

Terminology and Definitions

The most elusive term:

What is a Hedge Fund ?

A hedge fund is an investment vehicle with restrictions on *who* can invest ...

but no restrictions on *what* asset classes it can invest in ...

And no restrictions on *how* it can utilize investment tools and strategies or *how* it can charge investors.

- Not for Broad Retail Consumption
- Accredited Investors
- Qualified Purchasers
- 99 or 499 Limited Partners

- Equity or Fixed Income Securities
- Futures, Options, or other Derivatives
- Illiquid or Private Transactions

- Self-Prescribed by Manager
- No Leverage Limits
- No Liquidity Requirements
- No Short Sale Limitations
- Charges Incentive Fees

Terminology and Definitions

*Traditional
Investors*

*Alternative
Investors*

Hedge Fund

An exclusive, illiquid asset class which makes leveraged macro bets on global economic situations and charges high fees to investors.

A skill-based investment management vehicle with access to the entire array of strategies financial institutions use to exploit market inefficiencies, aligning compensation with investors' interests.

Terminology and Definitions

What Administrative and Operations Vocabulary should I be familiar with?

Accredited Investor*

Qualified Purchaser*

Individual

- Net worth, or joint net worth with that person's spouse, exceeds \$1,000,000 (3c-1 exempt)
- Individual income in excess of \$200,000 in each of the two most recent years or joint income with that person's spouse in excess of \$300,000 in each of those years

- A natural person who owns not less than \$5,000,000 in "investments" (3c-7 exempt)

Entity

- Any trust with total assets in excess of \$5,000,000, not formed for the specific purpose of acquiring the securities offered, whose purchase of the securities is directed by a person capable of evaluating the merits and risks of the prospective investment.
- Any organization that was not formed for the purpose of acquiring the securities being sold, with total assets in excess of \$5,000,000.
- Any entity in which all of the equity owners are Accredited Investors.

- A person, acting for its own account or the accounts of other qualified purchasers, who in the aggregate owns and invests on a discretionary basis not less than \$25,000,000 in "investments"
- A company, partnership or trust, each beneficial owner of the securities of which is a qualified purchaser.

**We have paraphrased these definitions here for illustrative and comparative purposes.*

Terminology and Definitions

What Administrative and Operations Vocabulary should I be familiar with?

Limited Partnership (LP)

- The typical structure of a non-registered hedge fund
- One or more general partners manages the partnership
- One or more limited partners shares the partnership's cash flow

General Partner

- The hedge fund “manager” – may have sub-advisors
- Complete discretion of the operations of the LP
- Unlimited legal responsibility for the debts and liabilities of the partnership

Limited Partner

- Hedge fund investors
- No power to direct operations of the partnership
- Not exposed to partnership liabilities beyond investment

Offshore Fund

- Fund established outside the US
- Typically domiciled in “tax friendly” countries
- Accessible to US non-taxable investors

Offering Memorandum

- Means by which a fund is offered as a private placement
- Similar to a prospectus for registered securities offering
- Explains terms, methodology, conflicts, etc.

Terminology and Definitions

How are vehicles classified for suitability?

3c-1

3c-1 refers to an exemption under the Investment Company Act of 1940. 3c-1 funds are available to accredited investors. A 3c-1 Limited Partnership can have a maximum of only 99 limited partners, so minimum investment size can be high: \$5 million is a common minimum.

