

HFRI Hedge Fund Indices

Defined Formulaic Methodology

2025

© 2025 HFR, Inc. - All rights reserved. HFR®, HFRI®, HFRX®, HFRU®, HFRQ®, HFRL™, WWW.HFR.COM®, WWW.HEDGEFUNDRESEARCH.COM®, HEDGE FUND RESEARCH™, HFR IndexScope™, HFR Bank Systematic Risk Premia Indices[™] and HFR Risk Parity Indices ™ are the trademarks of HFR.





Table of Contents

INTRODUCTION	
Definitions and Terms	
Definition of Eligible Funds	
INDEX CONSTRUCTION	
Strategy and Regional Classification	7
Family of HFRI Indices	
Annual Index Rebalance	
Additional Rebalance Considerations	
Index NAV Calculation	
Asset Weighted Indices	
Index Disruption Event	
APPENDIX 1. STRATEGY DESCRIPTIONS	
Primary Strategy Descriptions	
Equity Hedge	
Event-Driven	
Macro	
Relative Value	
Fund of Funds	
Regional Investment Focus	
Emerging Markets	
Thematic Indices	





Introduction

The <u>HFRI Monthly Indices ("HFRI")</u> are a series of benchmarks designed to reflect hedge fund industry performance by constructing composites of constituent funds, as reported by the hedge fund managers listed within HFR Database. The HFRI range in breadth from the industry-level view of the HFRI Fund Weighted Composite Index to the increasingly specific-level of the sub-strategy classifications. Most HFRI Indices are equally-weighted composites while asset-weighted versions of some indices are also available. None of the Indices take into account ESG factors or pursue ESG objectives.

In order to be considered for inclusion in the HFRI, a hedge fund manager must submit a complete set of information to HFR Database. Additionally, all HFRI constituents are required to report in U.S. dollars monthly, net of all fees performance and assets under management. Constituent funds must have either (a) \$50 million assets under management or (b) at least \$10 Million USD assets under management on the last reported month prior to the index rebalance and have been actively trading for at least twelve (12) months.





Definitions and Terms

For the clarity of the rebalance process we define:

- Index Manager: HFR, responsible for the calculation of the Index.
- Rebalance Date: the first business date of the calendar year.
- Evaluation Date: the month starting 1 month prior to the Rebalance Date.
- HFRI Single-Manager Indices:
 - Estimated Index Values: the index will first be published on the fifth US business day of the month with a value for the prior month based on the index constituents initial reporting. An updated estimate of index values for the prior month will be published again on the 15th of the month (or nearest US business day afterwards) as additional constituent funds report their performance to HFR.
 - Final Index Value: the index value for a given month will become final on the third to last US business day of the month of its initial publication, after which it will not be subject to change. For example, December performance is finalized on the third to last US business day of the following January.
- HFRI Fund of Fund Indices:
 - Estimated Index Value: Fund of Fund indices will first be published on the fifth business day of the month with a value for the prior month based on the index constituents initial reporting. Updated estimate of index values will continue to be published again on the 15th of the month (or nearest US business day afterwards) as additional constituent funds report their performance and the first and fifth US business day of the following months for the next 3 months.
 - Final Index Value: the Fund of Fund index values for a given month will become final after four months following its initial publication, after which it will not be subject to change. For example, December performance is finalized on the first business day of the following May.

Definition of Eligible Funds

A hedge fund is eligible for consideration as an Index constituent if HFR determines it satisfies all of the following evaluation criteria:

- 1. Have a fund vehicle open for new investment
- 2. Report monthly returns
- 3. Report Net of All Fees Returns
- 4. Report performance and assets in USD
- 5. Free from issues that affect or may affect the Fund investment terms and obligations.
- 6. Have at least \$50 Million USD under management or have been actively trading for at least twelve (12) months
- 7. Have at least \$10 Million USD under management on the last reported month prior to the index rebalance.





- It, nor its investment management company or any affiliate is under investigation by a regulatory body or other authority for reasons of wrongdoing, breach of any law, regulation or rule, or similar reason, which is deemed likely to be materially adverse to the fund by HFR.
- 9. Agree to the Submitter Code of Conduct (SCOC)
- 10. Funds may be subjected to a due diligence process by HFR which may include consideration of fund registration and liquidity terms.

Index Construction

Most HFRI Monthly Indices (HFRI) are fund-weighted (equal-weighted) indices. Unlike asset-weighting, the equal-weighting of indices presents a more general picture of performance of the hedge fund industry. Any bias towards the larger funds potentially created by alternative weightings is greatly reduced, especially for strategies that encompass a small number of funds. Asset-weighted versions of certain HFRI Indices offer an additional perspective on the same universe, whereby funds with greater AUM have a larger impact on the index performance. All indices are rebalanced on an annual basis.

Funds that become ineligible are removed from the index in a manner consistent with real market options and practices within a timeframe reflecting actual market conditions. AUM will be redistributed among existing constituents or allocated to a new constituent or both.

The HFRI Indices are utilized by numerous hedge fund managers as a benchmark for their own hedge funds. The HFRI Indices are broken down into 4 main strategies, each with multiple substrategies. All single-manager HFRI Index constituents are included in the HFRI Fund Weighted Composite. Due to mutual agreements with the hedge fund managers listed in the HFR Database, we are not at liberty to disclose the particular funds behind any index to non-database subscribers.

The following formula is used to define the representative Hedge Fund Strategy Universe ("Strategy Universe") derived from the Global Hedge Fund Universe. The Global Hedge Fund Universe is expressed as:

$$HFU = \bigcup HFS$$

where HFS is the set of funds classified by strategy according to the strategy structure of the HFR Hedge Fund Database.

The funds comprising the HFS are filtered using the following formula to create the Strategy Universe.

$$[\delta(freq - 12) + H(AUM_{t_0-1} - AUM_{min})] \cdot H(AUM_{t_0-1} - 10) \cdot \delta(fees - 1) \cdot \delta(open - 1) \cdot \delta(ISO - USD) \cdot \delta(SCOC - 1) \neq 0$$

where H(x) is the step function defined as

$$H(x) = \begin{cases} 1 & x \ge 0 \\ 0 & x < 0 \end{cases}$$





 $\delta(x)$ is the delta function defined as

$$\delta(x) = \begin{cases} 1 & x = 0 \\ 0 & x \neq 0 \end{cases}$$

and

- *freq* is the reporting frequency (12=monthly, 4=quarterly)
- *fees* is the returns net of all fees (1=yes, 0=no)
- *open* corresponds to the fund being open to new investments (1=yes, 0=no)
- *ISO* is the reporting currency
- AUM is the fund assets under management in USD
- to-1 corresponds to 1 months before the rebalance date to, (i.e. the December prior to the January rebalance)
- *AUM_min* corresponds to the minimum AUM required for qualification
- SCOC is the agreement to the Submitter Code of Conduct (0=no, 1=yes)

In cases where a manager lists multiple funds with the same or similar investment profile, HFR chooses only the most representative fund for HFRI Index inclusion. HFR reserves the right to remove a fund from an index if it deems it not to be representative of its strategy, is closed to new investments or has limited liquidity.





Strategy and Regional Classification

Single-manager hedge funds are classified into strategies and substrategies according to the HFR Strategy Classification as follows:









and in terms of their regional and sub-regional investment focus:



Every fund in the HFR Database is classified under the corresponding strategy, substrategy and regional investment focus. Detailed descriptions of these are described in Appendix 1.

