

**INTRODUCTION TO
ALTERNATIVE INVESTMENTS**

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WHAT IS AN ALTERNATIVE INVESTMENT?

This lesson describes large categories and subcategories of alternative investments, and provides a broad overview of how alternative investments differ from traditional investments.

LESSON MAP

- Demonstrate knowledge of the view of alternative investments by exclusion.
- Demonstrate knowledge of various alternative investment types.
- Demonstrate knowledge of the concept of structures in investments.
- Demonstrate knowledge of how alternative and traditional investments are distinguished by return characteristics.
- Demonstrate knowledge of how alternative and traditional investments are distinguished by methods of analysis.
- Demonstrate knowledge of other factors that distinguish alternative investments from traditional investments.
- Demonstrate knowledge of the goals of alternative investing.

KEY CONCEPTS

Four major alternative investment categories are covered in the CAIA curriculum: real assets, hedge funds, private equity, and structured products. “Structures” help distinguish alternative investments from traditional investments, and the five primary types of structures are (1) regulatory, (2) securities, (3) trading, (4) compensation, and (5) institutional structures. For example, the primary structure impacting hedge funds is the trading structure due to their use of “active, complex, and proprietary” trading strategies, whereas the primary structure defining private equity is the institutional structure, as the securities are not publicly traded. Four return characteristics (diversification, illiquidity, inefficiency, non-normality) help distinguish alternative investments from traditional investments.

Relative to traditional investments, alternative investments may require (1) different return computation methods, (2) different statistical methods, (3) different valuation methods, and (4) different portfolio management methods on account of the many factors that distinguish the two.

Relative to traditional investments, (1) alternative investments often have more information asymmetries, (2) trading structures in some alternative investments can intensify problems associated with incomplete markets and moral hazards, and (3) alternative investments are more innovative, necessitating constantly evolving methods of analysis.

Relative to traditional investments, the goals of alternative investing are often tilted toward active management (in pursuit of superior risk-return combinations) and away from passive management (where portfolio returns are designed to mimic an index or target benchmark). Alternative investment portfolio returns may be held to either a relative return standard or an absolute return standard, and may be considered either return enhancers or diversifiers.

Learning Objective: Demonstrate knowledge of the view of alternative investments by exclusion.

MAIN POINT: One way to define alternative investments is by what they do not include, but that method of definition (by exclusion) is too broad for the purposes of the CAIA curriculum, which focuses on “institutional quality” investments. By defining alternative

investments as those that are not traditional stocks and bonds, all kinds of esoteric investments could be included that may not be of institutional quality.

Typically, **traditional investments** include publicly traded equities, fixed-income securities, and cash.

- A good definition of an **investment** is that it is deferred consumption.
- An **institutional-quality investment** is the type of investment that financial institutions such as pension funds or endowments might include in their holdings because they are expected to deliver reasonable returns at an acceptable level of risk.

It is acknowledged that some may well argue that real estate is also a traditional investment. However, for the purposes of this curriculum, real estate is included as an alternative investment.

Learning Objective: Demonstrate knowledge of various alternative investment types.

MAIN POINT: Four major alternative investment categories are covered in the CAIA curriculum: real assets, hedge funds, private equity, and structured products. This is how CAIA Association defines alternative investments (by inclusion), but CAIA notes that the list is not exhaustive and rather focuses on institutional-quality assets.

- **Real assets** are investments in which the underlying assets involve direct ownership of nonfinancial assets rather than ownership through financial assets, such as the securities of manufacturing or service enterprises.
- **Commodities** are homogeneous goods available in large quantities, such as energy products, agricultural products, metals, and building materials.

For the purposes of the CAIA curriculum, operationally focused real assets include real estate, land, infrastructure, and intellectual property.