3c-7

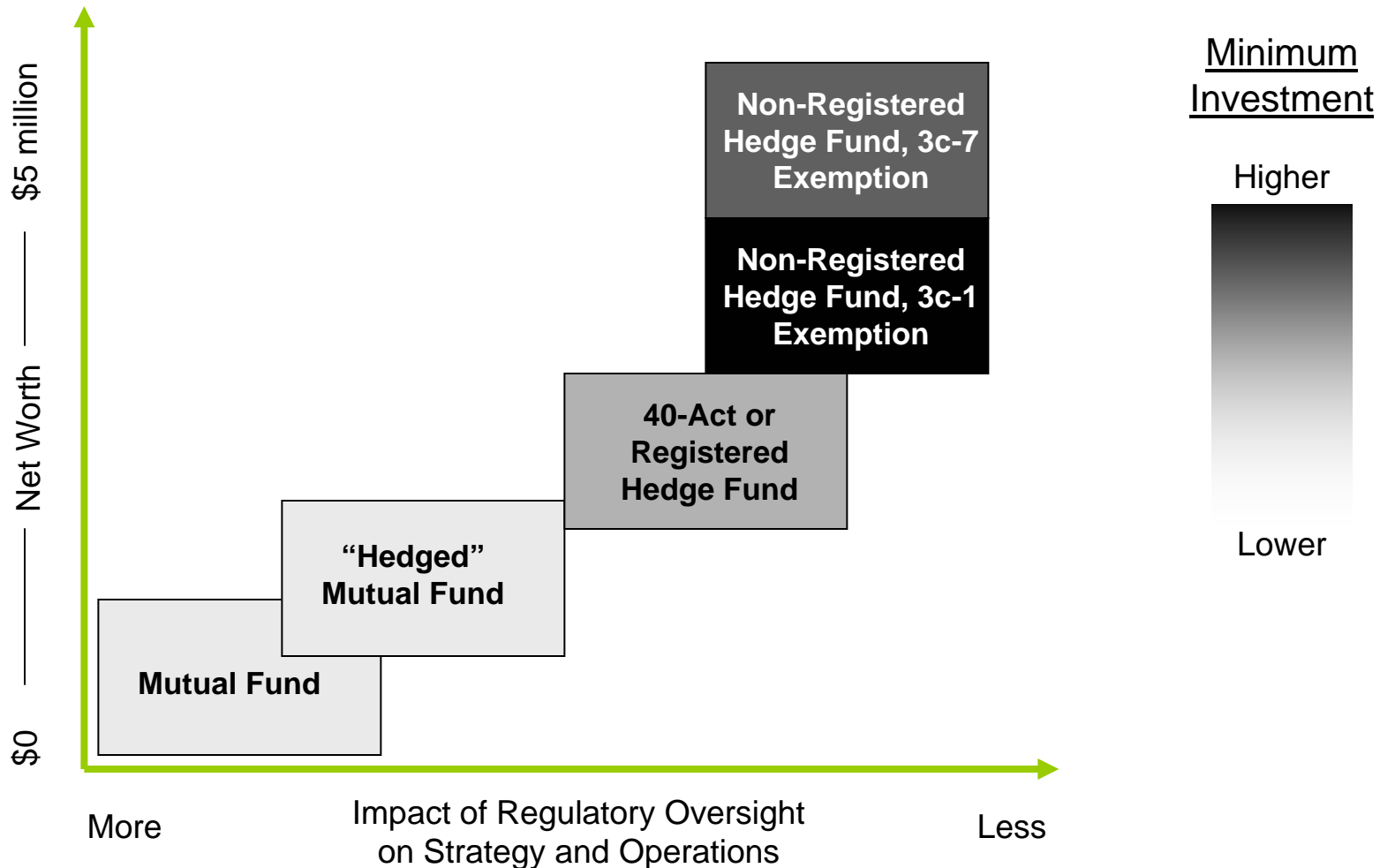
3c-7 refers to another exemption under the Investment Company Act of 1940. 3c-7 funds are only available to qualified purchasers. They have a maximum of 499 limited partners, so minimum investments are often lower than 3c-1 funds: \$1 million is a common minimum.

Registered Fund of Funds

Registered hedge funds are recently emerging vehicles, structured as closed-end, nondiversified investment companies under the Investment Company Act of 1940. They must file Form N-2 with the SEC, which contains detailed information regarding the management of the fund, risks, fees, shareholder redemption rights. They are offered by prospectus. While these funds are available only to accredited investors, they can have an unlimited number of investors so that minimum investments are typically lower, currently as little as \$25,000.

Terminology and Definitions

Regulatory Restrictions vs. Net Worth/Minimum Investment Requirements



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What are the key things I need to know about Fees?

Management Fee

- Asset based fee
- Typically calculated annually, paid monthly or quarterly
- Paid regardless of performance

Performance Fee

- Also called “incentive fee”
- Aligns manager/investor interests
- Typically 20% of trading profits (net of other fees)
- Typically calculated and paid annually; sometimes quarterly
- Almost always subject to High Water Mark provisions
- Often subject to hurdle provisions

High Water Mark

- Also called “loss carry forward”
- Requires Manager to recoup any losses before earning performance fees

Hurdle

- Minimum return a fund must earn before performance fees are calculated
- Arbitrary amount: 5%, T-bill rate, or T-bill rate plus 200 basis points

Net Returns

- Hedge fund returns are typically reported NET of all fees

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What are tax concerns for hedge fund investors?

