Roles of Alternative Investments in Portfolio Management

Common Features of Alternative Investments

Steps for Due Diligence in Alternative Investment Manager Selection

Issues to Consider for Individual Investors

- **Low liquidity.** Requires attention to determine if they suitable for a given investor. They should have a liquidity premium and higher return.
- **Diversification.** Generally low correlation with stocks and bonds.
- **Due diligence costs.** Costs of researching and monitoring investments can be high. Specialized expertise and skills are often required. Markets often lack transparency, making information difficult to find.
- **Difficult performance evaluation.** Lack of transparency and unique features of strategies make valuation benchmarks difficult to identify.

- Real estate and long-only commodities give exposure to risk and return that stocks and bonds don't.
- Hedge funds and managed futures give exposure to special strategies and are dependent on manager skill.
- Private equity and distressed securities are a combination of 1 and 2.

- **Taxes.** Many alternative investments are structured as limited partnerships which require specialized tax expertise.
- **Suitability.** Time horizon and liquidity needs must be considered as many alternative investments must stay invested for a minimum time period.
- **Commuunication.** Make sure the client understands the implications of a lock-out period or a complex strategy as much as is needed.
- **Decision risk.** Preparedness for losses and the ability to remain in a position at a maximum loss point.
- **Concentrated positions.** Wealthy individuals often have large positions in closely held companies or private residences. These should be considered as pre-existing allocations before adding more private equity or real estate investments. These positions may also have unrealized taxable gains that can complicate rebalancing.

1. *Asses the market opportunity offered.* Confirm that there are market inefficiencies for the type of investment in which the manager specializes. Past returns don't justify selecting a manager if there are no opportunities for him to exploit.
2. *Asses the investment process.* Identify the manager's competitive edge over others. How does his process identify investment opportunities.
3. *Assess the organization.* Is it stable and well-run? What is the staff turnover?
4. *Assess the people.* Meet and assess their character, including integrity and competence.
5. *Assess the terms and structure of the investment.* Consider fee structure, lock-out period, exit strategy and how it aligns the interests of the manager with the investors.
6. *Asses the service providers.* Investigate outside firms supporting the manager's business (e.g. lawyers or brokers).
7. *Review documents.* Review the prospectus, audits of manager's reports and other documents. Use legal advice when needed.
8. *Write-up.* Document the above review process.

Characteristics of Real Estate Investment

Characteristics of Private Equity Investment

Characteristics of Investment in Commodities

Characteristics of Hedge Fund

Investment in non-publicly-traded company. Limited to wealthy individuals or institutions. Often done through pooling funds with others in a private equity fund. Two most important categories are venture capital and buyout funds.

Two segments of buyout funds are middle-market buyout funds and mega-cap buyout funds. Middle-market funds concentrate on divisions of large publicly-traded companies and small private companies that cannot obtain capital. Mega-cap funds concentrate on taking public firms private.

Buyout funds add value through some combination of

1. Restructuring company operations and management.
2. Buying companies for less than intrinsic value.
3. Creating value by added leverage or restructuring existing debt.

Exit strategies are selling the company through private placement or IPOs or through dividend recapitalizations. In the latter, the debt-equity structure is changed by issuing lots of debt and then the company pays a large special dividend to the buyout fund. The fund retains ownership but recoups its cash.

Private equity is diverse and typically very risky. Venture capitalists are expected to bring both capital and business expertise to a company that might lack management skills.

Can be classified as direct or indirect. Direct investment includes ownership and management of residences, commercial real estate and agricultural land. Indirect investment generally involves a separate entity to manage the properties. Indirect investments include

- Companies that develop and manage real estate.
- Real estate investment trusts, REITs, which are publicly traded shares in a real estate portfolio. Divided into equity and mortgage REITs. Can be purchased in small sizes and are liquid.
- Commingled real estate funds, CREFs, which are pooled investments in real estate that are professionally managed and privately held. Are more flexible than REITs, can be either open- or closed-ended. Restricted to wealthy investors and institutions.
- Infrastructure funds purchase infrastructure assets (e.g., airports or toll roads). Because they provide a public service and are regulated, tend to have stable, long-term returns. Low correlation with equities. Long-term nature means they are used by institutions with long-term liabilities. Relatively low returns.

Advantages of real estate investment are low correlation with stocks and bonds, low volatility of returns and an inflation hedge. May offer tax advantages.

Disadvantages are high information and transaction costs, political risks from tax law changes, high operating expenses, and inability to subdivide investments.

Generally structured to avoid regulation, which allows them to charge large incentive fees. Designed to exploit a perceived market opportunity, often taking long and short positions on a leveraged basis. Many self-describe as exploiting arbitrage opportunities, although this is used loosely to describe low-risk and not risk-free opportunities.

Investment can be direct or indirect.

- Direct investment includes direct purchase of the physical commodity (e.g., agricultural products, crude oil, or metals) or the purchase of derivatives on those assets.
- Indirect investment can be investment in companies whose business is tied to a commodity (e.g., investing in metal via shares in a mining company).
- Direct investment through derivatives is more common as indirect investment doesn't track price changes and buying outright creates storage costs.

