

Learning Module 6: Hedge Funds

LOS 6a: explain investment features of hedge funds and contrast them with other asset classes

Hedge funds, as private investment entities, are distinguished by their distinctive investment strategy. They employ a blend of traditional debt and equity tools, leverage, derivatives, short selling, and various tactics to produce and amplify returns. The primary aim of a hedge fund is to generate substantial returns, whether in an absolute sense or concerning risk-adjusted performance relative to the volatility of its portfolio.

Benchmarking the performance of hedge funds against traditional index performance benchmarks can pose a challenge due to the unique strategies they utilize. Consequently, many hedge funds choose to assess their performance based on an absolute return standard rather than tracking a benchmark.

Hedge funds are appealing due to their diversification effects, showing a typically low correlation with traditional asset investments.

Comparing Hedge Funds and Mutual Funds

While hedge funds and mutual funds may seem similar, there are significant differences.

Mutual fund managers have fixed compensation and might not always invest in the funds they oversee. In contrast, hedge fund managers receive a performance-based fee, and many mandate that managers invest in the hedge fund. Certain hedge funds implement a high-water mark, where the manager receives a performance fee only if the returns surpass the fund's previous highest value.

Hedge fund managers usually possess greater flexibility in making trading decisions and distributing client funds. Mutual funds are subject to extensive regulation as they are accessible to public investors, whereas hedge funds are exclusively available to institutional and accredited investors.

Hedge funds stand apart from various fund types like mutual funds, ETFs, bond funds, and REITs due to their private ownership and relatively minimal regulation. In contrast to private equity funds, hedge funds usually operate with a shorter time horizon and invest in more liquid asset classes.

Hedge Fund Strategies

Hedge funds frequently employ methods that appear to elevate portfolio risk, like borrowing funds for investment, employing leverage (derivatives), and engaging in short selling. However, rather than hedging risky positions against market movements, these strategies appear to magnify the risks instead.

Nonetheless, the hedge fund investment strategy divides the portfolio in a way where each part counterbalances the risks of the others. This approach allows for internal neutralization of market risks and, through careful management of the portfolio elements, enables the hedge fund manager to achieve improved risk-adjusted returns.

Hedge funds are investment vehicles that are typically classified based on their strategy. There are five broad categories of strategies that hedge funds employ. These include:

1. Equity hedge funds
2. Event-driven hedge funds,
3. Relative value hedge funds,
4. Opportunistic hedge funds, and
5. Multi-manager hedge funds.

Equity Hedge Fund Strategies

Equity hedge funds focus on investing in equities. Equity long-short funds concentrate on public equity markets and engage in both long and short positions involving equity and equity derivative securities. The fund manager would use their expertise to select stocks that they believe will outperform the market. The strategies used by these funds can be broadly categorized into two approaches: "bottom-up" and "top-down." The **bottom-up Approach** starts

with a company-level analysis, followed by an overall industry analysis, and finally, an overall market analysis. The **top-down approach** involves a global macro analysis, followed by sector/regional analysis, and finally, an individual company analysis or any market-timing approach.

Types of Equity Hedge Strategies

- **Fundamental Long/Short.** This approach includes purchasing undervalued stocks relative to their potential intrinsic value while selling short those moving in the opposite direction. The objective is to execute this trade reversal to achieve alpha. For example, a fund might go long on Amazon due to its strong growth prospects and short on a company like GameStop due to its struggling business model.
- **Fundamental Growth.** These tactics utilize fundamental analysis to pinpoint companies anticipated to display substantial growth and value appreciation. The fund then takes a long position in these stocks. On the other hand, the fund will take short positions on companies facing downward pressure in their business models, expected to demonstrate low or negative growth, and encounter capital devaluation.
- **Fundamental Value.** These strategies leverage fundamental analysis to detect undervalued companies with potential for corporate turnarounds, leading to anticipated future revenue and cash flow growth and, subsequently, higher valuations. The hedge fund acquires long positions in these companies to benefit from projected future stock price increases.
- **Short Biased.** This involves utilizing quantitative, technical, and fundamental analysis; these strategies involve shorting overvalued equity securities with minimal or no long-side exposures. The anticipation is for the company's share price to decline, consequently enhancing the profitability of the fund's portfolio.
- **Market Neutral.** These strategies use quantitative, fundamental, and technical analysis to identify under and overvalued equity securities. The hedge fund takes long positions in undervalued securities and short positions in overvalued securities while

seeking to maintain a market-neutral net position. The intent is to profit from the movements of individual securities, undervalued ones rising and overvalued ones falling. For example, a fund might go long on an undervalued company like IBM and short on an overvalued company like Netflix to maintain a market-neutral position.

