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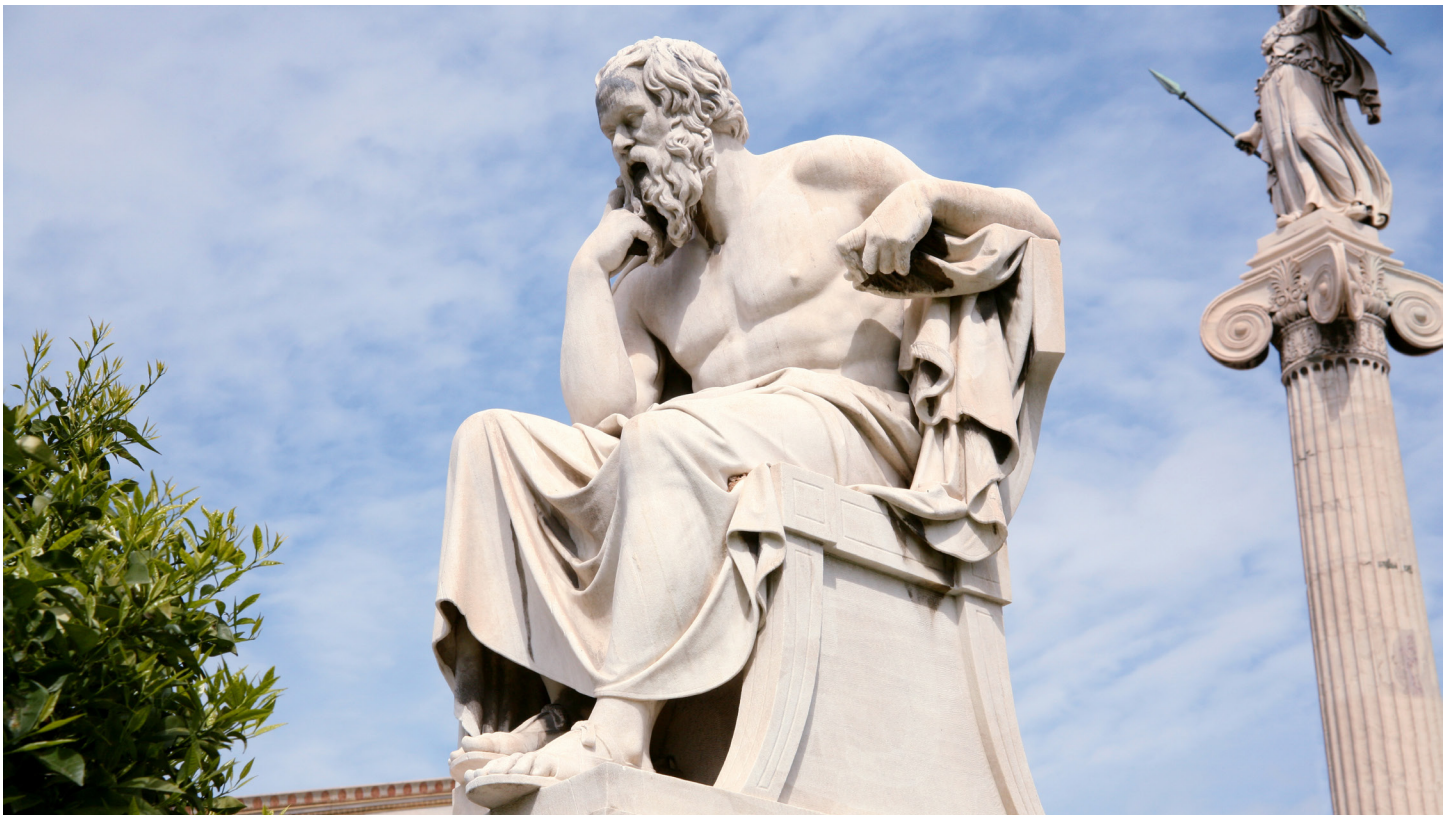

Hedge Fund Investment Philosophy

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Introduction

Hedge funds are vehicles that invest in different asset classes in a flexible and unregulated way. Contrary to popular perception, hedge funds are not a separate asset class like equities, government bonds or commodities.

Hedge funds are heterogeneous and diverse. Even hedge funds that invest in the same asset class and follow similar investment strategies exhibit large differences in behavior over time. As a result, most (but not all) academic and practitioner studies of aggregate hedge fund performance and risk taking are deeply flawed and meaningless.

Sources of hedge fund returns

Hedge fund returns are a mixture of asset class systematic risk premiums, liquidity risk premiums and alpha that are enhanced by leverage[1]. Similar to traditional asset managers, hedge fund managers harvest traditional asset class premiums; equity market, equity style and capitalization, credit spreads (across the capital structure), emerging markets risk premiums as well as bond risk premiums, inflation and currency carry. Unlike traditional asset managers however, hedge funds have the flexibility to profit from investing in alternative asset classes such as market volatility, mortgages (complexity), convertible bonds (conversion premium), M&A spreads and derivatives.