© 2025 HFR, Inc. - All rights reserved. HFR®, HFRI®, HFRX®, HFRU®, HFRQ®, HFRL™, WWW.HFR.COM®, WWW.HEDGEFUNDRESEARCH.COM®, HEDGE FUND RESEARCH™, HFR IndexScope™, HFR Bank Systematic Risk Premia Indices[™] and HFR Risk Parity Indices[™] are the trademarks of HFR





Family of HFRI Indices

Funds that qualify to be constituents are then combined to become various HFRI Indices which can satisfy one or more criteria according to their strategy, substrategy, regional investment focus and assets under management as of the Evaluation Date.

Index	Selection Criteria	Weighting Scheme
HFRI Fund Weighted Composite Index	All qualified funds included	Equal weighted
HFRI Asset Weighted Composite Index	All qualified funds included	Funds weighted by the funds' prior month's assets under management
HFRI Single Strategy Indices	All qualified funds in the specific strategy included	Equal weighted
HFRI Single Strategy Asset Weighted Indices	All qualified funds in the specific strategy included	Funds weighted by the prior month's assets under management
HFRI Single Substrategy Indices	All qualified funds in the specific substrategy included	Equal weighted
HFRI Regional Indices	All qualified funds with the specific region investment focus included	Equal weighted
HFRI Sub-regional Indices	All qualified funds with the specific sub- region investment focus included	Equal weighted





Annual Index Rebalance

The following rebalance methodology is applied on HFRI Hedge Fund Indices:

- > The eligible universe of constituents is determined at the Evaluation Date.
- The constituents are selected based on their qualification as defined by the Eligible Funds criteria on the Evaluation Date.
- > Each constituent is assigned with the same weight on each Rebalance Date.
- > A maximum number of constituents from each firm will be limited for optimal Index diversification purposes.
- The Index is rebalanced on an annual basis.

Additional Rebalance Considerations

- An Index constituent will be removed from the Index if it fails to meet the Evaluation Criteria on or before the Rebalance Date. In such a case, the NAV of the constituent will be allocated equally to the remaining constituents of the Index or allocated to a replacement prospective constituent.
- An Index constituent will be subject for removal from the Index for due diligence concerns or failure. In such a case, upon removal, the weight of the constituent will be allocated equally to the remaining constituents of the Index or allocated to a replacement constituent.
- If an Index constituent's weight cannot be maintained between Rebalance Dates, the constituent will remain in the Index at a reduced weight, its NAV will be reallocated equally to the remaining constituents or will be replaced with a similar qualifying prospective constituent as available.

Index NAV Calculation

HFRI Hedge Fund Indices (the "Index" and collectively, "Indices") are total return indices and are published by HFR at <u>www.hfr.com</u> and available through multiple market data vendors. Computation of the Index *NAV* uses actual performance of constituent funds as reported to HFR Performance reflects constituent fund management fees, incentive fees, dividends and other distributions.

The Index NAV is 1000 at inception where "*t*=0". The NAV changes are driven by the Index performance, which is defined as the percentage change in the value of the Index from a previous date "*t*-1" to current date "*t*".

At rebalance time "to", constituents are equal weighted so the NAV of the HFRI Index is defined as

$$NAV_{t_0} = NAV_{t_0-1} \times (1 + ROR_{t_0})$$





where ROR_{t_0} is the percentage change in the total value of the Index from " t_0 -1" to " t_0 " computed as:

$$ROR_{t_0} = \frac{1}{n} \sum_{i=1}^{n} ROR_{t_0}^i - F$$

where ROR_{t_0} is the rate of return of constituent i at time " t_0 ", F corresponds to an index adjustment term and n is the number of constituents in the Index. The index adjustment term is assigned a value of zero for the HFRI Fund of Fund Indices and for the rest of the HFRI Indices it is specific to each family, strategy and sub-strategy index. The index adjustment is based on historical analysis performed by HFR. Additional information on the calculation methodology of the index adjustment term can be found following this link: <u>IAF Methodology</u>.

The NAV of the HFRI Index at any other times "t" is computed as

$$NAV_t = NAV_{t-1} \times (1 + ROR_t)$$

where ROR_t is the percentage change in the total value of the Index from "t-1" to "t" as follows:

$$ROR_t = \sum_{i=1}^n w_t^i \times ROR_t^i - F$$

where ROR_t^i is the total return of constituent i at time "t", n is the number of constituents in the Index and W_t^i is the weight of constituent i at the beginning of month "t" computed as

$$w_t^i = \frac{(1 + R_{t-1}^i)}{\sum_{j=1}^n (1 + R_{t-1}^j)}$$

where R_{t-1}^{i} is the cumulative total return of constituent *i* between the rebalance date "t₀" and time "t-1":

$$1 + R_{t-1}^{i} = \prod_{t'=t_0}^{t-1} (1 + ROR_{t'}^{i}).$$

If a constituent k ceases to be a constituent of the Index at given time t before the rebalance date, its weight is then equally distributed to the remaining constituents in the Index; the new constituent weights are given by

$$w_{t'}^i = w_{t'}^i + \frac{1}{n-1} \cdot w_{t'}^k$$
 ,

with $i \neq k$.





Asset Weighted Indices

The constituent funds of the HFRI Asset Weighted Indices correspond to those of the (fund weighted) HFRI Indices with the funds weighted according to the AUM figures reported by each fund for the prior month.

The Index NAV is 1000 at inception where "*t*=0". The NAV changes are driven by the Index performance, which is defined as the percentage change in the value of the Index from a previous date "*t*-1" to current date "*t*".

The NAV at "t" is defined as

$$NAV_t = NAV_{t-1} \times (1 + ROR_t)$$

where ROR_t is the percentage change in the total value of the Index from "*t*-1" to "*t*" computed as:

$$ROR_t = \frac{1}{n} \sum_{i=1}^n w_i \times ROR_t^i - F$$

where ROR_t^i is the rate of return of fund i at time "t", n is the number of funds and F corresponds to an index adjustment term which is specific to each family, strategy and sub-strategy index... The index adjustment is based on historical analysis performed by HFR. At the time of rebalance " t_0 ", the weight w_i of fund i in the index is defined as

$$w_i = \frac{AUM_{t-1}^i}{\sum_{j=1}^n AUM_{t-1}^j}$$

where AUM_{t-1}^{i} corresponds to the reported assets of fund i at time "t-1".

For subsequent times "t", the weight w_t^i of fund i is computed as

$$w_t^i = \frac{w_i \times (1 + R_{t-1}^i)}{\sum_{j=1}^n w_j \times (1 + R_{t-1}^j)}$$

where R_{t-1}^{i} is the cumulative total return of constituent i between the rebalance date "to" and time "t-1":

$$1 + R_{t-1}^{i} = \prod_{t'=t_0}^{t-1} (1 + ROR_{t'}^{i}).$$





Index Disruption Event

"Index Disruption Event" means:

where, in the determination of HFR, it is not possible or it is not reasonably practicable for it to determine the price or value of a constituent; or

(2) a value for a constituent is not announced or is otherwise unavailable when such announcement or availability would normally be scheduled; or

(3) the occurrence of an event or circumstance (including, without limitation, a major market disruption, a systems failure, natural or man-made disaster, act of God, armed conflict, act of terrorism, riot or labor disruption or any similar intervening circumstance) that HFR, Inc. determines affects the Index.

