlying investment's extended life cycle or different investment methods and vehicles used to align the interests of managers and investors over time.

Contrary to individual securities, the scale and type of some alternative investments may be unattainable to some investors. Large pension funds, sovereign wealth funds, and not-for-profit endowments, which have the longest investment time horizons, have a tendency to devote a higher portion of their portfolio to these assets.

## Alternative Investment Categories

Alternative investment categories include:

- **Private capital:** This includes investments in private equity and venture capital funds, which invest in private companies or conduct buyouts of public companies.
- **Real assets:** This includes investments in physical assets like real estate, commodities, and natural resources.
- **Hedge funds:** These are pooled investment funds that use various strategies to earn active return, or alpha, for their investors.

## **Private Capital**

Private Capital is a broad term that refers to the funding provided to companies from sources other than public equity or public debt markets. It is categorized into two main types: private equity and private debt. For instance, a tech startup might raise private capital from venture capitalists or angel investors, rather than going public or taking on traditional debt.

## **Private Equity**

Private Equity is the capital provided in the form of equity investments. It is used for investment in privately owned companies or in public companies with the intent to make them private. Private equity is typically used in the mature life cycle stage or for firms in decline. The key approach used in private equity is leveraged buyouts.

For example, a private equity firm might buy a struggling retail chain with the intention of improving its operations and profitability before selling it off. Private equity managers frequently alter management and strategy, including closing, selling, or reorganizing business lines in order to boost profitability over a number of years by taking advantage of the greater control and flexibility that come with private ownership as opposed to public ownership.

**Venture Capital** is a specialized form of private equity where ownership capital is used for non-public companies in the early life cycle or startup phase. Often, an idea or business plan exists with a limited operation or customer base in this phase. For example, a biotech company with a promising new drug might receive venture capital to fund its clinical trials and other development efforts.

## **Private Debt**

Private Debt is the capital provided as a loan or other form of debt. It includes private loans or bonds, venture debt, and distressed debt. Venture debt is extended to early-stage firms with little or no cash flow. Distressed debt involves public or private debt of corporate issuers believed to be close to or in bankruptcy that could benefit from investors with capital restructuring skills. For instance, a hedge fund might buy the distressed debt of a bankrupt airline, hoping to profit

from its restructuring or liquidation.

## **Comparing Private Equity and Debt with Public Equity and Debt**

Private equity and private debt are alternative investments with features similar to public equity and public debt. For example, both private and public equity investors are company owners with residual claims to future cash flows and dividends.

Investors in private equity have full access to company information and the ability to influence day-to-day management and strategy decisions. On the other hand, investors in publicly traded equity receive only publicly available information, such as annual reports and periodic financial statements, with voting rights limited to decisions requiring shareholder approval.

## **Real Assets**

Real assets encompass a broad range of assets, which can include tangible items like real estate and natural resources, as well as intangible holdings like patents, intellectual property, and goodwill. These assets have the potential to either generate immediate or anticipated future cash flows, or they may serve as a reservoir of value. For instance, a piece of land (real estate) can generate cash flow through rent or its value can appreciate over time, providing a return on investment.

## **Real Estate**

Real estate encompasses both borrowed and owned capital invested in structures or land, and it can be categorized into developed and undeveloped land.

Commercial real estate comprises properties where the primary source of revenue is derived from private business activities, like a shopping mall where rental income from stores constitutes the primary cash flow.

On the other hand, the cash flows in residential real estate are generated through rents or mortgage payments made by households. For example, in the case of an apartment building, the primary cash flow source is the rent collected from tenants. Publicly traded forms of real estate

investments encompass entities like real estate investment trusts (REITs), which issue equity securities and mortgage-backed debt securities.

## **Infrastructure**

Infrastructure represents a unique category of real assets, often comprising land, buildings, and other durable fixed assets designed for public benefit, offering crucial services. Infrastructure projects may be initiated either solely by governmental entities or through a public-private partnership (PPP) involving private investors.

Infrastructure assets generate revenue either directly through fees, leases, or compensation for access rights or indirectly by fostering economic growth and enhancing a government's capacity to generate increased tax revenue from future economic activities. For example, a toll road developed via a PPP arrangement can yield direct cash flows in the form of toll fees collected

## **Natural Resources**

Natural resources encompass underdeveloped land, which inherently holds economic value, or naturally occurring goods that can be extracted. Underdeveloped land categories consist of farmland, timberland, or land designated for the exploration of natural resource deposits like minerals or energy sources.