Offshore Fund

- Open to US non-taxable investors: Nonprofits, Pensions, IRAs
- Limits on ERISA money, typically 25%
- May have higher fees, due to custodian/administrator needs
- Certain combinations of events create taxable events in the IRS' eyes

Limited Partner

- Investor in an onshore fund
- Gains pass through as income to the investor and are taxable
- K1s can be distributed late due to audit requirements and delays

401k / IRA

- Can go offshore
- IRA money from individuals isn't considered plan sponsor money subject to ERISA unless it is commingled with plan sponsor assets

UBIT

- Unrelated Business Income Tax
- Gains on leverage (borrowing) common creator of UBIT
- Offshore investments can block UBIT, but not always

Gray Areas

- Leverage may qualify for a loophole
- Structures on Indexes may allow for 1099s

Terminology and Definitions

What Return Vocabulary should I be familiar with?

Relative Return

- Return is tied to a related market “benchmark,” typically an index
- Examples: Out-perform the S&P 500; out-perform the Russell 2000 Index

Absolute Return

- Return target not related to underlying market conditions
- Goal is positive performance across all market conditions
- Often risk- or volatility adjusted (Sharpe Ratio)
- What is fair? Premium over risk-free rate will vary based on strategy

Alpha

- Excess return generated by a source other than directional market exposure
- Traditional money managers have limitations which limit ability to generate alpha
- Hedge funds generate alpha by executing tactical trading strategies such as short sales, relative value and arbitrage trades, use of derivatives and futures
- Regression calculation against an index; higher is better

Terminology and Definitions

What general risk vocabulary should I be familiar with?

Beta

- Relates to the portion of return generated by directional market exposure
- Makes up the bulk of return generated by traditional asset managers
- While the market has grown over time historically, managers with high beta have little protection against market downturns. This means MARKET RISK.

Net Exposure

- Net total of long and short market exposure
- Strategy with 60% long exposure and 40% short exposure is 20% net long

Transparency

- Refers to ability to see performance and underlying investments
- Hedge funds can be sensitive to transparency, particular on short positions
- Needed to evaluate manager's adherence to stated investment strategy
- Investor may be able to negotiate transparency with signed "non-disclosure"

Volatility

- Measured by standard deviation
- Higher volatility suggests more risk

Terminology and Definitions

What do I need to know about Liquidity?

Liquidity

- Refers to how easy and/or often an investment can be converted into cash without a discount in price
- Hedge funds have less frequent liquidity than many traditional investments
- Liquidity provisions can include an initial lock-up. Subsequent redemption periods can be monthly, quarterly, or annually
- Early liquidation may require a redemption penalty

Least Liquid

Most Liquid

Yearly

Monthly

Daily

Private Equity

Hedge Funds

CDs

Checking Account

Real Estate

**Microcap
Stocks**

Money Market

**Physical
Commodities**

**Government
Securities**

Blue Chip Stocks

General liquidity ranges are not to scale and for illustrative purposes only

Terminology and Definitions

What do I need to know about Liquidity?

Hedge fund strategies will have distinct liquidity ranges.

Least Liquid

Most Liquid

- Merger Arbitrage
- Distressed
- Special Situations

- Convertible Arbitrage
- Statistical Arbitrage
- Fixed Income Arbitrage

- Long/Short Equity
- Global Macro
- Managed Futures

• Fund of Funds

• Index-linked products

General liquidity ranges are not to scale and for illustrative purposes only

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Why is LEVERAGE such a dirty word?

Who uses leverage?

Anyone with a margin or futures account

Anyone with a credit card balance

Anyone with a mortgage or car payment

Who doesn't use leverage?