(4) the occurrence of other event or circumstance (including, without limitation, a personnel loss, a significant client(s) redemption, an audit holdback, a side pocket implemented, redemptions suspended / Gate activated, reduced liquidity of liquidating constituent, money laundering charges, Cyber security breach / Client info leaked or stolen, Fraud, breach of any law, regulation or rule, Market specific short bans or suspensions, Major reputation hurting story or any similar intervening circumstance) that HFR, Inc. determines affects the Index.

If, in the determination of HFR, any of the foregoing is material.

Upon the occurrence of an Index Disruption Event on any day on which the official closing level of the Index is scheduled to be published, HFR (i) shall not calculate and publish the Index Level and/or (ii) if relevant, may make such adjustments to the provisions of the Index to account for such Index Disruption Event as it determines appropriate, including, without limitation, delaying the application of any procedures or requirements of the Index.





Appendix 1. Strategy Descriptions

HFR has constructed an accurate, relevant, robust and contemporaneous Strategy Classification System for all investment managers present in the HFR Database. The classifications reflect the evolution of strategic trends in the hedge fund industry, cognizant of the reality that over market cycles the classification system is likely to continue to evolve, as new opportunities attract investor capital.

Primary Strategy Descriptions

Strategy: In completing a fund profile for inclusion in HFR subscriber database, an investment manager qualitatively chooses one of four primary strategies, as defined below:

Equity Hedge: Equity Hedge strategies maintain positions both long and short in primarily equity and equity derivative securities. A wide variety of investment processes can be employed to arrive at an investment decision, including both quantitative and fundamental techniques; strategies can be broadly diversified or narrowly focused on specific sectors and can range broadly in terms of levels of net exposure, leverage employed, holding period, concentrations of market capitalizations and valuation ranges of typical portfolios. Equity Hedge managers would typically maintain at least 50%, and may in some cases be substantially entirely invested in equities, both long and short.

Event-Driven: Investment Managers who maintain positions in securities of companies currently or prospectively involved in corporate transactions of a wide variety, including but not limited to: mergers, restructurings, financial distress, tender offers, shareholder buybacks, debt exchanges, security issuance or other capital structure adjustments. Security types can range from most senior in the capital structure to most junior or subordinated, and frequently involve additional derivative securities. ED exposure contains a combination of sensitivities to equity markets, credit markets and idiosyncratic, company specific developments. Investment theses are typically predicated on fundamental characteristics (as opposed to quantitative), with the realization of the thesis predicated on a specific development exogenous to the existing capital structure.

Macro: Investment Managers which execute a broad range of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on equity, fixed income, currency and commodity markets. Managers employ a variety of techniques, both discretionary and systematic analysis, combinations of top down and bottom up theses, quantitative and fundamental approaches and long and short term holding periods. Although some strategies employ RV techniques, Macro strategies are distinct from RV strategies in that the primary investment thesis is predicated on future movements in the underlying instruments, rather than realization of a valuation discrepancy between securities. In a similar way, while both Macro and equity hedge managers may hold equity securities, the overriding investment thesis is predicated on the impact movements in underlying macroeconomic variables may have on security prices, as opposes to EH, in which the fundamental characteristics on the company are the most significant and integral to investment thesis.

Relative Value: Investment Managers who maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities Manager employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income, derivative or other security types. RVA position may be involved in corporate transactions also, but as opposed to ED exposures, the investment thesis is predicated on realization of a pricing discrepancy between related securities, as opposed to the outcome of the corporate transaction.





Fund of Funds: Fund of Funds invest with multiple managers through funds or managed accounts. The strategy designs a diversified portfolio of managers with the objective of significantly lowering the risk (volatility) of investing with an individual manager. The Fund of Funds manager has discretion in choosing which strategies to invest in for the portfolio. A manager may allocate funds to numerous managers within a single strategy, or with numerous managers in multiple strategies. The minimum investment in a Fund of Funds may be lower than an investment in an individual hedge fund or managed account. The investor has the advantage of diversification among managers and styles with significantly less capital than investing with separate managers.

Sub-Strategy Descriptions:

Equity Hedge: Equity Hedge strategies maintain positions both long and short in primarily equity and equity derivative securities. A wide variety of investment processes can be employed to arrive at an investment decision, including both quantitative and fundamental techniques; strategies can be broadly diversified or narrowly focused on specific sectors and can range broadly in terms of levels of net exposure, leverage employed, holding period, concentrations of market capitalizations and valuation ranges of typical portfolios. Equity Hedge managers would typically maintain at least 50%, and may in some cases be substantially entirely invested in equities, both long and short. EH is further subdivided into 7 sub-strategies:

- 1. <u>EH: Equity Market Neutral</u> strategies employ sophisticated quantitative techniques of analyzing price data to ascertain information about future price movement and relationships between securities, select securities for purchase and sale. These can include both Factor-based and Statistical Arbitrage/Trading strategies. Factor-based investment strategies include strategies in which the investment thesis is predicated on the systematic analysis of common relationships between securities. In many but not all cases, portfolios are constructed to be neutral to one or multiple variables, such as broader equity markets in dollar or beta terms, and leverage is frequently employed to enhance the return profile of the positions identified. Statistical Arbitrage/Trading strategies consist of strategies in which the investment thesis is predicated on exploiting pricing anomalies which may occur as a function of expected mean reversion inherent in security prices; high frequency techniques may be employed and trading strategies may also be employed on the basis on technical analysis or opportunistically to exploit new information the investment manager believes has not been fully, completely or accurately discounted into current security prices. Equity Market Neutral Strategies typically maintain characteristic net equity market exposure no greater than 10% long or short.
- 2. <u>EH: Fundamental Growth</u> strategies employ analytical techniques in which the investment thesis is predicated on assessment of the valuation characteristics on the underlying companies which are expected to have prospects for earnings growth and capital appreciation exceeding those of the broader equity market. Investment theses are focused on characteristics of the firm's financial statements in both an absolute sense and relative to other similar securities and more broadly, market indicators. Strategies employ investment processes designed to identify attractive opportunities in securities of companies which are experiencing or expected to experience abnormally high levels of growth compared with relevant benchmarks growth in earnings, profitability, sales or market share
- 3. <u>EH: Fundamental Value</u> strategies which employ investment processes designed to identify attractive opportunities in securities of companies which trade a valuation metrics by which the manager determines them to be inexpensive and undervalued when compared with relevant benchmarks. Investment theses are focused on characteristics of the firm's financial statements in both an absolute sense and relative to other similar securities and more broadly, market indicators. Relative to Fundamental Growth strategies, in which earnings growth and capital appreciation is expected as a function of expanding market share and revenue increases, *Fundamental Value strategies typically focus on equities which currently generate high cash flow, but trade at discounted valuation multiples, possibly as a result of limited anticipated growth prospects or generally out of favor conditions, which may be specific to sector or specific holding.*
- 4. <u>EH: Quantitative Directional</u> strategies employ sophisticated quantitative analysis of price, other technical and fundamental data to ascertain relationships among securities and to select securities for purchase and sale. These can include both Factor-based and Statistical Arbitrage/Trading strategies. Factor-based investment





strategies include strategies in which the investment thesis is predicated on the systematic analysis of common relationships between securities. Statistical Arbitrage/Trading strategies consist of strategies in which the investment thesis is predicated on exploiting pricing anomalies which may occur as a function of expected mean reversion inherent in security prices; high frequency techniques may be employed and trading strategies may also be employed on the basis on technical analysis or opportunistically to exploit new information the investment manager believes has not been fully, completely or accurately discounted into current security prices. *Quantitative Directional Strategies typically maintain varying levels of net long or short equity market exposure over various market cycles.*