Farmland can yield revenue through the sale of crops, while land containing a gold mine can generate income by extracting and selling gold. The potential returns from such underdeveloped land types include anticipated price appreciation over time and generated cash flows.

## **Commodities**

Commodities are standardized, traded goods, including plant, animal, energy, and mineral products used in goods and services production. Commodities do not themselves generate cash flows but, rather, are ultimately sold by commodity producers to commodity consumers for economic use.

For example, a farmer who grows wheat (a commodity) does not generate cash flow from the

wheat itself but from selling the wheat to a bread manufacturer. Investors seek to benefit from commodity price changes based on their future economic use as well as a lower correlation of returns versus other asset classes over the economic cycle.

## Other Real Alternative Assets

Among the various alternative assets, there are other tangible collectible items like fine art, wine, rare coins, watches, and similar unique holdings. Additionally, there are intangible assets like patents, litigation claims, and what is commonly referred to as 'digital assets.' This term, 'digital assets,' encompasses a wide range of assets that can be electronically created, stored, and transmitted and possess associated ownership or usage rights.

For example, a patent for a new technology is an intangible asset that can generate cash flows through licensing fees, while a rare coin can appreciate in value over time, providing a return on investment.

## Hedge Funds

Hedge funds are a unique type of private investment vehicle. They have the flexibility to invest in a wide array of assets, including but not limited to public equities, publicly traded fixed-income assets, private capital, and real assets. For instance, a hedge fund might invest in shares of a publicly traded company like Apple Inc. or in private equity of a startup company. However, the distinguishing factor of hedge funds is not merely the investments they make but the unique approach they adopt towards investing.

Hedge funds often employ a diverse range of investment strategies, including:

- **Use of Leverage:** involves using borrowed money to increase potential returns. For example, a hedge fund might borrow money to invest in a risky venture, with the hope that the returns from the venture will exceed the cost of borrowing.
- **Derivatives:** financial contracts whose value is derived from an underlying asset. For instance, a futures contract on gold is a derivative, as its value is derived from the price of gold.

- **Short selling:** involves selling assets that are not currently owned, with the intention of buying them back at a lower price. For example, a hedge fund might short-sell shares of a company if it believes that the company's share price is overpriced and is going to fall.

These strategies often result in a risk and return profile that is substantially different from that of simply buying and holding the underlying assets in an investment portfolio.

Investors also have the option to invest in a portfolio of hedge funds. This is often referred to as a **fund of funds**. For instance, an investor might choose to invest in a fund of funds that includes hedge funds focusing on technology companies, emerging markets, and real estate, thereby diversifying their investment.

## Question #1

Which of the following factors is *least likely* a consideration when incorporating alternative investments into a portfolio?

- A. The liquidity and market efficiency of the investments.
- B. The current market trends and popular investment choices.
- C. The potential for greater diversification and higher expected returns.

**The correct answer is B.**

The current market trends and popular investment choices are not a primary consideration when incorporating alternative investments into a portfolio. While market trends and popular investment choices can provide some insight into the potential performance of an investment, they should not be the sole basis for investment decisions. Alternative investments, such as private equity, hedge funds, real estate, commodities, and others, require a deep understanding of the specific asset class, its risk and return characteristics, and how it fits into the overall portfolio.

The decision to incorporate alternative investments into a portfolio should be based on a thorough analysis of the investor's risk tolerance, investment objectives, time horizon, and other personal circumstances. Following market trends or popular investment choices without a proper understanding of the underlying asset class can lead to poor investment decisions and potential losses.

**C is incorrect.** The potential for greater diversification and higher expected returns is indeed a consideration when incorporating alternative investments into a portfolio. Alternative investments can provide diversification benefits due to their low correlation with traditional asset classes, and they can potentially offer higher returns, albeit at a higher level of risk.

**A is incorrect.** The liquidity and market efficiency of the investments are also

important considerations when incorporating alternative investments into a portfolio. Many alternative investments are illiquid and inefficiently priced, which can create opportunities for skilled investors but also pose significant risks.

## Question #2

In the context of hedge funds, how would you *most likely* define the concept of leverage, and how does it impact the potential returns of the fund?

- A. Leverage is the process of investing only in high-risk assets to maximize potential returns.
- B. Leverage is the process of investing in a diversified portfolio to spread the risk and potentially increase returns.
- C. Leverage is the process of buying more assets than the fund's capital would allow, thus increasing the potential returns but also the risk of loss.