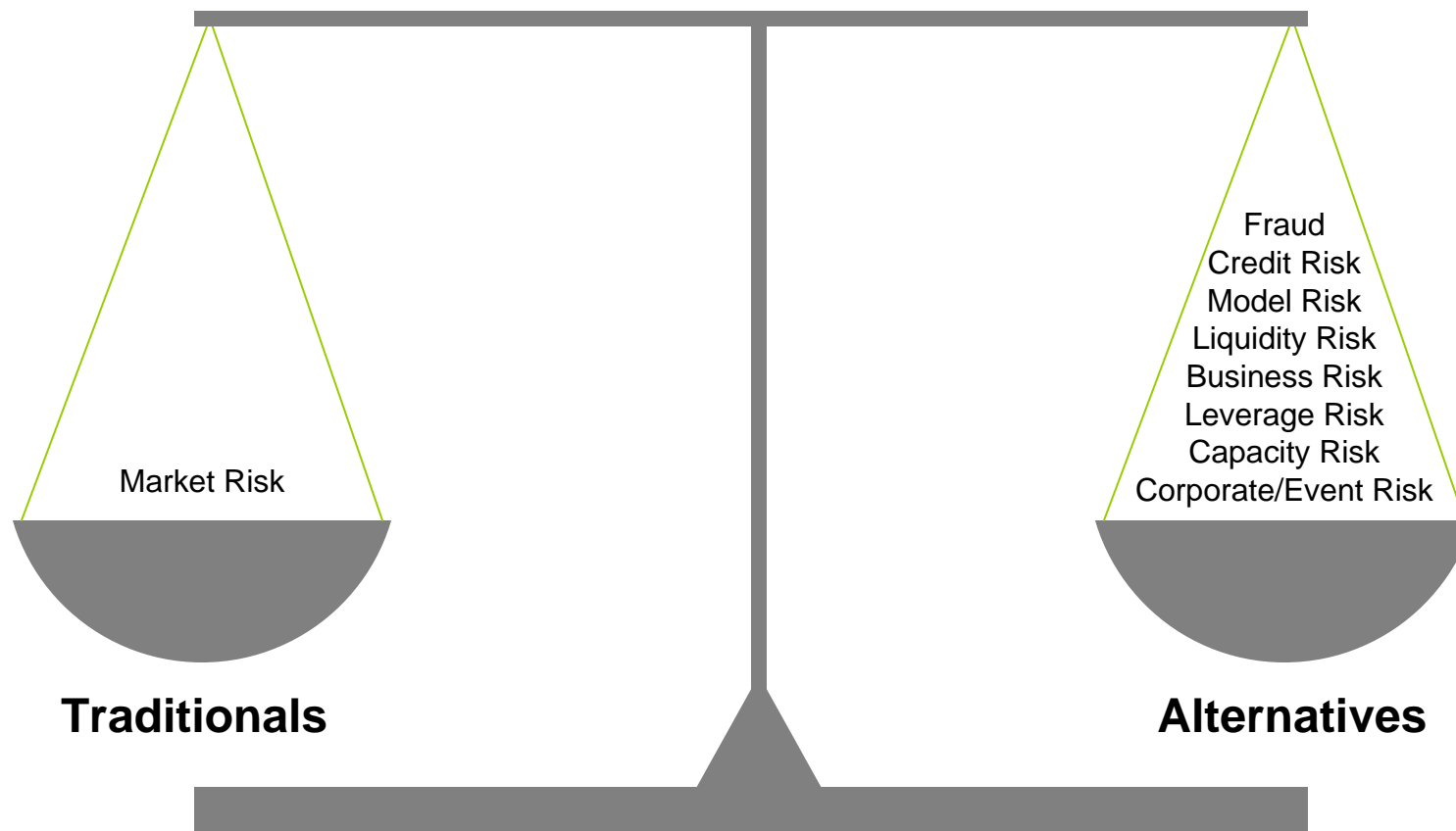
What do I need to know about leverage?

Leverage

- Degree to which borrowed money is used
- Reg T or Margin Accounts limit leverage in traditional investments
- Hedge funds do not have leverage limits
- A hedge fund should disclose its self-subscribed leverage limits
- “Prudent” use of leverage will vary by strategy and borrowing costs

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Hedge funds can limit market risk... but what is the trade-off?



Terminology and Definitions

Hedge funds can limit market risk... but what is the trade-off?

Type of risk: **Manager Risk**

In other words: Essentially... *Fraud*. Manager risk involves the potential that the manager is somehow taking advantage of the unregulated nature of the hedge fund environment and is acting either fraudulently or outside the scope of his investment mandates. A less malicious type of manager risk relates to *style drift*. Style drift can be more difficult to discern in alternative strategies than in traditional investment with well-defined benchmarks. Note that manager risk does exist with traditional investments (mutual fund timing, for example) as well, but is magnified with hedge funds due to their lack of regulation.

Type of risk: **Infrastructure or Business Risk**

In other words: Fledgling investment managers often *lack operational and administrative infrastructure*. This can create problems if key investment professionals have to focus on general business issues.

Type of risk: **Model Risk**

In other words: Model risk involves the *potential for flaws in a trading model or investment strategy, or curve fitting which may not be robust*, either inherent or magnified by changing market conditions.

Terminology and Definitions

Hedge funds can limit market risk... but what is the trade-off?

Type of risk:

Credit Risk

In other words:

Normal market fluctuations will generally not cause the credit risk of a company to shift, but sometimes large events do occur that will hurt a company's rating. If this happens, it can create *drastic pricing changes in a company's underlying stock or bonds*. Managers may choose to hedge some of this credit risk, but the cost of the hedge will drag the portfolio's returns.