Event-Driven Strategies

Event-driven strategies involve detailed bottom-up approaches that seek to generate profits from anticipated events that are predicted to alter valuations. These events generally revolve around changes in corporate structure, such as acquisitions or restructurings. For example, a significant event like Microsoft acquiring LinkedIn presents an opportunity for potential gains. These strategies might encompass long and short positions in common and preferred stocks, debt securities, and options.

Event-driven strategies include:

- **Merger Arbitrage.** Merger arbitrage strategies typically entail taking a long position on the stock of the company being acquired, bought at a price lower than the publicly announced takeover value, and a short position on the stock of the acquiring company at the time of the merger or acquisition announcement. For instance, in the scenario where Company A declares its intent to acquire Company B, a hedge fund might purchase shares of Company B, anticipating a price increase, while simultaneously shorting shares of Company A, anticipating a price decline. Leverage is commonly applied to enhance potential returns but concurrently escalates losses in the event of strategy failure.
- **Distressed/Restructuring.** Distressed or restructuring strategies center around securities of companies either currently in distress or believed to be close to bankruptcy. Hedge funds might acquire fixed-income securities trading at a substantial markdown but are sufficiently senior to be supported by ample corporate assets. Conversely, a fund might procure a debt instrument anticipated to transition into new equity following a restructuring or bankruptcy, commonly referred to as a fulcrum security. Subsequently, the fund can choose to retain the equity or divest its position.

- **Special Situations.** Special situation strategies concentrate on identifying chances to acquire shares of companies involved in specific activities like security issuance or repurchase, specialized capital distributions, rescue finance, asset sales, spin-offs, or other scenarios primarily driven by catalysts. For example, a hedge fund might invest in a company like HP during its split into two separate entities, expecting to profit from the restructuring.
- **Activist.** Activist strategies entail managers acquiring adequate equity stakes to facilitate a board position within the company, enabling them to impact corporate policies or direction. The objective is to instigate business changes that steer the investment toward a desired outcome. For instance, an activist hedge fund like Pershing Square might advocate for divestitures, restructuring, or capital distributions to shareholders. These hedge funds differ from private equity as they primarily function within the public equity market.

Relative Value Strategies

Relative value hedge funds aim to exploit price discrepancies between related financial instruments. For instance, if the price of gold is high in the US but low in the UK, a relative value hedge fund might buy gold in the UK and sell it in the US to profit from the price difference.

- **Convertible Bond Arbitrage.** This investment strategy aims to remain neutral in the market and capitalize on an identified mispricing between a convertible bond and its components: the underlying bond and the included call option.
- **Fixed Income (general).** These strategies center on assessing relative value within fixed-income markets, emphasizing sovereign debt and occasionally the comparative pricing of investment-grade corporate debt (known as relative value credit). Tactics may involve long-short trades between distinct issuers, corporate and government issuers, various sections within an issuer's capital structure, or different segments of an issuer's yield curve.
- **Fixed Income (Asset Backed, Mortgage Backed, and High Yield).** These

strategies emphasize the comparative value among diverse higher-yielding securities. They aim to secure an appealing and well-protected coupon return and capitalize on relative mispricing concerning security and quality. For example, if a mortgage-backed security is trading at a discount to its underlying mortgages, an investor could buy the security and short the individual mortgages, profiting if the security's price rises or if the mortgages' prices fall.

- **Multi-strategy.** These strategies engage in trading based on relative value, both within and among different asset classes or instruments. A multi-strategy manager's objective is to efficiently and promptly allocate capital across various strategy areas as market conditions evolve. For example, a multi-strategy hedge fund might have one team trading convertible bond arbitrage, another trading relative value in fixed income, and another trading relative value in asset-backed securities, all with the goal of maximizing returns while minimizing risk.