**The correct answer is C.**

Leverage, in the context of hedge funds, is indeed the process of buying more assets than the fund's capital would allow, thus increasing the potential returns but also the risk of loss. Hedge funds use leverage to amplify their potential returns by borrowing money to invest in more assets. This strategy can significantly increase the potential returns of the fund if the investments perform well. However, it also increases the risk of loss if the investments perform poorly.

The use of leverage can magnify both gains and losses, making it a double-edged sword. It is a key characteristic of hedge funds and a major reason why they can deliver high returns. However, it also makes them riskier than traditional investment vehicles. Therefore, investors in hedge funds need to be aware of the risks associated with leverage and be prepared for the possibility of significant losses.

**A is incorrect.** Investing only in high-risk assets to maximize potential returns is not the definition of leverage. While it is true that leverage can increase the potential returns of a fund, it does not involve investing only in high-risk assets. Leverage

involves borrowing money to invest in more assets, regardless of their risk level. It is a strategy that can be used in conjunction with a variety of investment strategies, including investing in both high-risk and low-risk assets.

**B is incorrect.** While investing in a diversified portfolio is a common strategy used by many investment vehicles, including hedge funds, to spread the risk and potentially increase returns, it is not what is meant by leverage. Diversification and leverage are two different investment strategies. Diversification involves spreading investments across a variety of assets to reduce risk, while leverage involves borrowing money to invest in more assets to increase potential returns.

## **LOS 1b: compare direct investment, co-investment, and fund investment methods for alternative investments**

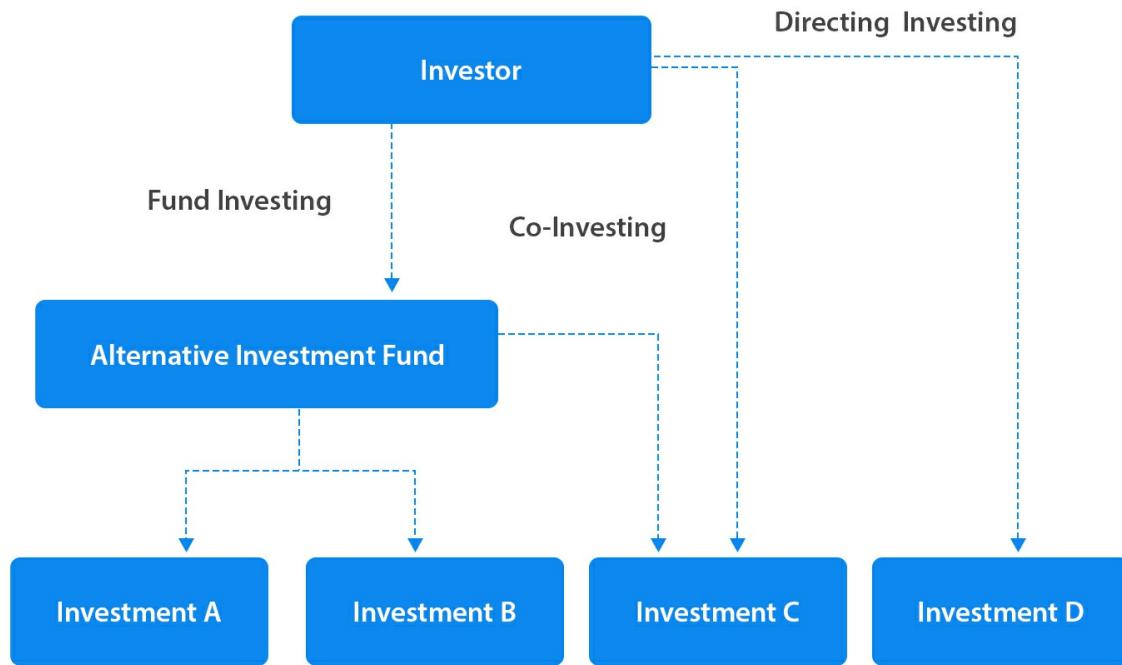
### **Alternative Investment Methods**

Investors have three primary methods of accessing alternative investments. These methods are:

- **Fund Investment:** This is the first method where investors put their money into a fund, such as a Private Equity (PE) fund. For instance, an investor might choose to invest in the Blackstone Group, a well-known PE fund.
- **Co-Investment:** In this method, the investor invests in a portfolio company of a fund. For example, an investor might co-invest with a venture capital fund like Sequoia Capital in a promising start-up.
- **Direct Investment:** Here, the investor invests directly into a company or project, such as infrastructure or real estate. For instance, an investor might directly invest in a real estate project like a new residential complex in New York City.