Type of risk:

Liquidity Risk

In other words:

Liquidity risk is a mis-match of the buyer's liquidity needs to the strategy's optimal holding period. It involves the *threat of holding positions that cannot be unwound* in the event that prices are moving against the portfolio.

Type of risk:

Corporate/Event Risk

In other words:

Corporate event risk involves the *possibility of unexpected corporate events* (bankruptcy, etc.) which may cause price gaps that move against positions.

Type of risk:

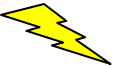























Capacity Risk

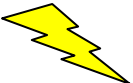


In other words:

Capacity risk can create a problem if other *investors withdraw funds that force a manager to liquidate positions at inopportune times*. In addition, many alternative strategies operate in *market niches with limited alpha opportunities*. In this case, a fund managing too many assets can dilute the return source.

Terminology and Definitions

How do different risks relate to different investment vehicles?

<u>Type of Risk</u>	<u>Traditionals</u>	<u>Fund of Funds</u>	<u>Single Hedge Funds</u>
Market Risk			
Manager/Fraud Risk			
Asset Allocation Risk			
Liquidity Risk			
Leverage Risk			
Style Drift			
Capacity Risk			
Credit Risk			

	Very Significant		Somewhat Significant		Less Significant
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Terminology and Definitions

What kind of risk management guidelines should I look for?

View

Takes a View

Top Down
Macroeconomic Tilting
Fundamental Analysis

Does Not Take a View

General/Passive Diversification
Bottom Up
Manager Driven

Market Exposure

Fund of Funds

Accepting Beta
Hedging Beta

Single Managers

Hedging
Leveraging

Diversification

Fund of Funds

% per Manager
% per Sector

Single Managers

% per Position
% per Sector

Terminology and Definitions

What do I need to think about when measuring performance?

Due Diligence

- Many of the measurements will require diligent assessment from the investor
- Due diligence has both qualitative and quantitative components
- Qualitative components are more subjective and demand a discerning eye

Benchmark

- The return target, for both the whole portfolio and the alternative side
- Benchmark can be absolute or relative

Index

- Alternative investment indices are available... but they are works in progress
- No industry standard has emerged
- Inherent reporting biases (survivorship, self-selection, etc.)

Peer Group

- Attempt to compare like-for-like performance by evaluating similar investment programs
- Lack of standard strategy classifications makes the process imperfect
- Currently the best relative performance measure

Terminology and Definitions

What are the main performance measures?

Standard Deviation

- Measures volatility of periodic returns around the mean return
- Important to distinguish between upside and downside deviation

Drawdown

- Measures significance of greatest peak to valley drawdown

Sharpe Ratio

- Ratio of risk (volatility) adjusted return, industry standard scorecard
- Rate of return *minus* risk free rate of return *divided by* standard deviation

Credit Spread Indicator

- “Flight to quality” measurement assesses the liquidity stance of a particular strategy. A great tool for stress testing.

Sterling Ratio

- Measures risk adjusted return without penalizing upside moves (which increase overall volatility).
- Rate of Return *minus* risk free rate of return *divided by* downside deviation

VAR

- Value-at-Risk analysis attempts to quantify portfolio and position potential for loss given a fixed scenario.

Correlation

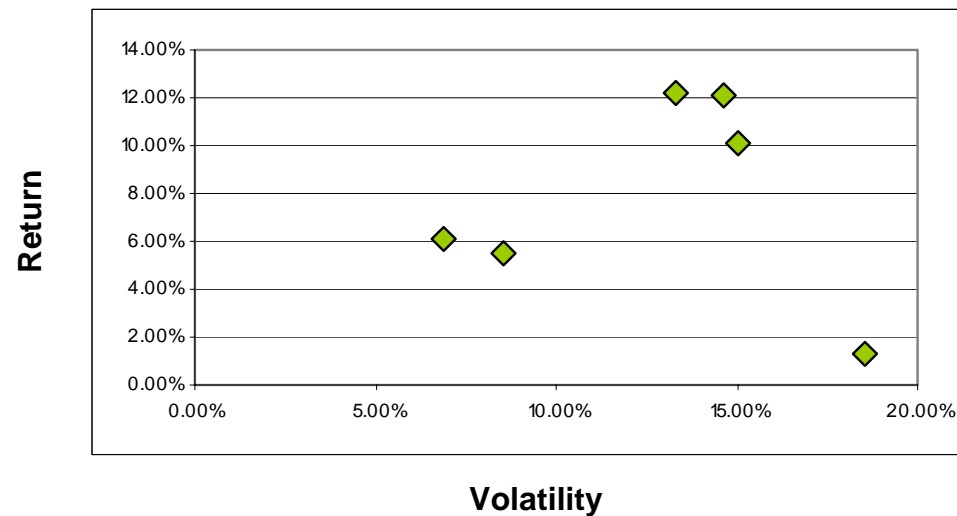
- Measures how different strategies move and generate performance in relation to each other; a key to building a diversified portfolio.