Opportunistic Strategies

Opportunistic hedge funds are flexible and can shift their investment strategies based on market conditions. For example, during a market downturn, an opportunistic hedge fund might shift its strategy to invest in distressed assets, anticipating that these assets will increase in value when the market recovers. The strategies used include:

- **Macro Strategies.** Macro strategies use a top-down methodology to recognize economic trends and execute trades according to anticipated shifts in economic indicators. For instance, if a macro strategy fund identifies a trend of rising inflation in the United States, it might adopt a long position in gold, a common hedge against inflation.
- **Managed Futures Funds.** Managed futures funds are actively managed funds making diversified directional investments primarily in the futures markets on the basis of technical and fundamental strategies. These funds are also known as commodity trading advisers (CTAs) because they historically focused on commodity futures. However, CTAs may include investments in a variety of futures, including commodities,

equities, fixed income, and foreign exchange.

Multi-Manager Hedge Funds

Multi-manager hedge funds employ multiple fund managers, each with their own strategy. Many hedge funds trade in a variety of financial instruments, including sovereign and corporate debt, commodities, futures contracts, options, derivatives, and even real estate investments. However, it's important to note that not all hedge funds maintain short positions or use leverage. Some hedge funds exploit niche areas of expertise in a sophisticated manner, and hedging and leverage may or may not be involved.

There are also **funds of hedge funds**, which create a diversified portfolio of hedge funds. These are particularly attractive to smaller investors who lack the resources to select individual hedge funds and build a portfolio of them.

Unique Characteristics of Hedge Fund Investments

Hedge funds, unlike traditional investments such as mutual funds or ETFs, possess several unique characteristics that set them apart.

1. Less Legal and Regulatory Flexibility

Hedge funds are subject to fewer legal and regulatory constraints, which allows them more flexibility in their investment strategies. This includes the use of shorting and derivatives, as well as the ability to focus on a larger investment universe.

2. Aggressive Investment Styles

Hedge funds often adopt aggressive investment styles, taking concentrated positions in securities that offer exposure to credit, volatility, and liquidity risk premiums. They also make relatively liberal use of leverage, which can increase the potential for higher returns but also increase risk.

3. Liquidity Constraints

Hedge funds often impose liquidity constraints, such as lockups and liquidity gates, which can limit investors' ability to withdraw their funds. For instance, a hedge fund might have a one-year lockup period during which investors cannot withdraw their funds, whereas a mutual fund investor can typically redeem their shares on any business day.

4. Higher Fee Structures

Hedge funds typically have higher fee structures involving both management and incentive fees. The incentive fees are designed to align the interests of the fund managers with those of the investors, as they are based on the fund's performance. For example, a hedge fund might charge a 2% management fee and a 20% performance fee, often referred to as "two and twenty."

5. Flexible mandates permitting the use of derivatives

This flexibility allows for more varied investment strategies and the use of specialized tools, like derivatives, shorting, or access to hedge funds, to manage and potentially enhance investment returns.

6. Large investment universe

Hedge funds often have the flexibility to invest in various financial markets, assets, and strategies that might not be accessible to other types of investment funds, such as mutual funds. This expansive investment scope allows hedge funds to explore diverse opportunities across different markets, asset classes, and investment instruments.

7. Relative liberal use of leverage

Hedge funds often have fewer regulatory constraints compared to other types of investment funds. They can use borrowed money or derivatives to magnify their positions, enabling them to potentially generate higher returns, but it also comes with increased risk due to the amplified exposure.

Considerations for Choosing a Hedge Fund

Investors should consider several factors when choosing a hedge fund:

- **Assess the operational framework, risk management practices, and portfolio performance monitoring** of the limited partner capabilities. For instance, a limited partner with a robust operational framework and strong risk management practices would be better equipped to handle market volatility and protect investor capital.
- **Evaluate the General Partner (GP) performance**, considering their fiduciary management guidelines, manager experience, and alignment of interests towards the fund's strategies. For example, a GP with a long track record of successful investments and a clear alignment of interests (such as investing their own money in the fund) would be a positive sign.
- **Be aware of the potential for fraud**, such as Ponzi schemes and false performance data reporting. This is particularly important given the reduced regulatory oversight of hedge funds compared to other investment vehicles.
- **Consider the fund's strategy, transparency, liquidity, and reporting practices.** For example, a fund that uses a complex, opaque strategy and has poor liquidity (i.e., it is difficult to withdraw your investment) may be riskier than a fund with a clear strategy and good liquidity.
- **Evaluate the fund manager's past performance** and understand how the fund compensates the managers and calculates the fees charged to investors. For instance, a common fee structure is "2 and 20", where the fund charges 2% of total asset value as a management fee and 20% of profits as a performance fee.