- 5. <u>EH: Sector Energy/Basic Materials</u> strategies which employ investment processes designed to identify opportunities in securities in specific niche areas of the market in which the Manager maintains a level of expertise which exceeds that of a market generalist in identify companies engaged in the production and procurement of inputs to industrial processes, and implicitly sensitive to the direction of price trends as determined by shifts in supply and demand factors, and implicitly sensitive to the direction of broader economic trends. Energy/Basic Materials strategies typically maintain a primary focus in this area or expect to maintain in excess of 50% of portfolio exposure to these sectors over a various market cycles.
- 6. <u>EH: Sector Technology/Healthcare</u> strategies employ investment processes designed to identify opportunities in securities in specific niche areas of the market in which the Manager maintain a level of expertise which exceeds that of a market generalist in identifying opportunities in companies engaged in all development, production and application of technology, biotechnology and as related to production of pharmaceuticals and healthcare industry. Though some diversity exists as an across sub-strategy, strategies implicitly exhibit some characteristic sensitivity to broader growth trends, or in the case of the latter, developments specific to the healthcare industry. Technology/Healthcare strategies typically maintain a primary focus in this area or expect to maintain in excess of 50% of portfolio exposure to these sectors over a various market cycles.
- 7. <u>EH: Short-Biased</u> strategies employ analytical techniques in which the investment thesis is predicated on assessment of the valuation characteristics on the underlying companies with the goal of identifying overvalued companies. Short Biased strategies may vary the investment level or the level of short exposure over market cycles, but the primary distinguishing characteristic is that the manager maintains consistent short exposure and expects to outperform traditional equity managers in declining equity markets. Investment theses may be fundamental or technical and nature and manager has a particular focus, above that of a market generalist, on identification of overvalued companies and would expect to maintain a net short equity position over various market cycles.
- 8. <u>EH: Multi-Strategy</u> Investment Managers maintain positions both long and short in primarily equity and equity derivative securities. A wide variety of investment processes can be employed to arrive at an investment decision, including both quantitative and fundamental techniques; strategies can be broadly diversified or narrowly focused on specific sectors and can range broadly in terms of levels of net exposure, leverage employed, holding period, concentrations of market capitalizations and valuation ranges of typical portfolios. EH Multi-Strategy managers do not maintain more than 50% exposure in any one Equity Hedge sub-strategy.

Event-Driven: Investment Managers who maintain positions in companies currently or prospectively involved in

corporate transactions of a wide variety including but not limited to mergers, restructurings, financial distress, tender offers, shareholder buybacks, debt exchanges, security issuance or other capital structure adjustments. Security types can range from most senior in the capital structure to most junior or subordinated, and frequently involve additional derivative securities. Event Driven exposure includes a combination of sensitivities to equity markets, credit markets and idiosyncratic, company specific developments. Investment theses are typically predicated on fundamental characteristics (as opposed to quantitative), with the realization of the thesis predicated on a specific development exogenous to the existing capital structure.





- 1. <u>ED: Activist</u> strategies may obtain or attempt to obtain representation of the company's board of directors in an effort to impact the firm's policies or strategic direction and in some cases may advocate activities such as division or asset sales, partial or complete corporate divestiture, dividend or share buybacks, and changes in management. Strategies employ an investment process primarily focused on opportunities in equity and equity related instruments of companies which are currently or prospectively engaged in a corporate transaction, security issuance/repurchase, asset sales, division spin-off or other catalyst oriented situation. These involve both announced transactions as well as situations which pre-, post-date or situations in which no formal announcement is expected to occur. Activist strategies are distinguished from other Event-Driven strategies in that, over a given market cycle, Activist strategies would expect to have greater than 50% of the portfolio in activist positions, as described.
- 2. <u>ED: Credit Arbitrage</u> strategies employ an investment process designed to isolate attractive opportunities in corporate fixed income securities; these include both senior and subordinated claims as well as bank debt and other outstanding obligations, structuring positions with little of no broad credit market exposure. These may also contain a limited exposure to government, sovereign, equity, convertible or other obligations but the focus of the strategy is primarily on fixed corporate obligations and other securities are held as component of positions within these structures. Managers typically employ fundamental credit analysis to evaluate the likelihood of an improvement in the issuer's creditworthiness, in most cases securities trade in liquid markets and managers are only infrequently or indirectly involved with company management. Fixed Income Corporate strategies differ from Event Driven: Credit Arbitrage in that the former more typically involve more general market hedges which may vary in the degree to which they limit fixed income market exposure, while the latter typically involve arbitrage positions with little or no net credit market exposure, but are predicated on specific, anticipated idiosyncratic developments.
- 3. <u>ED: Distressed/Restructuring</u> strategies which employ an investment process focused on corporate fixed income instruments, primarily on corporate credit instruments of companies trading at significant discounts to their value at issuance or obliged (par value) at maturity as a result of either formal bankruptcy proceeding or financial market perception of near term proceedings. Managers are typically actively involved with the management of these companies, frequently involved on creditors' committees in negotiating the exchange of securities for alternative obligations, either swaps of debt, equity or hybrid securities. Managers employ fundamental credit processes focused on valuation and asset coverage of securities of distressed firms; in most cases portfolio exposures are concentrated in instruments which are publicly traded, in some cases actively and in others under reduced liquidity but in general for which a reasonable public market exists. In contrast to Special Situations, Distressed Strategies employ primarily debt (greater than 60%) but also may maintain related equity exposure.
- 4. <u>ED: Merger Arbitrage</u> strategies which employ an investment process primarily focused on opportunities in equity and equity related instruments of companies which are currently engaged in a corporate transaction. Merger Arbitrage involves primarily announced transactions, typically with limited or no exposure to situations which pre-, post-date or situations in which no formal announcement is expected to occur. Opportunities are frequently presented in cross border, collared and international transactions which incorporate multiple geographic regulatory institutions, with typically involve minimal exposure to corporate credits. Merger arbitrage strategies typically have over 75% of positions in announced transactions over a given market cycle.
- 5. <u>ED: Private Issue/Regulation D</u> strategies which employ an investment process primarily focused on opportunities in equity and equity related instruments of companies which are primarily private and illiquid in nature. These most frequently involve realizing an investment premium for holding private obligations or securities for which a reasonably liquid market does not readily exist until such time as a catalyst such as new security issuance or emergence from bankruptcy proceedings occurs. Managers employ fundamental valuation processes focused on asset coverage of securities of issuer firms, and would expect over a given market cycle to maintain greater than 50% of the portfolio in private securities, including Reg D or PIPE transactions.





- 5. <u>ED: Special Situations</u> strategies which employ an investment process primarily focused on opportunities in equity and equity related instruments of companies which are currently engaged in a corporate transaction, security issuance/repurchase, asset sales, division spin-off or other catalyst oriented situation. These involve both announced transactions as well as situations which pre-, post-date or situations in which no formal announcement is expected to occur. Strategies employ an investment process focusing broadly on a wide spectrum of corporate life cycle investing, including but not limited to distressed, bankruptcy and post bankruptcy security issuance, announced acquisitions and corporate division spin-offs, asset sales and other security issuance impacting an individual capital structure focusing primarily on situations identified via fundamental research which are likely to result in a corporate transactions or other realization of shareholder value through the occurrence of some identifiable catalyst. Strategies effectively employ primarily equity (greater than 60%) but also corporate debt exposure, and in general focus more broadly on post-bankruptcy equity exposure and exit of restructuring proceedings.
- 7. <u>ED: Multi-Strategy</u> managers would typically have no greater than 50% exposure to any one, distinct Event-Driven sub-strategy.