Terminology and Definitions

How do these measurements work?

Peer Group Example

Monthly Data Jan. 1998 - March 2004	Annualized Std. Dev.	Compound Annual RoR	Sharpe Ratio	Down Deviation	Worst Drawdown	Worst 12 Months
Manager A	13.30%	12.21%	0.63	1.83%	-13.75%	-2.35%
Manager B	14.62%	12.11%	0.57	2.31%	-12.77%	-1.89%
Index A	8.53%	5.54%	0.2	1.41%	-6.76%	-5.17%
Index B	6.92%	6.08%	0.33	1.19%	-13.08%	-6.63%
Index C	15.01%	10.15%	0.42	2.45%	-14.65%	-12.05%
Index D	18.53%	1.31%	-0.13	3.79%	-44.73%	-26.62



Terminology and Definitions

How do I think about Asset Allocation with Alternatives?

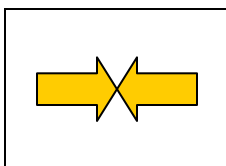
Are Hedge Funds an asset class? ... No, but they can behave like one.

Modern Portfolio Theory

- Supports construction of an optimal portfolio by considering the relationship (correlation) between investment instruments' risk and return
- Given an investor's preferred level of risk, a particular portfolio can be constructed that maximizes expected return for that level of risk
- **MPT is difficult to apply to hedge funds because returns are non-normal and MPT has limits in addressing outliers (tail risk)**

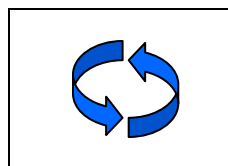
Terminology and Definitions

How do I categorize different strategies to compare and diversify?



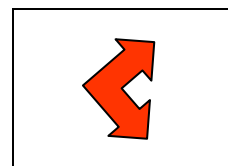
Arbitrage

Convertible Arbitrage
Statistical Arbitrage
Fixed Income Arbitrage



Event Driven

Merger Arbitrage
Distressed
Special Situations



Directional

Long/Short Equity
Global Macro
Managed Futures

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What are the behavior characteristics of these styles?