- **Real estate** focuses on land and improvements that are permanently affixed, like buildings.
- **Land** comprises a variety of forms, including undeveloped land, timberland, and farmland: **Timberland** includes both the land and the timber of forests of tree species typically used in the forest products industry. **Farmland** consists of land cultivated for row crops (e.g., vegetables and grains) and permanent crops (e.g., orchards and vineyards).
- **Infrastructure investments** are claims on the income of toll roads, regulated utilities, ports, airports, and other real assets that are traditionally held and controlled by the public sector (i.e., various levels of government).
- CAIA defines a **hedge fund** as a privately organized investment vehicle that uses its less regulated nature to generate investment opportunities that are substantially distinct from those offered by traditional investment vehicles, which are subject to regulations such as those restricting their use of derivatives and leverage.

The term *private equity* is used in the CAIA curriculum to include both equity and debt positions that, among other things, are not publicly traded.

- **Venture capital** refers to support via equity financing to start-up companies that do not have a sufficient size, track record, or desire to attract capital from traditional sources, such as public capital markets or lending institutions.
- **Leveraged buyouts (LBOs)** refer to those transactions in which the equity of a publicly traded company is purchased using a small amount of investor capital and a large amount of borrowed funds in order to take the firm private.
- **Mezzanine debt** derives its name from its position in the capital structure of a firm: between the ceiling of senior secured debt and the floor of equity.
- **Distressed debt** refers to the debt of companies that have filed or are likely to file in the near future for bankruptcy protection.
- **Structured products** are instruments created to exhibit particular return, risk, taxation, or other attributes.

Learning Objective: Demonstrate knowledge of the concept of structures in investments.

MAIN POINT: Structures help distinguish alternative investments from traditional investments, and the five primary types of structures are (1) regulatory, (2) securities, (3) trading, (4) compensation, and (5) institutional structures. For example, the primary structure impacting hedge funds is the trading structure due to their use of “active, complex, and proprietary” trading strategies, whereas the primary structure defining private equity is the institutional structure, as the securities are not publicly traded. These structures help us less to define alternative investments than to understand how alternative investments are distinguished from traditional investments in terms of return computation, methods of analysis, and other aspects covered next. The five structures are:

1. **Regulatory structure** refers to the role of government, including both regulation and taxation, in influencing the nature of an investment.
2. **Securities structure** refers to the structuring of cash flows through leverage and securitization.
3. **Trading structure** refers to the role of an investment vehicle’s investment managers in developing and implementing trading strategies.
4. **Compensation structure** refers to the ways that organizational issues, especially compensation schemes, influence particular investments.
5. **Institutional structure** refers to the financial markets and financial institutions related to a particular investment, such as whether the investment is publicly traded.

Learning Objective: Demonstrate knowledge of how alternative and traditional investments are distinguished by return characteristics.

MAIN POINT: Four return characteristics (diversification, illiquidity, inefficiency, non-normality) help distinguish alternative investments from traditional investments. In contrast to traditional stock and bond investments, many alternative investments are relatively uncorrelated with traditional assets (and thus diversifiers); they may have illiquid investments, return strategies designed to exploit inefficiencies, and non-normal distributions requiring different methods of analysis.

Non-normal distributions are discussed in the statistics section. Here we note that the securities and trading structures of some alternative investments can cause non-normal returns. For example, some structured products (influenced by the securities structure) may have nonlinear payoffs from the use of derivatives, and some hedge funds (influenced by

the trading structure) with many short-term trades in and out of long and short positions may produce non-normal returns. In addition, infrequently traded securities may exhibit non-normal returns. Thus, many alternative investments cannot be analyzed with the same statistical methods that are based on the assumption of normal returns such as is the case with most traditional investments.

- A **diversifier** is an investment with a primary purpose of contributing diversification benefits to its owner.
- **Absolute return products** are investment products viewed as having little or no return correlation with traditional assets, and have investment performance that is often analyzed on an absolute basis rather than relative to the performance of traditional investments.
- **Illiquidity** means that the investment trades infrequently or with low volume (i.e., thinly).
- **Lumpy assets** are assets that can be bought and sold only in specific quantities, such as a large real estate project.