Macro: Investment Managers which trade a broad range of strategies in which the investment process is

predicated on movements in underlying economic variables and the impact these have on equity, fixed income, hard currency and commodity markets. Managers employ a variety of techniques, both discretionary and systematic analysis, combinations of top down and bottom up theses, quantitative and fundamental approaches and long and short term holding periods. Although some strategies employ RV techniques, Macro strategies are distinct from RV strategies in that the primary investment thesis is predicated on predicted or future movements in the underlying instruments, rather than realization of a valuation discrepancy between securities. In a similar way, while both Macro and equity hedge managers may hold equity securities, the overriding investment thesis is predicated on the impact movements in underlying macroeconomic variables may have on security prices, as opposed to EH, in which the fundamental characteristics of the company are the most significant and integral to investment thesis.

- 1. <u>Macro: Active Trading</u> strategies employ either discretionary or rule-based high-frequency strategies to trade multiple asset classes. Distinguished from Systematic: Diversified strategies by their high portfolio turnover and a trade duration of five days or less, and from Equity Hedge: Quantitative Directional by their significant use of asset classes other than equities, these strategies employ an investment process predicated on evaluation of historical and current price and other technical, fundamental and quantitative market data to determine trading opportunities lasting from a few seconds to a few days at a time. Positions may be defined as momentum-based, mean reversion, or spread/arbitrage trades. These strategies frequently employ leverage and are active across market sectors including equities, fixed income, foreign exchange, and commodity asset classes, utilize cash, futures, and/or options, and are generally diversified in geography. These trading strategies characteristically emphasize rapid response to new fundamental and technical market information, generally utilize liquid markets, and often derive alpha from market volatility and instability.
- 2. <u>Macro: Commodity Agriculture</u> strategies are reliant on the evaluation of market data, relationships and influences as they pertain primarily to Soft Commodity markets focusing primarily on positions in grains (wheat, soybeans, corn, etc.) or livestock markets. Portfolio the investment process can be predicated on fundamental, systematic or technical analysis, and Agricultural strategies typically invest in both Emerging and Developed Markets. Commodity: Agricultural strategies typically would expect to have greater than 50% of portfolio in dedicated Agricultural exposure over a given market cycle.
- 3. <u>Macro: Commodity Energy</u> strategies are reliant on the evaluation of market data, relationships and influences as they pertain primarily to Energy commodity markets focusing primarily on positions in Crude Oil, Natural Gas and other Petroleum products. Portfolio investment process can be predicated on fundamental, systematic or technical analysis, and strategies typically invest in both Emerging and Developed Markets. Commodity: Energy strategies typically would expect to have greater than 50% of portfolio in dedicated Energy exposure over a given market cycle.





- 4. <u>Macro: Commodity Metals</u> strategies are reliant on the evaluation of market data, relationships and influences as they pertain primarily to Hard Commodity markets focusing primarily on positions in Metals (Gold, Silver, Platinum, etc). Portfolio investment process can be predicated on fundamental, systematic or technical analysis, and strategies typically invest in both Emerging and Developed Markets. Commodity: Metals strategies typically would expect to have greater than 50% of portfolio in dedicated Metals exposure over a given market cycle.
- 5. Macro: Commodity - Multi strategies include both discretionary and systematic commodity strategies. Systematic commodity have investment processes typically as function of mathematical, algorithmic and technical models, with little or no influence of individuals over the portfolio positioning. Strategies employ an investment process designed to identify opportunities in markets exhibiting trending or momentum characteristics across commodity assets classes, frequently with related ancillary exposure in commodity sensitive equities or other derivative instruments. Strategies typically employ quantitative process which focus on statistically robust or technical patterns in the return series of the asset, and typically focus on highly liquid instruments and maintain shorter holding periods than either discretionary or mean reverting strategies. Although some strategies seek to employ counter trend models, strategies benefit most from an environment characterized by persistent, discernible trending behavior. Systematic Commodity strategies typically would expect to have greater than 35% of portfolio in dedicated commodity exposure over a given market cycle. Discretionary Commodity strategies are reliant on the fundamental evaluation of market data, relationships and influences as they pertain primarily to commodity markets including positions in energy, agricultural, resources or metal assets. Portfolio positions typically are predicated on the evolution of investment themes the Manager expect to materialize over a relevant timeframe, which in many cases contain contrarian or volatility focused components. Investment Managers also may trade actively in developed and emerging markets, focusing on both absolute and relative levels on equity markets, interest rates/fixed income markets, currency; frequently employing spread trades to isolate a differential between instrument identified by the Investment Manager to be inconsistent with expected value. Discretionary Commodity strategies typically would expect to have greater than 35% of portfolio in dedicated commodity exposure over a given market cycle.
- 6. <u>Macro: Currency Discretionary</u> strategies are reliant on the fundamental evaluation of market data, relationships and influences as they pertain primarily to currency markets including positions in global foreign exchange markets, both listed and unlisted, and as interpreted by an individual or group of individuals who make decisions on portfolio positions; strategies employ an investment process most heavily influenced by top down analysis of macroeconomic variables. Portfolio positions typically are predicated on the evolution of investment themes the Manager expect to materialize over a relevant timeframe, which in many cases contain contrarian or volatility focused components. Investment Managers also may trade actively in developed and emerging markets, focusing on both absolute and relative levels on equity markets, interest rates/fixed income markets, currency; frequently employing spread trades to isolate a differential between instrument identified by the Investment Manager to be inconsistent with expected value. Currency Discretionary strategies typically would expect to have greater than 35% of portfolio in dedicated currency exposure over a given market cycle.
- 7. <u>Macro: Currency Systematic</u> strategies have investment processes typically as function of mathematical, algorithmic and technical models, with little or no influence of individuals over the portfolio positioning. Strategies which employ an investment process designed to identify opportunities in markets exhibiting trending or momentum characteristics across currency assets classes, frequently with related ancillary exposure in sovereign fixed income. Strategies typically employ quantitative process which focus on statistically robust or technical patterns in the return series of the asset, and typically focus on highly liquid instruments and maintain shorter holding periods than either discretionary or mean reverting strategies. Although some strategies seek to employ counter trend models, strategies benefit most from an environment characterized by persistent, discernable trending behavior. Currency Systematic strategies typically would expect to have greater than 35% of portfolio in dedicated currency exposure over a given market cycle.
- 8. <u>Macro: Discretionary Thematic</u> strategies are primarily reliant on the evaluation of market data, relationships and influences, as interpreted by an individual or group of individuals who make decisions on portfolio positions; strategies employ an investment process most heavily influenced by top down analysis of macroeconomic variables. Investment Managers may trade actively in developed and emerging





markets, focusing on both absolute and relative levels on equity markets, interest rates/fixed income markets, currency and commodity markets; frequently employing spread trades to isolate a differential between instrument identified by the Investment Manager to be inconsistent with expected value. Portfolio positions typically are predicated on the evolution of investment themes the Manager expect to materialize over a relevant timeframe, which in many cases contain contrarian or volatility focused components.