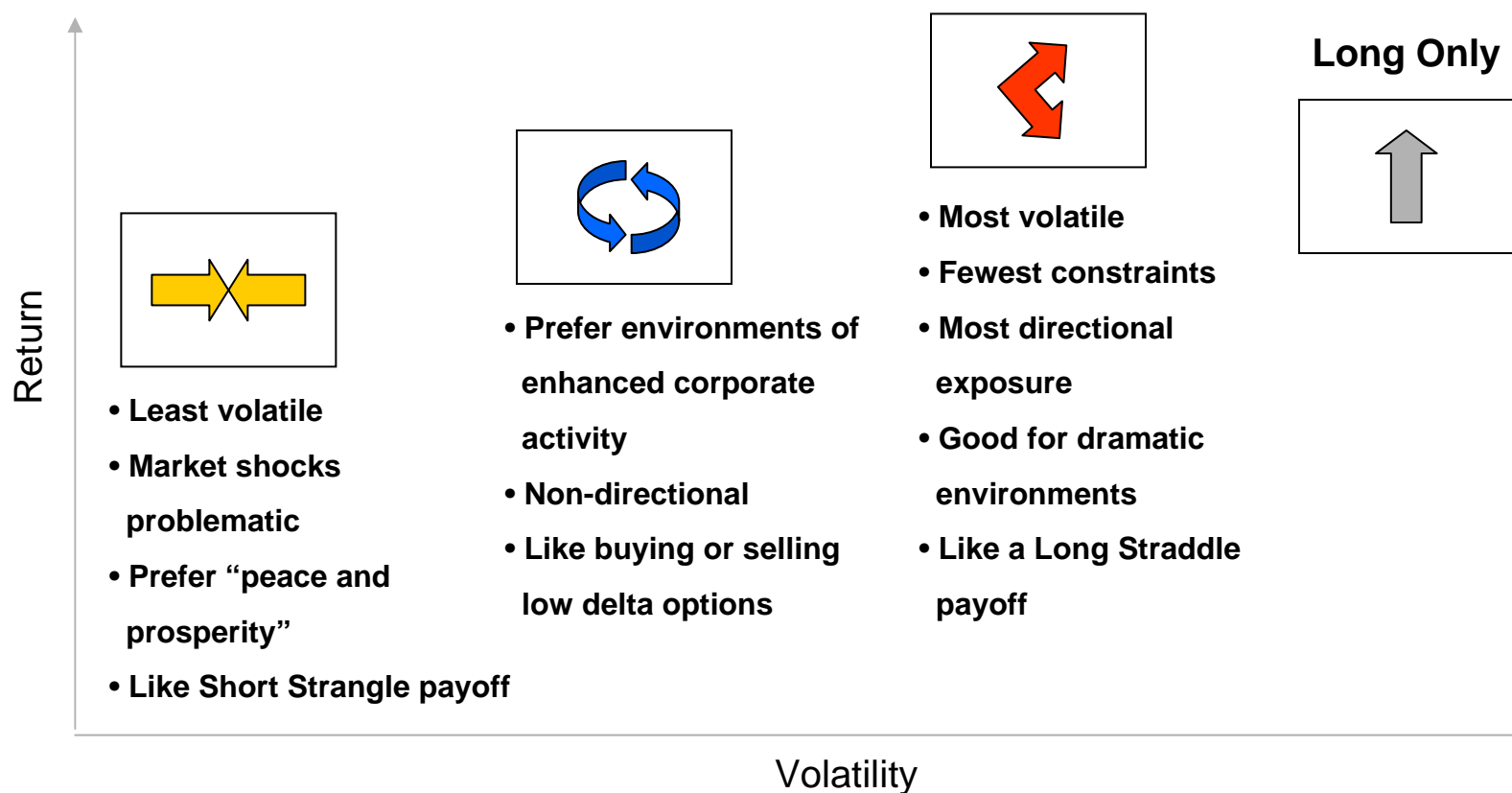
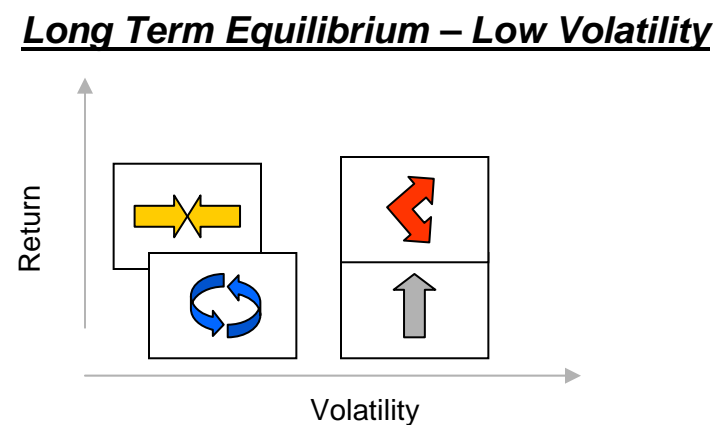
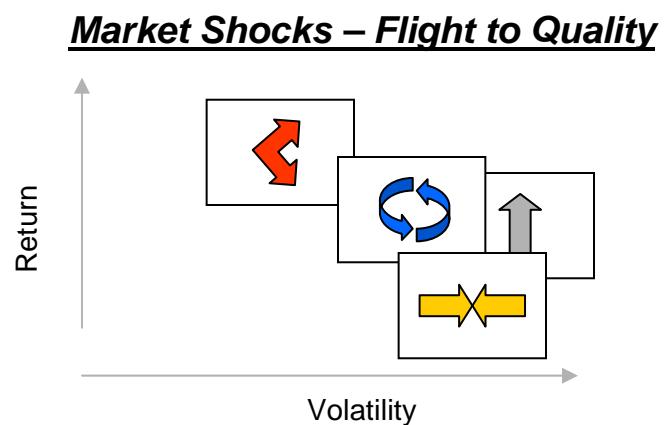
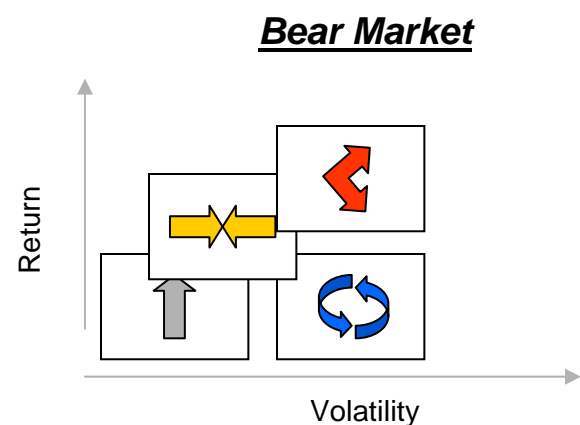
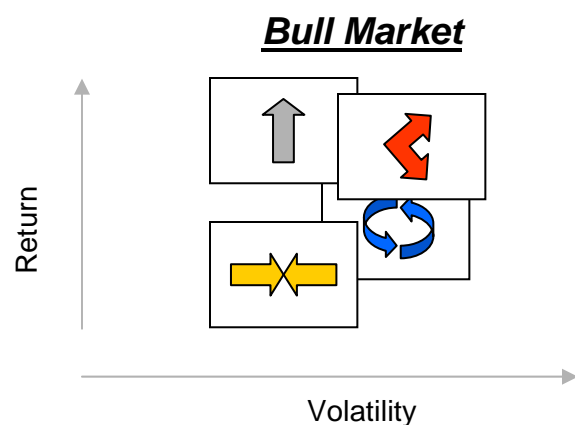