## Methods of Alternative Investments



Typically, investors start their journey in alternative investments via funds. As they gain more experience and knowledge, they may start to explore co-investing and direct investing.

## Fund Investment

Investors, especially those with limited resources or experience, often choose fund investing as a means to participate in alternative investments. In fund investing, investors contribute capital to a fund, and the fund's management takes care of the investments on their behalf.

The investor is then charged a management fee and, if the fund manager delivers superior results compared to a benchmark or hurdle rate, a performance fee. The investment decisions of fund investors are limited to either investing in the fund or not. Fund investing is available for all

major alternative investment types, including hedge funds, private capital, real estate, infrastructure, and natural resources.

Investing in alternative assets requires specialized skills that many investors do not have. For instance, investing in real estate requires knowledge about property valuation, legal issues, and market trends, which a typical investor may not have. Such investors can gain exposure to these assets through fund investing. In this method, one or more investors contribute capital to an investment management company that identifies, selects, manages, and monitors investments on behalf of the investors.

### **Comparing Fund Investment with Traditional Public Equity and Fixed Income**

Fund investment structures for alternative investments differ significantly from traditional public equity and fixed-income fund or ETF investments:

- Alternative funds usually involve the pre-commitment of funds before investment selection and an extended lock-up period during which the fund cannot be liquidated.
- Fund investment structures for alternative investments have higher management fees with more complex fee structures and less frequent transparency on periodic returns and fund positions compared to equity or fixed-income funds.
- Investors in alternative funds usually compensate managers using a performance-based fee structure to better align manager and investor incentives over extended periods.

### **Advantages of Fund Investment**

- Fund investing requires less investor involvement compared to direct and co-investing.
- The alternative investment option is accessible to anyone, regardless of their expertise.
- Diversification benefits come from the multiple investments found in a single fund.
- It requires a low minimum capital compared to the other investments.

### **Disadvantages of Fund Investment**

- It is costly since an investor must pay management and performance fees.
- An investor is expected to conduct due diligence when selecting the appropriate fund.
- There are exit restrictions due to lockups and similar limitations.

## **Co-Investment**

Co-investing is a strategic method of investment where an investor diversifies their investment approach by investing in assets both indirectly through a fund and directly in the same assets. This is achieved by obtaining co-investment rights. For instance, if a private equity fund is investing in a startup, an investor with co-investment rights could also directly invest in that startup alongside the fund.

Co-investing allows an investor to participate in a deal identified by a fund, not just by investing in the fund itself. This method of investment provides an opportunity for investors to expand their investment knowledge, skills, and experience beyond what they would gain from a fund-only investment approach.

### **Advantages of Co-investing**

- An investor can learn from the fund's expertise and improve at direct investing.
- Investors co-invest an additional amount into an investment, often without paying management fees on the capital they used for direct investments.
- Co-investing allows investors to be more actively involved in managing their portfolios than fund investing.

### **Disadvantages of Co-investing**

- Co-investors have limited control over the investment selection process compared to direct investing.

- It may be subject to adverse selection. A fund may offer less attractive investment opportunities to the co-investor while allocating capital to more appealing deals.
- Co-investing requires an investor to be more actively involved since they must evaluate both investment opportunities and the fund manager.

## **Benefits of Co-Investment for Managers**

Managers also benefit from choosing one or more co-investors. The benefits include:

- **Accelerating Investment Timing:** When available funds and expected inflows are insufficient for a specific deal, co-investors can provide the additional capital needed to expedite the investment. For instance, if a hedge fund manager identifies a lucrative investment opportunity but lacks sufficient funds, they can bring in co-investors to quickly secure the deal.
- **Expanding Investment Opportunities:** Co-investing can expand the scope of available new investments. By pooling resources with co-investors, managers can access larger, more diverse investment opportunities that they might not be able to afford on their own.
- **Increasing Diversification:** Co-investing can help increase the diversification of an existing pool of fund investments. By bringing in co-investors, managers can spread the risk across a wider range of assets, reducing the potential impact of any single investment's poor performance.

## **Direct Investment**

Direct investing is a method employed by large, sophisticated investors who possess the necessary skills and knowledge to manage individual alternative investments. This approach eliminates the need for an intermediary, providing the investor with maximum flexibility and control over their investment choices, financing methods, and timing. For instance, a billionaire investor like Warren Buffet might directly invest in a company like Apple, buying shares directly

from the market instead of going through a mutual fund or an ETF.