- 9. <u>Macro: Systematic Diversified</u> strategies have investment processes typically as function of mathematical, algorithmic and technical models, with little or no influence of individuals over the portfolio positioning. Strategies which employ an investment process designed to identify opportunities in markets exhibiting trending or momentum characteristics across individual instruments or asset classes. Strategies typically employ quantitative process which focus on statistically robust or technical patterns in the return series of the asset, and typically focus on highly liquid instruments and maintain shorter holding periods than either discretionary or mean reverting strategies. Although some strategies seek to employ counter trend models, strategies benefit most from an environment characterized by persistent, discernable trending behavior. Systematic Diversified strategies typically would expect to have no greater than 35% of portfolio in either dedicated currency or commodity exposures over a given market cycle.
- 10. <u>Macro: Multi-Strategy</u> Strategies which employ components of both Discretionary and Systematic Macro strategies, but neither exclusively both. Strategies frequently contain proprietary trading influences, and in some cases contain distinct, identifiable sub-strategies, such as equity hedge or equity market neutral, or in some cases a number of sub-strategies are blended together without the capacity for portfolio level disaggregation. Strategies employ an investment process is predicated on a systematic, quantitative evaluation of macroeconomic variables in which the portfolio positioning is predicated on convergence of differentials between markets, not necessarily highly correlated with each other, but currently diverging from their historical levels of correlation. Strategies focus on fundamental relationships across geographic areas of focus both inter and intraasset classes, and typical holding periods are longer than trend following or discretionary strategies.

Relative Value: Investment Managers who maintain positions in which the investment thesis is predicated

on realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income, derivative or other security types. Fixed income strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk adjusted spread between these instruments represents an attractive opportunity for the investment manager. RV position may be involved in corporate transactions also, but as opposed to ED exposures, the investment thesis is predicated on realization of a pricing discrepancy between related securities, as opposed to the outcome of the corporate transaction. RV is further subdivided into 6 sub-strategies:

- 1. <u>RV: Fixed Income-Asset Backed</u> includes strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread is a fixed income instrument backed physical collateral or other financial obligations (loans, mortgages, credit cards) other than those of a specific corporation. Strategies employ an investment process designed to isolate attractive opportunities between a variety of fixed income instruments specifically securitized by collateral commitments which frequently include loans, pools and portfolios of loans, receivables, real estate, mortgage, machinery or other tangible financial commitments. Investment thesis may be predicated on an attractive spread given the nature and quality of the collateral, the liquidity characteristics of the underlying instruments and on issuance and trends in collateralized fixed income instruments, broadly speaking. In many cases, investment managers hedge, limit or offset interest rate exposure in the interest of isolating the risk of the position to strictly the yield disparity of the instrument relative to the lower risk instruments.
- <u>RV: Fixed Income-Convertible Arbitrage</u> includes strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread is a convertible fixed income instrument. Strategies employ an investment process designed to isolate attractive opportunities between the price of a convertible security and the price of a non-convertible security,





typically of the same issuer. Convertible arbitrage positions maintain characteristic sensitivities to credit quality the issuer, implied and realized volatility of the underlying instruments, levels of interest rates and the valuation of the issuer's equity, among other more general market and idiosyncratic sensitivities.

- 3. <u>RV: Fixed Income-Corporate</u> includes strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread is a corporate fixed income instrument. Strategies employ an investment process designed to isolate attractive opportunities between a variety of fixed income instruments, typically realizing an attractive spread between multiple corporate bonds or between a corporate and risk free government bond. Fixed Income-Corporate strategies differ from Event Driven: Credit Arbitrage in that the former more typically involve more general market hedges which may vary in the degree to which they limit fixed income market exposure, while the latter typically involve arbitrage positions with little or no net credit market exposure, but are predicated on specific, anticipated idiosyncratic developments.
- 4. <u>RV: Fixed Income Sovereign</u> includes strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread is a sovereign fixed income instrument. Strategies employ an investment process designed to isolate attractive opportunities between a variety of fixed income instruments, typically realizing an attractive spread between multiple sovereign bonds or between a corporate and risk free government bond. Fixed Income Sovereign typically employ multiple investment processes including both quantitative and fundamental discretionary approaches and relative to other Relative Value Arbitrage sub-strategies, these have the most significant top-down macro influences, relative to the more idiosyncratic fundamental approaches employed. RV: Fixed Income: Sovereign funds would typically have a minimum of 50% exposure to global sovereign fixed income markets, but characteristically maintain lower net exposure than similar strategies in Macro: Multi-Strategy sub-strategy.
- 5. <u>RV: Volatility</u> strategies trade volatility as an asset class, employing arbitrage, directional, market neutral or a mix of types of strategies, and include exposures which can be long, short, neutral or variable to the direction of implied volatility, and can include both listed and unlisted instruments. Directional volatility strategies maintain exposure to the direction of implied volatility of a particular asset or, more generally, to the trend of implied volatility in broader asset classes. Arbitrage strategies employ an investment process designed to isolate opportunities between the price of multiple options or instruments containing implicit optionality. Volatility arbitrage positions typically maintain characteristic sensitivities to levels of implied and realized volatility, levels of interest rates and the valuation of the issuer's equity, among other more general market and idiosyncratic sensitivities.
- 6. <u>RV: Yield Alternatives Energy Infrastructure</u> strategies employ an investment thesis which is predicated on realization of a valuation differential between related instruments in which one or multiple components of the spread contains exposure to Energy Infrastructure most typically achieved through investment in Master Limited Partnerships (MLPs), Utilities or Power Generation. Strategies are typically fundamentally driven to measure the existing relationship between instruments and identify positions in which the risk adjusted spread between these instruments represents an attractive opportunity for the investment manager. In contrast to Equity Hedge strategies, the investment thesis is predicated on the yield differential realized from the securities as opposed to directional price appreciation of the underlying securities, and strategies typically contain greater than 50% of portfolio exposure to Energy Infrastructure positions.
- 7. <u>RV: Yield Alternatives Real Estate</u> strategies employ an investment thesis which is predicated on realization of a valuation differential between related instruments in which one or multiple components of the spread contains exposure to investment in real estate directly (commercial or residential) or indirectly through Real Estate Investment Trusts (REITS). Strategies are typically fundamentally driven to measure the existing relationship between instruments and identify positions in which the risk adjusted spread between these instruments represents an attractive opportunity for the investment manager. In contrast to RVA: Fixed Income: Asset Backed, Yield Alternative: Real Estate contains primarily non-fixed income, non-securitized obligations, and strategies typically contain greater than 50% of portfolio exposure to Real Estate positions.





8. <u>RV: Multi-Strategies</u> employ an investment thesis is predicated on realization of a spread between related yield instruments in which one or multiple components of the spread contains a fixed income, derivative, equity, real estate, MLP or combination of these or other instruments. Strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk adjusted spread between these instruments represents an attractive opportunity for the investment manager. In many cases these strategies may exist as distinct strategies across which a vehicle which allocates directly, or may exist as related strategies over which a single individual or decision making process manages. *Multi-strategy is not intended to provide broadest-based mass market investors appeal, but are most frequently distinguished from others arbitrage strategies in that they expect to maintain >30% of portfolio exposure in 2 or more strategies meaningfully distinct from each other that are expected to respond to diverse market influences*

Fund of Funds: Fund of Funds invest with multiple managers through funds or managed accounts. The

strategy designs a diversified portfolio of managers with the objective of significantly lowering the risk (volatility) of investing with an individual manager. The Fund of Funds manager has discretion in choosing which strategies to invest in for the portfolio. A manager may allocate funds to numerous managers within a single strategy, or with numerous managers in multiple strategies. The minimum investment in a Fund of Funds may be lower than an investment in an individual hedge fund or managed account. The investor has the advantage of diversification among managers and styles with significantly less capital than investing with separate managers.