Commodity futures and publicly traded commodity companies are liquid when compared with other alternative investments. Investments in commodities have low correlation with stocks and bonds, business-cycle sensitivity and generally have positive correlation with inflation.

Characteristics of Managed Futures Investments

Characteristics of Investment in Distressed Securities

Comparison of Alternative Investment Characteristics

Comparison of Alternative Investment Benchmarks

Securities of companies that are in or near bankruptcy. Risk and return depend on skill-based strategy. Can construct subgroups based on structure.

- If structured like a hedge fund, there is more liquidity.
- If structured like private equity, there is less liquidity because of fixed terms and closed-ended funds.
- The private equity structure is useful when the underlying assets are too illiquid to determine a NAV.

Similar to hedge funds in that they are skilled-based and have a similar fee structure. Tend to trade only in derivatives and take positions based on indices. Like hedge funds with a macro focus instead of micro.

Investment can be done through private commodity pools, managed futures programs as separately managed accounts (called CTA managed accounts), and publicly-traded commodity futures funds available to small investors. Liquidity is higher for publicly-traded funds. Trading strategies used include

- Systematic trading strategies follow rules. Trend following rules may focus on short-, medium-, or long-term trends and are common. Contrarian strategies are less common and have higher diversification.
- Discretionary trading strategies use manager judgment and use economic or other criteria.
- May invest in all financial markets, only currency markets or a diversified mix of derivatives and underlying commodities.

The risk characteristics very as with hedge funds. Standard deviation is generally less than half of equities, but greater than bonds. The correlation with equities is low and often negative, higher with bonds but less than 0.5.

	Benchmarks	*Construction*	*Biases*
Real estate	NCREIF, NAREIT.	NACREIF value weighted, NAREIT cap weighted.	Volatility is downward biased.
Private equity	Cambridge Associates and Thomson Venture Economics.	Constructed for buyout and VC. Depends on events. Custom benchmarks.	Infrequent repricing means dated values.
Commodities	Dow Jones-UBS and S&P Commodity Indices.	Assume futures-based strategy.	Indices vary widely depending on purpose, makeup, and weight.
Managed futures	MLMI, CTA indices.	MLMI uses trend-following, CTA uses dollar weights.	Requires special weighting scheme.
Distressed securities	Similar to long-only hedge fund benchmarks.	Either equal or based on AUM. Selection criteria varies.	Self-reporting, backfill, inclusion, popularity, survivorship biases.

	Types of Investments	*Risk/Return Features*	*Liquidity*
Real estate	Residences, commercial real estate, raw land.	Large risk component, good diversification.	Low.
Private equity	Preferred shares, VC, buyout funds.	Startup and MM have more risk.	Low.
Buyout funds	Large private firms and spin-offs.	Less risk than VC, high diversification.	Low.
Infrastructure funds	Public infrastructure assets.	Low risk and return, diversification.	Low.
Commodities	Agriculture, oil, metals.	Low correlation with stocks, high with inflation.	Fairly liquid.
Managed futures	Generally only derivatives.	Risk between stocks and bonds.	Lower for private funds.
Distressed securities	Can be debt or equity.	Depends on skill. High returns.	Liquid as hedge funds.

Hedge Fund Benchmarks

Hedge Fund Benchmark Biases

- **Relevance of past data** may be questionable. Hedge funds are based on manager skill, and past returns may be a reflection of that skill which may not be present today. Funds with a particular style do have similar returns, and individual managers don't beat their style group.
- **Popularity bias** can occur when one fund attracts a lot of capital in a value weighted index. This overweights its presence in the index, without being caused by return on investment.
- **Survivorship bias** occurs when indices drop funds with poor performance, causing an upward bias in reported values. It can be as high as 1.5-3% per year. The bias is lower for event-drive strategies and higher for hedged equity strategies.
- **Stale price bias** varies depending on the markets used. When a fund uses markets with infrequent trading, pricing and appraisal can lag causing understatement of volatility. Evidences suggests this is not a large problem.
- **Backfill or inclusion bias** arises from filling in past data. Managers will often only supply data if it benefits them, causing an upward bias in past returns.

Many differences in indices as style classifications vary. Index providers compose indices using the following.

- *Selection criteria* can include assets under management, track record and new investment restrictions.
- *Style classification* varies as to how how a fund is classified by style.
- *Weighting schemes* are usually equally weighted or based on assets under management.
- *Rebalancing rules* must be defined for equally weighted indices and the frequency can be from monthly to annually.
- *Investabilty* depends on reporting frequency. Some indices are not investable, but independent firms make modifications to provide investable proxies.

Some indices list the funds comprising the index, and some do not. Some report monthly and some report daily.

- Providers of daily indices include Hedge Fund Research (HFR), Dow Jones and S&P. The DJ and S&P explicitly list funds and use equal weighting.
- Monthly indices include CISDM, equally weighted indices covering hedge funds and managed futures, EACM100 Index, an equally weighted index of 100 funds, and various benchmarks for different strategies based on assets under management from Credit Suisse.