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 defining characteristics of alternative investments.
- Demonstrate knowledge of the history of alternative investments in the United States.
- 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 characteristics that distinguish alternative investments from traditional investments.
- Demonstrate knowledge of the goals of alternative investing.
- Demonstrate knowledge of the two pillars of alternative investment management.

KEY CONCEPTS

Four major alternative investment categories are covered in the CAIA curriculum: real assets, hedge funds, private equity, and structured products. 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 due to 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). Four return characteristics (diversification, illiquidity, inefficiency, non-normality) help distinguish alternative investments from traditional investments. Eight other characteristics help distinguish alternative investments from traditional investments: (1) regulatory factors, (2) structuring, (3) trading strategies, (4) compensation structures, (5) institutional factors, (6) information asymmetries, (7) incomplete markets, and (8) innovation. Two pillars of alternative investment management are empirics and economic reasoning.

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. Real assets may include intangible assets such as intellectual property as well as tangible assets. The opposite of real assets is financial assets, such as stocks or bonds, which represent a claim to cash flows.
- **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.

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- **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 defining characteristics of alternative investments.

MAIN POINT: There are many assets that are referred to as both traditional and alternative assets. The distinction between the two is not always clear.

The Blurred Line

Alternative Investment	Asset Often Characterized as Traditional or Alternative	Analogous Traditional Asset
Real assets (37%)	Public real estate and public equities of corporations with performance dominated by stable positions in real assets	Public equities of corporations with performance dominated by managerial decisions
Hedge funds (27%)	Liquid alternative mutual funds	Ordinary mutual funds
Private equity (27%)	Closed-end funds with illiquid holdings	Public equity
Complex structured products (9%)	Simple structured products offering relatively stable and common risk and return characteristics	Simple derivative used as a part of a strategy with stable risk exposures

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Following the introductory lessons, the CAIA curriculum covers each of the four major alternative investment types in the first column of the table "The Blurred Line." The percentages in parentheses represent the relative proportion of the four categories by market size. Importantly, in the second column we can see that there are some types of investments within each category that are sometimes characterized as alternative and sometimes as traditional investments. Also, CAIA acknowledges that there are ways to categorize alternative investments other than how they have done so for the curriculum.

Learning Objective: Demonstrate knowledge of the history of alternative investments in the United States.

MAIN POINT: The advent of modern portfolio theory in the 1950s and 1960s led to changes in the law that allowed investments to be evaluated as a portfolio "as a whole" rather than as a stand-alone basis. When considered on a stand-alone basis many alternative investments are risky, but due to low return correlation with traditional investments they are

diversifiers and actually lower the risk of the "portfolio as a whole." Thus, institutional investment in alternatives began increasing only after the advent of modern portfolio theory.

In 1902, the Dow Jones Index consisted of just 12 stocks and virtually all were commodity producers (e.g., copper, sugar, paper, rubber, steel). What is now considered an alternative investment was then considered a traditional investment. Prior to the 1920s, most institutions held real assets rather than common stocks. They held preferred stocks, real estate, mortgages, and government bonds.

From 1920 to 1950 institutions added high quality bonds, domestic equities, and agricultural debt to their portfolios. Institutions evaluated each investment individually and only safe investments were allowed in the portfolios. On a stand-alone basis many investments were considered too risky. The advent of modern portfolio theory in the 1950s and 1960s led to changes in the law that allowed investments to be evaluated within the context of diversification and their impact on the overall portfolio risk.

From 1950 to 1980 institutions added average quality corporate bonds and international equities to their portfolios. By 1950 the top companies in the United States were General Motors, Standard Oil, Ford Motor, General Electric, US Steel, Mobile, and Gulf oil. This illustrates the changing components of an economy necessitates a dynamic approach to portfolio management. Now service and technology companies dominate. From 1980 to the present, institutions added high-yield debt, small stocks, structured products, private equity, hedge funds, and real assets.

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).

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- **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 characteristics that distinguish alternative investments from traditional 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.

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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); 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.

Alternative investments have most of the following five goals of alternative investing:

1. Add value through active management
    - **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.
2. Achieve absolute or relative returns
    - 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

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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.
3. Enhance returns through arbitrage-like strategies or other return-enhancing strategies
    - **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**.
4. Diversify risk
    - 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**.
5. Avoid obsolescence
    - What an institution thinks is appropriate at one point in time may not be in another.

Learning Objective: Demonstrate knowledge of the two pillars of alternative investment management.

MAIN POINT: The two pillars of alternative investment management are empirical analysis and economic reasoning.

Although we say past performance does not represent future performance, most decision making is based on historical observations—empirics. Note that empirical results are less reliable for alternative investments than for traditional investments. Empirics should not be relied upon without the support of economic reasoning.

One useful framework for discussing the appropriateness of an allocation to an investment is a 2-by-2 framework. On one axis is the clear-cut distinction between whether it is publicly or privately traded. On the other is an admittedly less clear-cut, albeit still useful, distinction as to whether its purpose is as a return enhancer or diversifier.\

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