## **Private Equity and Direct Investing**

In the context of private equity, direct investing involves the acquisition of a direct stake in a private company. This is done without the use of a fund managed by an external asset manager or general partner.

The direct investor must have the resources to provide the specialized knowledge, skills, and oversight capabilities that direct investment requires. For example, a venture capitalist might directly invest in a startup, taking a significant stake in the company and actively participating in its management and decision-making process.

## **Direct Investing in Other Sectors**

While the direct investment approach is commonly applied to private capital and real estate, it is also used by some very large investors, such as pensions and sovereign wealth funds, for direct investment in infrastructure and natural resources.

## **Advantages of Direct Investment**

- An investor avoids paying ongoing management fees to an external manager.
- Direct investing allows an investor to create a portfolio of investments that suits their needs.
- Direct investing provides an investor with the utmost flexibility and control over their investment.

## **Disadvantages of Direct Investment**

- Direct investing requires a greater level of investment expertise.
- A direct investor won't enjoy the diversification benefits of fund investing.

- Direct investing requires more significant levels of due diligence because of the absence of a fund manager.
- Compared to fund investing, it requires a higher minimum capital.

## Question #1

Which of the following is *least likely* a potential benefit for the manager in choosing to co-invest?

- A. Reducing the need for active management of the investment.
- B. Expanding the scope of available new investments by pooling resources.
- C. Accelerating the timing of the investment when available funds are insufficient.

**The correct answer is A.**

Reducing the need for active management of the investment is NOT a potential benefit for the hedge fund manager in choosing to co-invest. Co-investment does not necessarily reduce the need for active management. In fact, it may increase the need for active management due to the complexity of managing multiple investors and their expectations.

Co-investment can bring additional resources and capital, but it also brings additional responsibilities and potential conflicts of interest. The manager will still need to actively manage the investment to ensure that it is performing as expected and to manage the relationships with the co-investors. Therefore, reducing the need for active management is not a benefit of co-investment for the hedge fund manager.

**B is incorrect.** Expanding the scope of available new investments by pooling resources is also a potential benefit of co-investment. By pooling resources with co-investors, a hedge fund manager can potentially access larger or more diverse investment opportunities that would be out of reach if the manager were investing alone. This can help to diversify the investment portfolio and potentially increase returns.

**C is incorrect.** Accelerating the timing of the investment when available funds are insufficient is indeed a potential benefit of co-investment. If a hedge fund manager

has identified a lucrative investment opportunity but does not have sufficient funds to take full advantage of it, bringing in co-investors can provide the additional capital needed to make the investment sooner rather than later.

## Question #2

An investor with co-investment rights is considering directly investing in a startup alongside a private equity fund. Which of the following is *most likely* a potential drawback that the investor should consider?

- A. Co-investing does not provide any learning opportunities.
- B. Co-investing requires more active management, which can increase costs.
- C. Co-investing does not allow the investor to participate in a deal identified by a fund.

**The correct answer is B.**

Co-investing requires more active management, which can increase costs. When an investor co-invests alongside a private equity fund, they are taking on a more active role in the investment. This means that they will need to dedicate more time and resources to managing the investment, which can increase costs. This is in contrast to investing in a private equity fund, where the fund manager takes on the responsibility of managing the investments.

The investor will need to conduct their own due diligence, negotiate terms, monitor the investment, and potentially take on a role in the management of the startup. All of these activities require time and expertise, which can increase the cost of the investment. Therefore, while co-investing can provide potential benefits such as increased control and potentially higher returns, it also comes with increased costs and responsibilities.

**A is incorrect.** Co-investing can provide significant learning opportunities. By taking on a more active role in the investment, the investor can gain a deeper understanding of the business and the industry. This can be a valuable experience that can be

applied to future investments. Therefore, the statement that co-investing does not provide any learning opportunities is incorrect.

**C is incorrect.** Co-investing does allow the investor to participate in a deal identified by a fund. In fact, this is one of the main benefits of co-investing. The investor can leverage the expertise and deal-sourcing capabilities of the private equity fund while also having the opportunity to invest directly in the startup. Therefore, the statement that co-investing does not allow the investor to participate in a deal identified by a fund is incorrect.