Chart is based generally on 10 year return and standard deviation of constituent strategies' corresponding HFR Index. Chart is not to scale and is for illustrative purposes only.

Terminology and Definitions

How might these styles perform during various economic environments?



Charts are not to scale and is for illustrative purposes only. Based on general characteristics and expected performance.

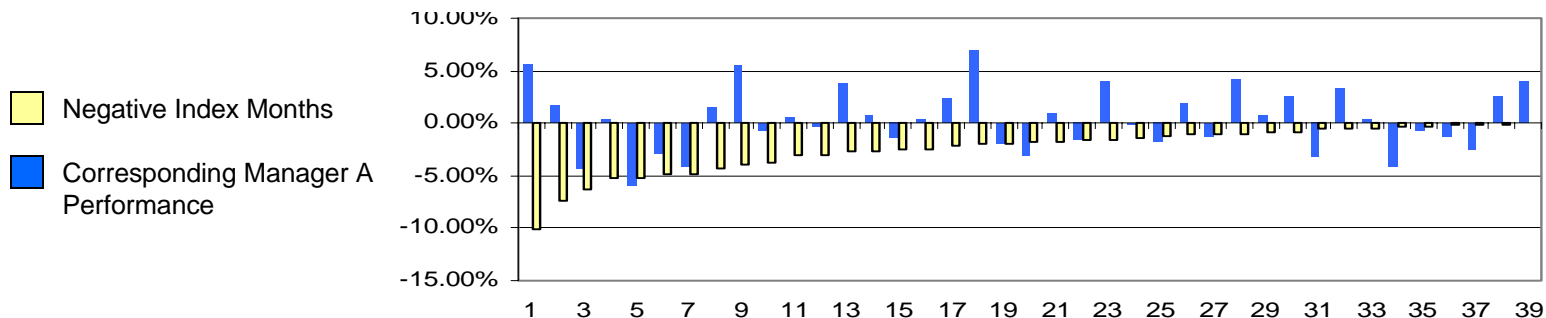
Terminology and Definitions

How does correlation relate to asset allocation?

Correlation Examples

Positive and
Negative Month
Correlation
Comparison

1998 - 2003	Manager A	Manager B
Index A	0.64	0.31
Index A Up	0.41	0.22
Index A Down	0.29	0.19
Index B	0.57	0.17
Index B Up	0.37	0.11
Index B Down	0.12	-0.11
Index C	-0.24	0.20
Index C Up	-0.21	-0.06
Index C Down	-0.32	0.08



Terminology and Definitions

What are some key strategy terms?

Long Only

- Largely a traditional strategy, characterized by directional exposure
- Long-only hedge funds: 'Mutual fund in drag'

Arbitrage

- Attempt to profit by exploiting temporary price differences in similar or related financial instruments

Short Sales

- Attempt to profit from the falling price of a security by selling a borrowed security, then buying it back

Market Neutral

- A methodology or portfolio with little or no directional market exposure and an absolute return focus

Stock Picking

- An attempt to select stocks (either long or short) that will out- or under-perform the market at-large

Sector Specific

- Strategy which focuses on a specific market sector (for example: Biotech, Financial, Retail)
- The best sector managers will utilize all financial instruments available to them

Multi Strategy

- Combines strategies (often similar) and maneuvers among them based on economic outlook or other asset allocation factors