Risks of Hedge Funds

Despite their potential benefits, hedge funds also come with risks. Some of these include:

- **Complex strategies that may fail during market turmoil.** For example, a hedge fund using a high-leverage strategy could suffer significant losses if the market moves

against them.

- **Reduced regulatory oversight** can open the door for unscrupulous fund managers to exploit investors. This is why due diligence is crucial when selecting a hedge fund.
- **Large investments are typically required to participate in a hedge fund.** This can make hedge funds inaccessible to smaller investors and can also tie up a significant portion of an investor's capital, potentially limiting their ability to take advantage of other investment opportunities.

Question #1

A hedge fund manager is considering implementing a long-short equity hedge fund strategy. Which of the following is *most likely* the primary purpose of this strategy in the context of hedge fund management?

- A. To ensure that the hedge fund always has a balanced portfolio of long and short positions.
- B. To take advantage of price movements in both directions, potentially generating profits regardless of market conditions.
- C. To reduce the risk of the hedge fund's portfolio by always having an equal number of long and short positions.

The correct answer is B.

The primary purpose of a long-short equity strategy in the context of hedge fund management is to take advantage of price movements in both directions, potentially generating profits regardless of market conditions. This strategy involves buying stocks that are expected to increase in value (long positions) and selling short stocks that are expected to decrease in value (short positions).

The goal is to profit from both rising and falling markets. This strategy is not dependent on the overall direction of the market, making it a potentially effective approach in both bull and bear markets. The long-short equity strategy is a type of absolute return strategy, which seeks to produce positive returns irrespective of the overall market conditions. It is a common strategy used by hedge funds to generate returns and manage risk.

A is incorrect. While a long-short equity strategy does involve maintaining both long and short positions, the primary purpose is not to ensure a balanced portfolio. The balance between long and short positions can vary depending on the fund manager's outlook on the market and individual stocks. The strategy is more about exploiting

opportunities for profit in both rising and falling markets than maintaining a specific balance of long and short positions.

C is incorrect. While a long-short equity strategy can help to reduce risk by providing a hedge against market downturns, the primary purpose is not to reduce risk by always having an equal number of long and short positions. The number of long and short positions can vary, and the strategy is more focused on generating profits from price movements in both directions than on risk reduction.

Question #2

An investor is reviewing the performance of a General Partner (GP) of a hedge fund. The GP has a long track record of successful investments and has shown a clear alignment of interests by investing their own money in the fund. What does this indicate about the GP's performance and commitment to the fund?

- A. The GP is likely to be less committed to the fund's success because they have their own money at risk.
- B. The GP's successful track record and personal investment in the fund are positive signs of their commitment and potential for continued success.
- C. The GP's past performance does not necessarily indicate future success and their personal investment does not affect their commitment to the fund.

The correct answer is B.

The GP's successful track record and personal investment in the fund are indeed positive signs of their commitment and potential for continued success. A General Partner (GP) who invests their own money in the fund they manage is demonstrating a strong alignment of interests with the other investors in the fund. This is often seen as a positive sign by investors, as it indicates that the GP has a personal stake in the fund's success and is, therefore, likely to be highly motivated to ensure its performance.

Furthermore, a GP with a long track record of successful investments is likely to have

developed a strong set of investment skills and strategies, which could potentially contribute to the continued success of the fund. However, it's important to note that past performance is not a guarantee of future results, and all investments carry some level of risk.

A is incorrect. The assertion that the GP is likely to be less committed to the fund's success because they have their own money at risk is counterintuitive. In fact, the opposite is generally true: a GP who has invested their own money in the fund is likely to be more committed to its success, as they have a personal financial stake in the outcome.

C is incorrect. While it's true that a GP's past performance does not necessarily indicate future success, their personal investment in the fund can indeed affect their commitment to the fund. As mentioned above, a GP who invests their own money in the fund is demonstrating a strong alignment of interests with the other investors, which is generally seen as a positive sign of their commitment to the fund's success.