## **LOS 1c: describe investment ownership and compensation structures commonly used in alternative investments**

Alternative investment structures are complex due to the illiquidity, complexity, and long-term nature of these investments. These structures are designed to bridge potential gaps between manager and investor interests. They explicitly address the roles and responsibilities of both parties to mitigate these gaps. These roles are designed to ensure that both parties' interests are aligned and that the investment structure functions effectively. For instance:

- **Managers** might stipulate that investors are obligated to make future capital contributions. For example, in a private equity fund, the fund manager may call for additional capital from investors for new investment opportunities.
- **Investors** may put restrictions on manager investment selection to avoid conflicts of interest or hostile takeovers, among other investment criteria. For instance, an investor in a hedge fund may stipulate that the fund manager cannot invest in specific industries or companies.

Moreover, alternative investment structures tailor the distribution of returns between managers and investors to better align their incentives. For instance, performance-based compensation structures are designed to encourage managers to maximize returns in the best interest of investors. They can include:

- **Minimum return requirements for investors:** This ensures that the investors receive a certain level of return before the manager can receive their performance fee. For example, a hedge fund may have a hurdle rate of 8%, meaning it needs to earn at least 8% before the manager can receive their performance fee.
- **Delayed payouts:** This is a mechanism to ensure that the manager is focused on long-term performance. The manager's performance fee may be held in escrow and paid out over several years.
- **The ability to reclaim incentive compensation in the event of poor fund performance:** This is known as a **clawback provision**. If the fund performs poorly in

subsequent years, the investors can reclaim some of the manager's performance fee.

## Ownership Structures

Alternative investment vehicles frequently adopt partnership structures to optimize flexibility in their investment arrangements, allocate business-related risks and returns, and delineate specific responsibilities between investors and managers. Specifically, we shall look into limited partnerships.

### Limited Partnerships (LP)

Limited partnerships involve at least one general partner (GP) with theoretically unlimited liability who is responsible for managing the fund. Limited partners (LPs) are investors who own a fractional interest in the partnership based on their initial investment and the terms set out in the partnership agreements.

LPs play passive roles and are not involved with the management of the fund. The operations and decisions of the fund are controlled only by the GP. For example, in a private equity fund, the GP might be the private equity firm, while the LPs could be pension funds, endowments, or wealthy individuals. However, note that co-investment rights grant limited partners (LPs) the opportunity to make supplementary direct investments in the portfolio companies.

A limited number of LPs hold fractional interest in the fund. LP investors must generally meet specific minimum regulatory net worth, institutional, or other requirements to be considered accredited investors and, as such, are able to access these investments, which are less regulated compared to general public offerings.

### Limited Partnership Agreement (LPA)

A limited partnership agreement (LPA) establishes the terms of an LP. Important components of an LPA encompass the allocation of profits and losses, managerial duties and obligations (including investment criteria and limitations), as well as provisions governing the transfer,

withdrawal, and dissolution of the agreement.

For example, the LPA might specify that profits are distributed 80% to the LPs and 20% to the GP after the return of the initial investment.

## **Side Letters**

Occasionally, modifications to LP terms are implemented to cater to the distinct legal, regulatory, or reporting demands of a particular investor. In such cases, a supplemental document known as a side letter is issued between a GP and one or more LPs with terms that override or modify the original LPA terms. The terms might include:

- increased investor ability to transfer investments to a successor
- first right of refusal and other similar clauses,
- ability to forgo a contractual capital contribution,
- ability to receive additional investment reporting.
- “most favored nation” clause, which guarantees that any more advantageous or supplementary terms negotiated externally to the LPA with other investors will likewise be applicable to a specific LP.

## **Specialized Structures**

Different specialized structures are commonly adopted for other alternative investments. For instance,

- Infrastructure investors often engage in public-private partnerships, which involve agreements between the public and private sectors to fund, construct, and manage public infrastructure. Infrastructure projects frequently incorporate a special purpose entity tasked with securing borrowed and ownership capital for developing and operating a particular long-term asset.
- Investors in real estate or natural resource funds are typically categorized as

unitholders within a master limited partnership (MLP). An MLP shares similarities with a limited partnership but tends to offer greater liquidity and is frequently publicly traded. As an illustration, an MLP might be utilized for investments in oil and gas pipelines.

- Additional forms of liquid investments in alternative assets include real estate investment trusts (REITs), commodity funds, and various exchange-traded funds (ETFs).