- <u>Fund of Funds: Conservative</u> FOFs classified as "Conservative" exhibit one or more of the following characteristics: seeks consistent returns by primarily investing in funds that generally engage in more "conservative" strategies such as Equity Market Neutral, Fixed Income Arbitrage, and Convertible Arbitrage; exhibits a lower historical annual standard deviation than the HFRI Fund of Funds Composite Index. A fund in the HFRI FOF Conservative Index shows generally consistent performance regardless of market conditions.
- 2. <u>Fund of Funds: Diversified</u> FOFs classified as "Diversified" exhibit one or more of the following characteristics: invests in a variety of strategies among multiple managers; historical annual return and/or a standard deviation generally similar to the HFRI Fund of Fund Composite index; demonstrates generally close performance and returns distribution correlation to the HFRI Fund of Fund Composite Index. A fund in the HFRI FOF Diversified Index tends to show minimal loss in down markets while achieving superior returns in up markets.
- 3. <u>Fund of Funds: Market</u> Defensive FOFs classified as "Market Defensive" exhibit one or more of the following characteristics: invests in funds that generally engage in short-biased strategies such as short selling and managed futures; shows a negative correlation to the general market benchmarks (S&P). A fund in the FOF Market Defensive Index exhibits higher returns during down markets than during up markets.
- 4. <u>Fund of Funds: Strategic</u> FOFs classified as "Strategic" exhibit one or more of the following characteristics: seeks superior returns by primarily investing in funds that generally engage in more opportunistic strategies such as Emerging Markets, Sector specific, and Equity Hedge; exhibits a greater dispersion of returns and higher volatility compared to the HFRI Fund of Funds Composite Index. A fund in the HFRI FOF Strategic Index tends to outperform the HFRI Fund of Fund Composite Index in up markets and underperform the index in down markets.
- 5. <u>HFRI FOF: Low Vol (S) Index</u> is comprised of approximately 40% of the lowest volatility funds that are constituents of the HFRI 500 Index and is designed to synthetically (S) represent the performance of low volatility fund of funds. The index emulates the standard fund of fund fee structure by equal weighting the monthly performance of single manager funds less 100 basis points per annum.





- 6. <u>HFRI FOF: Mid Vol (S) Index</u> is comprised of approximately 60% medium volatility funds that are constituents of the HFRI 500 Index and is designed to synthetically (S) represent the performance of medium volatility fund of funds. The index emulates the standard fund of fund fee structure by equal weighting the monthly performance of single manager funds less 100 basis points per annum.
- 7. <u>HFRI FOF: High Vol (S) Index</u> is comprised of approximately 40% of the highest volatility funds that are constituents of the HFRI 500 Index and is designed to synthetically (S) represent the performance of high volatility fund of funds. The index emulates the standard fund of fund fee structure by equal weighting the monthly performance of single manager funds less 100 basis points per annum.

Regional Investment Focus

HFR's Regional Investment Focus is designed to reflect the primary focus of the Fund's strategic exposure, over various market cycles, independent of the investment manager's physical location or the domiciled registration location of the fund. The Regions have been constructed based on primary continental economic association, as well as actual continental geographic location. In completing a fund profile for inclusion in HFR Database, an investment manager qualitatively selects one of the four following primary Regions:

While most strategies in some manner do contain exposures outside of the primary region, we encourage managers to classify strategies on the basis of the expected primary focus (containing greater than 50% of portfolio exposure) over a number of market cycles.

In addition, we also request sub-regional classification, defined as follows:

<u>Asia</u>

Japan - Primary focus on Japan, typically >75% exposure.
Asia ex-Japan - Primary focus on Asia, typically with <10% exposure in Japan.
Asia w/Japan - Primary focus on Asia, with between 10% and 75% exposure in Japan.

Europe

Western Europe / UK - Primary focus in region, with greater than 50% exposure in these areas. Russia / Eastern Europe - Primary focus in region, with greater than 50% exposure in these areas. Northern Europe - Primary focus in region, typically >50% exposure Pan European - > 75% exposure in all European regions.

Americas

North America - Primary focus, with greater than 50% exposure in these areas. **Latin America** - Primary focus, with greater than 50% exposure in these areas. **Pan American** > 75% exposure in the Americas.





<u>Other</u>

Africa - Greater than 50% exposure in African region.
Middle East - Greater than 50% exposure in Middle East region.
Global - No greater than 50% exposure in any specific geographic region.
Multiple Emerging Markets - No greater than 50% exposure in any specific emerging market.

Geographic Classification notes:

Asia - Includes a diverse range of nations that border the Pacific and Indian oceans. For our purposes the nations that transverse this region include: Japan, China, Korea, Australia, India, Hong Kong, Singapore, etc...

Europe - Includes Western, Eastern and Northern European (Scandinavian) nations, as well as Russia and Turkey

Americas - North America includes the USA, Canada and Greenland. Latin America includes Mexico, Central and South America as well as the nations of the Caribbean.

Africa - Includes all of Africa except for Egypt which is classified as Middle East

Middle East - for our purposes this area ranges from Egypt to Israel to Syria to Iran and includes all the nations of the Arabian Peninsula

Other - HFR reserves the inclusion of a fund in "Global" to those funds which have no greater than 50% exposure to ANY of the more-specific geographic regions provided and the inclusion of a fund in "Multiple Emerging Markets" to those funds which have no greater than 50% exposure to ANY of the more-specific emerging markets regions provided.

Emerging Markets: The constituents of the HFRI Emerging Markets Indices are selected according to their

Regional Investment Focus only. There is no Investment Strategy criteria for inclusion in these indices. Funds classified as Emerging Markets have a regional investment focus in one of the following geographic areas: Asia ex-Japan, Russia/Eastern Europe, Latin America, Africa or the Middle East. Funds with no primary focus in any of the aforementioned regions are classified as Global. At the current time HFR does not publish separate indices for funds focused in the Africa and Middle East regions. However, these funds are represented in the HFRI Emerging Markets (Total) Index.

- 1. <u>HFRI Emerging Markets (Total) Index</u> is a fund-weighted composite of all Emerging Markets funds.
- 2. <u>HFRI Emerging Markets: Asia ex-Japan Index</u> Primary focus on Asia, typically with <10% exposure in Japan
- 3. <u>HFRI Emerging Markets: Global Index</u> No greater than 50% exposure in any specific geographic region
- 4. <u>HFRI Emerging Markets: Russia/Eastern Europe Index</u> Primary focus in region, with greater than 50% exposure in these areas.
- 5. <u>HFRI Emerging Markets: Latin America Index</u> Primary focus, with greater than 50% exposure in these areas.





Thematic Indices

Thematic Indices are designed to reflect the performance of funds grouped by a specific criterion that falls outside the scope of our standard investment strategy or regional classifications.