Lumpy assets are illiquid. While most stocks are liquid, some individual stocks are not. Illiquid securities, in any asset class, have more risk than liquid securities because there are fewer prices to observe due to few transactions. In addition, the lack of trading means that one trade can move the price more, relative to a liquid security, all else equal.

- **Efficiency** refers to the tendency of market prices to reflect all available information.
- **Inefficiency** refers to the deviation of actual prices from valuations that would be anticipated in an efficient market.

Learning Objective: Demonstrate knowledge of how alternative and traditional investments are distinguished by methods of analysis.

MAIN POINT: Relative to traditional investments, alternative investments may require (1) different return computation methods (e.g., the internal rate of return [IRR] in the case of private equity due to infrequent trading), (2) different statistical methods (e.g., due to non-normal returns), (3) different valuation methods (e.g., appraisal methods for real estate), and (4) different portfolio management methods owing to the many factors that distinguish the two.

Various computational, statistical, valuation, and portfolio management methods are detailed later in the curriculum. Here, we just note that when analyzing alternative investments these methods often need to differ from the methods used to analyze traditional investments.

Learning Objective: Demonstrate knowledge of other factors that distinguish alternative investments from traditional investments.

MAIN POINT: Relative to traditional investments, (1) alternative investments often have more information asymmetries (less information is available in private markets); (2) trading structures in some alternative investments can intensify problems associated with incomplete markets and moral hazards; and (3) alternative investments are more innovative, necessitating constantly evolving methods of analysis.

- **Information asymmetries** refer to the extent to which market participants possess different data and knowledge.

- **Incomplete markets** refer to markets with insufficient distinct investment opportunities.
- **Moral hazard** is that risk that the behavior of one or more parties will change after entering into a contract.

A manager that takes excessive risks to increase the performance fee is an example of a moral hazard.

Learning Objective: Demonstrate knowledge of the goals of alternative investing.

MAIN POINTS: Relative to traditional investments, the goals of alternative investing are often tilted toward active management (in pursuit of superior risk-return combinations) and away from passive management (where portfolio returns are designed to mimic an index or target benchmark). Alternative investment portfolio returns may be either (1) a *relative return standard* whereby they are compared to a benchmark to determine active risk (deviations from the benchmark caused by active management) and active return (return difference from the benchmark due to skill) (this is detailed more later in the curriculum), or (2) an *absolute return standard* where they are compared to a zero return or a fixed rate. Sometimes trading strategies designed to exploit mispricing through the simultaneous purchase and sale of *similar* positions are referred to loosely as *arbitrage*, but this is not pure arbitrage because the strategies are not risk-free. Finally, alternative strategies and investments may be considered either return enhancers or diversifiers.

- **Active management** refers to efforts of buying and selling securities in pursuit of superior combinations of risk and return.
- **Passive investing** tends to focus on buying and holding securities in an effort to match the risk and return of a target, such as a highly diversified index.
- An investor's risk and return target is often expressed in the form of a **benchmark**, which is a performance standard for a portfolio that reflects the preferences of an investor with regard to risk and return.
- The returns of the fund would typically be compared to the **benchmark return**, which is the return of the benchmark index or benchmark portfolio.
- **Active risk** is that risk that causes a portfolio's return to deviate from the return of a benchmark due to active management.
- **Active return** is the difference between the return of a portfolio and its benchmark that is due to active management.
- An **absolute return standard** means that returns are to be evaluated relative to zero, a fixed rate, or relative to the riskless rate, and therefore independently of performance in equity markets, debt markets, or any other markets.
- A **relative return standard** means that returns are to be evaluated relative to a benchmark.
- **Pure arbitrage** is the attempt to earn risk-free profits through the simultaneous purchase and sale of identical positions trading at different prices in different markets.
- If the primary objective of including an investment product in a portfolio is the superior returns that it is believed to offer, then that product is often referred to as a **return enhancer**.
- If the primary objective of including the product is the reduction in the portfolio's risk that it is believed to offer through its low correlation with the portfolio's other assets, then that product is often referred to as a **return diversifier**.