## Compensation Structures

In the world of alternative investments, there often exists an asymmetry of information between the general partner (GP), who possesses specialized knowledge and control, and the limited partners (LPs). This imbalance necessitates the creation of more complex compensation structures to align the incentives of both parties. For instance, consider a venture capital firm (GP) and its investors (LPs). The firm has in-depth knowledge about the startups it invests in, while the investors rely on the firm's expertise to make profitable decisions.

### Management and Performance Fee

Unlike funds that own public equity or debt securities, which charge management fees as a fixed percentage of assets under management (AUM), alternative investment funds usually combine a higher management fee (often 1%-2% of AUM) with a performance fee (also known as an incentive fee or carried interest) based on a percentage of periodic fund returns.

Hedge funds and REITs usually assess a management fee based on assets under management. In contrast, private equity funds often apply this fee to committed capital, which encompasses the entire sum that limited partners (LPs) have pledged to support future investments.

The management fee is typically based on committed capital, not invested capital. This reduces the incentive for GPs to allocate the committed capital as quickly as possible, allowing them to be selective about deploying capital into investment opportunities. Furthermore, given the significant impact of the general partner (GP) on the asset's value, it would be unsuitable to

calculate management fees based on the value of assets under management.

For example, a hedge fund might charge a 2% management fee and a 20% performance fee. This means that for every \$100 million in assets, the fund would charge \$2 million in management fees. If the fund generates a return of \$20 million, it would also charge \$4 million (20% of \$20 million) as a performance fee.

## Performance Fees and Hurdle Rates

Performance fees in alternative investments are mechanisms to reward fund managers for achieving returns above a specified baseline. This baseline is often termed the '**hurdle rate**'. The introduction of a hurdle rate ensures that managers are incentivized to outperform a minimum benchmark, aligning their interests with those of the investors.

There are two primary types of hurdle rates:

### 1. Hard Hurdle Rate

In this arrangement, the manager earns fees only on the portion of returns that exceed the hurdle rate. For instance, with an 8% hard hurdle rate, if the fund achieves a 10% return, the manager is compensated based on the 2% excess return.

### 2. Soft Hurdle Rate

Under a soft hurdle rate, the manager earns fees on the entire return once the hurdle is surpassed. Using the same example, if a fund with an 8% soft hurdle rate achieves a 10% return, the manager is compensated based on the full 10%.

## Catch-up Clause

A **catch-up clause** is intended to make the manager whole so that their incentive fee is based on the total return and not exclusively on the return in excess of the preferred return. For instance, if a GP earns a performance fee of 20%, a catch-up clause stipulates that the GP receives all the distributions above the hurdle rate until they receive 20% of the profits earned. Every amount above that is then split 80/20 between the LPs and GP.

For example, consider a fund that has earned a 15% IRR, a performance fee of 20%, and a hurdle rate of 9% is applicable. Assuming that the catch-up clause is included in the agreement, LPs would take the 9% profit (hurdle rate), and then the GP would receive 1.2% [= 20% × 6%]. Given that the catch-up clause applies, the remaining 4.8% [= 6% - 1.2%] is split between the LPs and the GP in an 80/20 proportion. Therefore, the total amount LPs earn is 12.84% [= 9% + 80% (4.8%)], and the total amount a GP earns is 2.16% [1.2% + 20% (4.8%)].

Intuitively, in the absence of the catch-up clause, the LPs would still take the 9% profit, and the remaining 6% would be split between LPs and the GP at an 80/20 distribution rate. In this case, the GP would only receive 1.2%.

## **Calculating the GP's Rate of Return**

Ignoring management fees and assuming a single period fund rate of return of  $r$ , the GP's rate of return ( $r_{GP}$ ) with a hard hurdle rate is calculated as:

$$r_{GP} = \max[0, p(r - r_h)]$$

Where:

- $r_{GP}$  = GP's rate of return
- $p$  = Performance fee as a percentage of total return
- $r$  = Fund's rate of return for a period
- $r_h$  = Hard hurdle rate

If there's a catch-up clause, the calculation changes to:

$$r_{GP} = \max[0, r_{cu} + p(r - r_h - r_{cu})]$$

Where  $r_{cu}$  is the return rate, after which the GP starts to 'catch up' on performance fees.

## **Example: Calculating GP's Return**

Let's consider a fund with a 20% GP performance fee and an 8% hurdle rate. Suppose the fund achieves a 12% return for a period.

### **Without a catch-up clause (Hard Hurdle):**

The GP would earn fees on the 4% excess return (12% - 8%). Thus,  $r_{GP}$  would be  $20\% \times 4\% = 0.8\%$ .