Examples of theme-specific indices include: The ethnic origin or gender of the person or persons which own the management firm or are the portfolio manager of a fund (Diversity and Woman Indices); Indices based on funds focused on a particular niche sector or industry (MLP or Alternative Energy Indices); or funds that fall across multiple sub-strategies or regions (e.g. Credit). The constituents of the Thematic Indices must meet the general HFRI inclusion criteria and unless otherwise stated any HFRI Thematic index would also be fund-weighted (equal-weighted).

HFRI Credit Index

The constituents of the HFRI Credit Index correspond to the funds from the following HFRI substrategy indices: ED: Credit Arbitrage, ED: Distressed, ED: Multi-Strategy, RV: FI – Asset Backed, RV: FI – Convertible Arb, RV: FI – Corporate, RV: Multi-Strategy. The index is fund weighted across constituent funds.

HFRI Multi-Manager/Pod Shop Index

The HFRI Multi-Manager/Pod Shop Index is comprised of funds of various strategy types that utilize a multi-manager or "Pod Shop" structure, whereby fund capital is allocated to multiple independent investment teams referred to as "Pods." The Pods are autonomous but generally operate within certain portfolio management or risk guidelines, and capital is allocated to or from these Pods in a discretionary manner under the supervision of a Chief Investment Officer. The HFRI Multi-Manager/Pod Shop Index was published in 2024, and historical performance was calculated using funds that were determined to be actively utilizing a multi-manager structure. The index is rebalanced annually.

HFRI Long Volatility Index

The HFRI Long Volatility Index is a composite of funds of various strategy types that generally position their portfolios to profit from sharp increases in the value of option positions and portfolios when market volatility increases. Funds in this strategy generally use options and also utilize other derivatives (futures, CDS, etc.) to create positions and portfolios which increase in value as both implied and realized volatility increase. Increases in option value can be a result of increased value of option premium, as well as the ability to purchase or sell the underlying instrument at a level (strike price) which becomes profitable because of changes, sometimes significant, in the value of the underlying asset, as a result of both appreciation/positive movement or depreciation/negative movement in the underlying asset. Strategies can combine multiple underlying instruments, assets, premium levels, strike prices and option maturities/expirations. Long volatility strategies generally involve the purchase of option premium which may result in loss of value/negative carry if volatility declines and options expire out of the money. The HFRI Long Volatility Index constituents are a sub-set of funds that were historically included in the HFRI Fund Weighted Composite Index.





HFR Long Volatility Index

The HFR Long Volatility Index is a composite of alternative investment products of various strategy types that generally position their portfolios to profit from sharp increases in the value of option positions and portfolios when market volatility increases. Products in this strategy generally use options and also utilize other derivatives (futures, CDS, etc.) to create positions and portfolios which increase in value as both implied and realized volatility increase. Increases in option value can be a result of increased value of option premium, as well as the ability to purchase or sell the underlying instrument at a level (strike price) which becomes profitable because of changes, sometimes significant, in the value of the underlying asset, as a result of both appreciation/positive movement or depreciation/negative movement in the underlying asset. Strategies can combine multiple underlying instruments, assets, premium levels, strike prices and option maturities/expirations. Long volatility strategies generally involve the purchase of option premium which may result in loss of value/negative carry if volatility declines and options expire out of the money. The HFR Long Volatility Index includes hedge funds and separate/managed accounts, including products that may not have been historically included in the HFRI Fund Weighted Composite Index.





Disclaimer

The information contained in this report was prepared by HFR, ("HFR") and may be distributed by one or more of its affiliates. HFRI Indices are compiled and calculated by HFR, and are publicly available at <u>www.hfr.com.</u>

Published by HFR, reproduction in whole or in part is prohibited except by permission. Information has been obtained by HFR from sources believed to be reliable. However, because of the possibility of human or mechanical error by our sources, HFR or others, does not guarantee the accuracy, adequacy, or completeness of any information and is not responsible for errors or omission or for the results obtained from the use of such information. HFR does not perform an audit on Index constituent data and may rely on unaudited financial information. Any Index data presented may be changed or withdrawn as a result of changes in, or unavailability of, such information, or based on other circumstances.

It should be recognized that the HFRI Indices have been developed with the goal that they reflect an actual investment in the underlying Index constituents and reflect the commercial elements (liquidity, transparency, etc.) of such instruments. Accordingly, it should be assumed that this Methodology has been or will be operated from this commercial point of view and, as such, may be significantly impacted. HFR affiliates may offer investable products that directly or indirectly hold investments in some, all or substantially all of the Index constituents. These products may include structured products such as options, swaps, certificates and principle protected notes that are linked to the Index return.

HFR 110 North Wacker Drive, 25th Floor Chicago, IL 60606 (312) 658-0955 <u>indices@hfr.com</u> <u>www.hfr.com</u>

v.2025.04.24





Addendum – Revisions to the Methodology

Date	Revision	Process
12/18/19	Expanded the fund eligibility criteria.	No constituent or performance changes were made.
2/12/21	The eligibility criteria has been updated to exclude funds reporting assets under \$10 million. The change becomes effective as of the performance date of February, 2021.	No prior performance was affected by the change.
6/30/2021	Updated page 10 to clarify other rebalance considerations.	No constituent or historical performance changes were made
6/30/2021	Beginning the performance month of July 2021, the period of finalization of the index value has been changed to the thirds to last US business day of the month it was initially published.	No constituent or historical performance changes were made
6/30/2021	An index adjustment term has been added to the index performance calculation. Starting the performance month of July 2021, HFR will adjust the performance of the indices by 6 bps per month.	No historical performance has been affected.
7/08/2021	A new section describing the HFRI FOF Low/Mid/High Vol (S) Indices has been added	No historical performance has been affected.
8/12/2021	A clarification of the timing of the Final Index Value has been added to the Definitions and Terms section. The index adjustment term for the HFRI Fund of Fund Indices in the Index NAV Calculation section has been set to zero.	No historical performance has been affected.
3/18/2022	The HFRI FOF: Low/Mid/High Vol (S) Indices section was updated to generalize the language and formulas.	No historical performance has been affected.
3/30/2022	A new section describing the HFRI FOF Risk Mitigation (S) Index has been added	No historical performance has been affected.
4/27/2022	A clarification of the index adjustment fees for the FOF Vol and Risk Mitigation (S) indices has been included	No historical performance has been affected.
10/11/2022	The sections for the HFRI FOF: Low/Mid/High Vol and Risk Mitigation (S) Indices has been moved to a separate methodology document	No historical performance has been affected.
2/15/2024	An update on the number of funds in the HFRI FOF Vol (S) indices has been included	No historical performance has been affected.
2/26/2024	Clarifying language regarding ESG indices was added to the Introduction.	No historical Performance has been affected
2/27/2024	An update on the index adjustment term has been added.	No historical Performance has been affected
8/29/2024	A hyperlink to the calculation methodology of the index adjustment term has been added.	No historical Performance has been affected
8/29/2024	A section describing the HFRI Multi-Manager/Pod Shop Index has been added.	No historical Performance has been affected
4/24/2025	Sections describing the HFRI Long Volatility Index and the HFR Long Volatility Index have been added.	No historical Performance has been affected

© 2025 HFR, Inc. - All rights reserved. HFR®, HFRI®, HFRX®, HFRU®, HFRQ®, HFRL™, WWW.HFR.COM®, WWW.HEDGEFUNDRESEARCH.COM®, HEDGE FUND RESEARCH™, HFR IndexScope™, HFR Bank Systematic Risk Premia Indices[™] and HFR Risk Parity Indices[™] are the trademarks of HFR