LOS 6b: describe investment forms and vehicles used in hedge fund investments

Recap: Hedge Funds

A hedge fund is typically structured as a private investment partnership. This can be either onshore, like in the United States, or in a tax-advantaged offshore location, such as the Cayman Islands. The offering of the hedge fund is subject to certain legal restrictions, which vary by jurisdiction.

Hedge funds, much like private equity funds, are commonly structured as private limited partnerships or limited liability companies. In this structure, the hedge fund manager, responsible for investment choices, serves as the general partner. The partnership or managing member collects a management fee, usually a percentage of the total assets under management, while the general partner is remunerated based on the fund's performance, typically through a performance fee—a percentage of the fund's profits.

Investment in Hedge Funds

Investors in hedge funds purchase a share of the fund or partnership. In return, they receive a fixed percentage of the fund returns after the deduction of applicable fees. A typical fee structure is the "2 and 20" structure, where the management fee is 2% of the total assets, and the performance fee is 20% of the profits.

Another example of the fee structure is 1 or 30, which implies that the manager earns the greater of a 1% management fee or an incentive fee of 30% of the fund's alpha or outperformance against a benchmark rather than a performance fee based on total profits.

The fund's legal and contractual relationship between the fund manager and the investor is established through fund documents, such as the private placement memorandum, partnership agreement, and articles of incorporation. These documents also establish the operational structure of the fund.

Forms of Hedge Fund Investment

Direct Hedge Fund Investment Forms

Master Feeder Structure

The master-feeder structure, widely used in hedge funds, is tailored for maximum tax efficiency and involves an offshore feeder fund and an onshore feeder fund. To illustrate, consider a hedge fund based in the United States (onshore feeder fund) that also attracts investments from Europe (offshore feeder fund).

The feeder funds feed into a master fund that invests the capital based on its contractual partnership agreements. The investment returns, after management and performance fees, flow back to the feeder funds to the investors.

Side Letters

Apart from the partnership agreement that outlines duties, hedge funds frequently employ side letters to address an investor's particular legal, regulatory, tax, operational, and reporting needs. These side letters supplement and, at times, override the terms specified in the fund's documents. They are commonly utilized when an investor in a hedge fund needs certain accommodations without altering the private placement memorandum, partnership agreement, or articles.

On occasion, specific privileges are granted to a particular investor, such as expanded information rights. For instance, a side letter might grant an investor more detailed quarterly reports compared to other investors.

Separately Managed Account (SMA)

Larger investors in the hedge fund arena might opt for a "fund of one" or a separately managed account (SMA) structure. These setups consist of distinct investment accounts where the investor maintains more control. With the "fund of one" arrangement, the hedge fund is

established solely for one investor. In the case of an SMA, the investor establishes their personalized investment entity, with the assets held and registered under the investor's name.

Nonetheless, the everyday management of the account is entrusted to the hedge fund manager. These structures may necessitate additional agreements and service providers for smooth and efficient operation.

Advantages and Disadvantages of SMA

An SMA structure provides a tailor-made portfolio featuring investor-specific investment directives, improved transparency, efficient capital allocation, and increased liquidity, giving the investor more control while maintaining lower fees.

Nevertheless, SMAs involve more operational complexity and require higher governance oversight, making them better suited for larger institutional investors.

In contrast to a commingled fund, the managers lack a stake in the fund investments. Investors negotiate for reduced fees and fund expenses but may, in turn, receive allocations only to the fund manager's most liquid investment trades. As a result, the managers' overall motivation for investment performance might be diminished.

Indirect Hedge Fund Investment Forms

Investing indirectly in hedge funds is a strategy designed to render hedge fund exposures more attainable for smaller institutional and larger retail investors. The rationale for pursuing indirect exposure often involves minimizing management expenses, enhancing performance visibility, and bolstering liquidity.

For example, a retail investor with limited familiarity with the complexities of hedge fund management might select an indirect investment to access a diversified hedge fund portfolio without the need to oversee the investments directly. This approach enables them to leverage the expertise of professional fund managers while also reducing their risk exposure.

Fund-of-Hedge-Funds Approach

One prevalent indirect investment approach is through fund-of-hedge-funds strategies. These funds pool investments from various investors and allocate the funds into a diversified array of hedge fund investments across different strategies, regions, and management styles. This method offers direct diversification benefits.