### **With a catch-up clause:**

In this case, the catch-up return ( $r_{cu}$ ) is 0.8%. For the 12% fund return, the GP will earn on the full 0.8% catch-up return plus 20% of the excess return (12% - 8% - 0.8%). Thus,  $r_{GP}$  would be:

$$\begin{aligned} r_{GP} &= \max[0, r_{cu} + p(r - r_h - r_{cu})] \\ &= \max[0, 0.8\% + 20\%(12\% - 8\% - 0.8\%)] \\ &= 1.44\% \end{aligned}$$

## **High-Water Mark**

A **high-water mark** is the highest value, net of fees, that a fund has reached in its history. It indicates the highest cumulative return used to calculate an incentive fee. A high-water mark clause stipulates that a GP must recover the decrease in funds value from the high-water mark prior to charging a performance fee on new profits earned.

Usually, a high watermark is carried forward to the new calendar year in most alternative investments. However, in hedge funds, investors cannot claw back incentives earned in the previous calendar year if losses are experienced in the current year.

High-water mark application varies from investor to investor, given their investment timing. For instance, an investor who invests at the fund's lowest point will benefit when it improves. On the other hand, to qualify for payment, an investor who invests when the fund improves will have to wait until it recovers any previous losses.

## **Clawback Provision**

A **clawback clause** gives LPs the right to recover the performance fees from the GP. For

instance, this happens if a GP pays itself an incentive fee on profit not yet fully earned. Note that the clawback clause allows an investor to claw back past incentive fee accrual and payments. Clawback is usually applicable when the GP closes successful deals early and incurs losses after some time within the life of a fund.

## Waterfall structure

Alternative investments frequently employ a waterfall structure to establish the allocation of cash flows to general partners (GPs) and limited partners (LPs). There are two types of waterfalls: deal-by-deal (or American) waterfalls and whole-of-fund (or European) waterfalls.

- **Deal-by-Deal (American) Waterfalls:** Here, GPs can earn performance fees on individual deals, even before LPs have fully recouped their investments and earned their predefined returns. Clearly, this is beneficial to GPs.
- **Whole-of-Fund (European) Waterfalls:** LPs are prioritized. GPs only start earning profits once LPs have fully recouped their initial investments and the hurdle rate is achieved for the entire fund.

These structures are designed to ensure that the distribution of profits is fair, and that GPs are incentivized to deliver consistent, long-term returns to their LPs.

## Question

A private equity fund has \$500 million in committed capital. The fund charges a 2% management fee and a 20% performance fee with a hard hurdle rate of 8%. In a given year, the fund generates a return of \$50 million. How much would the fund *most likely* charge in total fees for that year?

- A. \$10 million
- B. \$12 million
- C. \$14 million

**The correct answer is B.**

The total fees charged by the private equity fund consist of two components: the management fee and the performance fee.

### Management Fee:

The management fee is calculated as a percentage of the committed capital. In this case, it is 2% of \$500 million.

$$\text{Management Fee} = 2\% \times \$500 \text{ million} = \$10 \text{ million}$$

### Performance Fee:

The performance fee is calculated as a percentage of the returns above the hurdle rate. The hurdle rate is 8% of the committed capital, which amounts to:

$$\text{Hurdle Rate} = 8\% \times \$500 \text{ million} = \$40 \text{ million}$$

Since the fund generated a return of \$50 million, the returns above the hurdle rate are:

$$\text{Returns above Hurdle Rate} = \$50 \text{ million} - \$40 \text{ million} = \$10 \text{ million}$$

Therefore, the performance fee is 20% of \$10 million:

$$\text{Performance Fee} = 20\% \times \$10 \text{ million} = \$2 \text{ million}$$

**Total Fees:**

The total fees charged by the fund for that year would be the sum of the management fee and the performance fee:

$$\begin{aligned}\text{Total Fees} &= \text{Management Fee} + \text{Performance Fee} \\ &= \$10 \text{ million} + \$2 \text{ million} \\ &= \$12 \text{ million}\end{aligned}$$

Therefore, the correct answer is B) \$12 million in total fees, with the hurdle rate not affecting the calculation as the returns exceeded the hurdle rate.

The hurdle rate affects this calculation by determining the portion of the returns that are subject to the performance fee. In this case, since the returns exceeded the hurdle rate, the performance fee is calculated based on the returns above the hurdle rate. If the returns had not exceeded the hurdle rate, there would be no performance fee, and the total fees would be equal to the management fee alone.