Fund-of-hedge-funds generally present lower investment minimums, shorter lockup periods, and typically more favorable exit liquidity. However, this strategy entails higher fees. The fund of funds manager applies additional fees atop the existing hedge fund management fees, which reduces the initial gross returns for the end investor and could mean paying fees multiple times for managing the same assets.

In spite of the supplementary fees, investors opt for funds of funds because they offer access to underlying hedge funds that might otherwise be closed to new investors. Although funds of funds offer greater liquidity, this may lead to diminished performance due to fund redemptions during market turmoil.

Managers of fund-of-hedge-funds must possess expertise in evaluating hedge funds, monitoring both absolute and relative performance, and often have the leverage to negotiate better redemption or fee terms compared to individual investors.

Hedge Fund Replication ETFs

A growing array of exchange-traded products, including ETFs, aim to imitate hedge fund investment methodologies without directly investing in hedge funds themselves. Hedge fund replication ETFs endeavor to produce returns highly correlated with actual hedge fund returns.

However, the performance of these strategies often falls short when compared to pure hedge fund strategies due to several reasons: they are publicly traded, face more stringent regulatory constraints, lack restrictions on redemptions, and are unable to leverage to the same extent.

These investments offer enhanced liquidity, reduced fees, and heightened transparency in contrast to similar hedge fund or fund-of-funds strategies and aim to align with the monthly returns of hedge fund indexes.

Question #1

Which of the following statements is *most likely* accurate about the role of the fund-of-hedge-fund managers? Fund-of-hedge-fund managers:

- A. do not need expertise in conducting hedge fund due diligence.
- B. are not responsible for monitoring both absolute and relative performance.
- C. are often able to negotiate better redemption or fee terms than individual investors can.

The correct answer is C.

Fund-of-hedge-fund managers are often able to negotiate better redemption or fee terms than individual investors can. This is because they manage a large pool of assets and have a significant bargaining power with the underlying hedge funds. They can use this power to negotiate more favorable terms for their investors, such as lower fees or more flexible redemption terms.

This can be particularly beneficial in times of market turmoil, when investors may need to redeem their investments quickly. In addition, fund-of-hedge-fund managers have the expertise and resources to monitor the performance of the underlying hedge funds and make informed investment decisions on behalf of their investors. They can also provide access to hedge funds that may be closed to new investors, offering further diversification benefits.

A is incorrect. Fund-of-hedge-fund managers do need expertise in conducting hedge fund due diligence. This is a critical part of their role, as they need to assess the quality of the underlying hedge funds, their investment strategies, their risk management practices, and their operational infrastructure. This due diligence process is essential for identifying potential risks and ensuring that the fund-of-hedge-funds is well diversified and aligned with its investment objectives.

B is incorrect. Fund-of-hedge-fund managers are indeed responsible for monitoring

both absolute and relative performance. They need to assess the performance of the underlying hedge funds both in absolute terms and relative to their benchmarks or peers. This is a key part of their role and is crucial for ensuring that the fund-of-hedge-funds meets its investment objectives.

Question #2

Which of the is *most likely* the potential reasons for the returns from Hedge Fund Replication ETF not matching those of the actual hedge funds?

- A. ETFs have higher fees and lockup periods compared to direct hedge fund investments.
- B. ETFs do not use quantitative tools to imitate a broad spectrum of hedge fund returns or a specific style return.
- C. ETFs are publicly traded, are subject to a much heavier regulatory burden, do not impose restrictions on redemptions, and cannot use leverage to the same level as actual hedge funds.

The correct answer is C.

The returns from Hedge Fund Replication ETFs might not match those of the actual hedge funds due to several reasons, and the most significant ones are encapsulated in Choice A. Firstly, these ETFs are publicly traded, which means they are subject to a much heavier regulatory burden than actual hedge funds. This can limit their investment strategies and potentially reduce their returns. Secondly, these ETFs do not impose restrictions on redemptions like actual hedge funds do.

This means they need to maintain a higher level of liquidity, which can also limit their investment strategies and potentially reduce their returns. Lastly, these ETFs cannot use leverage to the same level as actual hedge funds. Leverage can amplify returns, but it can also amplify losses. Therefore, the inability to use leverage to the same extent can result in the returns from these ETFs not matching those of the actual hedge funds.

A is incorrect. In fact, one of the main advantages of Hedge Fund Replication ETFs is that they typically have lower fees and no lockup periods compared to direct hedge fund investments. Therefore, this is not a reason why the returns from these ETFs might not match those of the actual hedge funds.

B is incorrect. Hedge Fund Replication ETFs do use quantitative tools to imitate a broad spectrum of hedge fund returns or a specific style return. This is one of the main strategies they use to replicate hedge fund investment styles. Therefore, this is not a reason why the returns from these ETFs might not match those of the actual hedge funds.

LOS 6c: analyze sources of risk, return, and diversification among hedge fund investments

Hedge funds function as investment vehicles designed to minimize market exposure and returns derived from beta, emphasizing the generation of idiosyncratic returns. The primary source of excess return in hedge funds comes from exploiting market inefficiencies, which could be fleeting, and the manager's skill in leveraging these inefficiencies.

For example, a hedge fund manager might identify an undervalued stock caused by a momentary market overreaction and heavily invest in it, creating alpha as the market rectifies itself.

Sources of Hedge Fund Performance

Hedge fund performance can be ascribed to three sources:

- **Market beta:** This constitutes the overall market beta achievable through market index-based funds or ETFs.
- **Strategy beta:** This is the beta associated with the hedge fund's investment strategy deployed within the broad market.
- **Alpha:** These are the manager-specific returns due to the selection of specific positions.

Managers have the ability to capture strategy beta and alpha returns by virtue of their expertise in identifying mispriced securities and sectors, accurately timing the market, and exercising operational control over the company's business model. They can also employ leverage to magnify the outcomes.

Traditional Asset Pricing Models

Conventional asset pricing models function based on a series of assumptions, including the assumption of market efficiency. Hedge fund returns stem from systematic and idiosyncratic alternative risk factors that these models do not account for.

For example, a hedge fund might generate returns from exploiting pricing inefficiencies in the market, which would not be captured by a traditional asset pricing model that assumes market efficiency.

Investor Returns and Hedge Fund Fees

Generally, investors often do not fully capture the returns yielded by hedge funds. Hedge funds are recognized for their elevated fees, which diminish the alpha they generate. For instance, a hedge fund might impose a 2% management fee and a 20% performance fee, leading to a substantial portion of the fund's returns being allocated to fees.

Additionally, when capital is redeemed from liquidated positions, it may lead to a reduced payout, thereby decreasing the overall return from the fund. If a hedge fund has to vend assets at a loss to fulfill redemption demands, this could further lower the fund's returns.

Challenges in Assessing Hedge Hedge Risk-Adjusted Returns

To assess the risk-adjusted returns of individual hedge funds and collective hedge fund strategies, hedge fund indexes are employed. These indexes are formulated using publicly accessible hedge fund performance data.

The majority of hedge fund indexes rely on information reported voluntarily by hedge fund managers and other authorized recipients of performance data. This voluntary reporting introduces various biases, indicating that hedge fund performance is probably overestimated.

These indexes may encounter **selection bias**, wherein individual funds are placed into strategy peer groups in an irregular fashion. This allocation might rely on the prospectus in some cases, historical style analysis in others, or a combination of approaches. Moreover, indexes may also draw from inconsistent sources of the underlying data.

Fund indexes may face **survivorship bias**, where funds that have stopped reporting are excluded from the index, potentially leading to an inflated depiction of performance. To mitigate this bias, incorporating the returns of both active funds and those that have ceased reporting can be instrumental.

Moreover, hedge funds that have closed to new investors or ceased operations because of subpar performance are treated similarly; their performance is omitted from the index value.

Additionally, it's crucial to acknowledge that hedge fund performance data is commonly released with a delay, often around four weeks or one month. Due to the non-investable and illiquid nature of these indexes, replicating their performance can pose a challenge.

Another potential concern is **backfill bias**. This occurs when a successful fund commences reporting its performance for the first time, and its prior strong performance is added to the index. This may result in an exaggeration of the index's actual performance. This situation resembles survivorship bias, occurring when a new hedge fund is integrated into an index and its historical performance is retroactively added "backfilled" into the index's database.

Lastly, most hedge fund indexes do not weight funds by assets under management. In these indexes, each hedge fund is given an equal index weighting in the performance peer group. This can result in skewed comparisons between large and small funds compared to the performance of a size-weighted index.

Hedge Fund Investment Risks and Returns

In traditional investments, funds such as index ETFs tend to diversify away a significant portion of idiosyncratic risks by investing in numerous stocks and earning their return by bearing the systematic risk, also called beta. On the other hand, hedge funds utilize various instruments across asset classes and methods, with an aim to earn absolute returns under all market environments.

Hedge Fund Benchmarking

Hedge fund managers have a high degree of flexibility over investments and offer minimal disclosure, making it difficult to conduct performance attribution analysis. For example, a hedge fund might invest in private equity, real estate, commodities, and other non-traditional assets, and it might not disclose these investments until much later.

The relative illiquidity of investments held by the funds makes marking to market a problematic and potentially futile process. Therefore, attributing the sources of returns and risks is a composite process that is further complicated by the complexity of the strategies and compounded using various sources of leverage.

As such, risk and return comparisons are typically made to fund-of-funds composite indexes to minimize return distortions. This approach controls for the effects of self-reporting and selection biases and ensures that the fund-of-funds benchmark index is investable.

Examples of hedge fund indices include the HFRI Fund of Funds Composite Index, the MSCI ACWI Index, and the Bloomberg Barclays Global Aggregate Index.

Hedge Fund Strategies Performance

Assessing the performance of diverse hedge fund strategies across time involves considering the connection between hedge fund returns and risk, typically measured by the standard deviation of returns. For instance, strategies like short-bias and betting on stock price declines have demonstrated lower performance compared to all other strategies in both return and standard deviation-based risk. Numerous hedge fund strategies exhibit notably different risk and return features when contrasted with typical equity and fixed-income benchmarks.

The risk-return tradeoff of hedge fund investment is also measured using the coefficient of variation of annual hedge fund returns. The coefficient of variation can be seen as the price of return relative to risk. Intuitively, a higher coefficient of variation indicates a greater return for the same amount of risk.

Diversification Benefits of Hedge Fund Investments

Hedge funds present opportunities for risk diversification, but these advantages can vary. Therefore, investors need to be diligent in their selection of a hedge fund manager.

Typically, hedge fund performance shows minimal correlation with traditional asset classes like bonds and currencies/cash. This aspect makes hedge funds an appealing choice for conventional

investors aiming for diversified portfolios and stable returns in the long term.

For instance, integrating hedge funds into a traditional 60/40 portfolio (60% stocks and 40% bonds) can lead to a decrease in the total portfolio standard deviation and an increase in the Sharpe ratio. This results in enhanced portfolio diversification and improved risk-adjusted return.

Question

An investor is considering diversifying his portfolio, which is primarily composed of stocks and bonds. He is considering adding a hedge fund to his portfolio. Based on the general characteristics of hedge funds, how might this decision potentially impact the overall risk of his portfolio and why?

- A. The overall risk of the portfolio would increase due to the high correlation between hedge funds and traditional asset classes.
- B. The overall risk of the portfolio would decrease due to the low correlation between hedge funds and traditional asset classes.
- C. The overall risk of the portfolio would remain the same as hedge funds have no correlation with traditional asset classes.

The correct answer is **B**.

Adding a hedge fund to a portfolio primarily composed of stocks and bonds could potentially decrease the overall risk of the portfolio due to the low correlation between hedge funds and traditional asset classes. Hedge funds employ a variety of strategies, including short selling, leverage, arbitrage, derivatives, and other complex financial instruments, which can result in a low correlation with traditional asset classes such as stocks and bonds. This low correlation can provide diversification benefits, reducing the overall risk of the portfolio.

A is incorrect. Hedge funds do not necessarily have a high correlation with traditional asset classes. The strategies employed by hedge funds can result in a low correlation with traditional asset classes, providing diversification benefits and potentially reducing the overall risk of the portfolio.

C is incorrect. While it is true that some hedge fund strategies may have no correlation with traditional asset classes, it is not accurate to say that all hedge funds have no correlation with traditional asset classes. The correlation between hedge

funds and traditional asset classes can vary depending on the specific strategies employed by the hedge fund. Therefore, adding a hedge fund to a portfolio could potentially impact the overall risk of the portfolio.