Liquidity risk premiums constitute a significant source of many hedge fund returns; hedge funds tend to provide liquidity to financial markets.

The most desirable component of a manager's return stream is his/her ability to generate uncorrelated alpha. Unfortunately, pure alpha is very difficult to find and tends not to be sustainable over the long term. And when sustainable alpha does exist, it is typically associated with significant fees. There are only two sources of alpha; market inefficiencies and the ability (skill) of a manager to forecast (time) markets[2].

Hedge Fund Fees

Hedge funds typically carry substantial fees, a management fee of 1.5%-2.0% and a performance fee of 20%. The level and structure of fees has been a topic of constant debate in the industry. Drawing general conclusions on the appropriateness of fees for the whole industry is misleading. Managers that are highly skilled and strategies that are in short capacity would typically command higher fees. In contrast, one can today invest in a simple properly constructed long term trend follower for a management fee of 0.5% and no performance fee[3]. Lower fees can be a substantial source of (net) alpha for investors. Most new fund launches offer substantial fee discounts to early investors.

Investment beliefs

Successful investing in financial markets requires a clearly articulated set of investment beliefs. These beliefs should be consistent with the accumulated academic knowledge in economics and finance but also in other fields that study investor behavior, such as psychology, decision making theory and neuroscience. Beliefs should be empirically sound and account for the observed microstructure of financial markets.

Market efficiency

Markets are generally efficient in the long-run but not perfectly efficient. Future cash flows and discount rates are inherently uncertain. The intrinsic value of assets is unknown and noisy, but the noise is not random. Prices materially deviate from intrinsic value in a systematic way.

Markets reflect not only information but also the different and often conflicting points of view (beliefs) of diverse groups of investors. In the short-run, investors make investment mistakes that can – under certain conditions – become correlated[4]. Correlated investment mistakes can drive market valuations to extremes. These extremes can persist for a long time and it is difficult to estimate when they will get corrected. In the long run, however, prices mean revert to intrinsic value.

In addition, inefficiencies arise due to regulation, taxation, investor restrictions, differences in the investment horizon of market participants, supply/demand imbalances, and the pricing of complex illiquid securities. These inefficiencies can persist over time as in some cases it is difficult to arbitrage them. The existence of inefficiencies requires the presence of certain types of investors whose wealth is systematically drained by arbitrageurs either knowingly (e.g. regulation, central bank capital) or unknowingly (e.g. existence of noise traders).

Forecasting ability and investment views

Both arbitrage opportunities and market timing are a zero-sum game for the market and that is before managers charge their fees[5]. Net of fees, these strategies have a negative aggregate expected return, which implies that it is very hard to ex-ante identify managers with the ability to generate alpha in the long-term.

Systematic risk premiums vary with the economic cycle and are partially forecastable over medium term horizons. As such, they significantly affect changes in manager performance.

Alpha is also cyclical[6]. (both within and across asset classes) and depends on capital flows, changing volatilities and changing correlations. Alpha opportunities increase dramatically in periods of crisis as elevated uncertainty leads to higher dispersion securities. Very few managers are able to generate consistent alpha across market environments. As a result, having views on the factors that affect hedge fund returns is a critical component of manager selection and portfolio construction.

Hedge Fund manager selection

Manager profiling

A key component in evaluating and selecting a hedge fund manager is the construction of a profile of the manager's beliefs, views and expected behavior. The profile incorporates all available information on a manager, both qualitative through extensive manager interviewing and quantitative by analyzing the manager's past performance and risk metrics. It focuses on three principal areas of a manager's investment philosophy/strategy:

- Manager edge
  - o What is the manager's unique and sustainable (robust) competitive advantage?
  - o What are the manager's beliefs on how securities are priced?
  - o Why mispricings exist?
  - o What does the manager believe his advantage is in exploiting these miss-pricings?
- Alpha thesis
  - o How does the manager translate his beliefs into alpha generation?
  - o Is the alpha thesis robust and sustainable?
  - o Can alpha be attributed to known factors?
- Risk
  - o What does the manager believe risk is?
  - o What type of systematic risks does he take into his portfolio?
  - o How does the manager size and time positions?
  - o How risky is the manager's alpha thesis?
  - o How crowded is the manager's strategy? Is there a systematic "hedge fund" factor driving returns?

The profile provides an expected return distribution for the manager, a "prior" that is used as input to an independent Bayesian framework for testing, validating and/or falsifying manager beliefs. The manager profile evolves over time driven by weekly/monthly return and risk statistics and other qualitative information. The advantage of this approach is that it combines multiple sources of information and that it efficiently blends subjective due diligence information with risk and return data. The approach mitigates the impact of human biases in decision making and avoids the selective use of narratives to support ex-post explanations of both positive and negative surprises. Such a framework of course is as good as its underlying assumptions. All predictions should be viewed with a dose of critical skepticism.

Selecting hedge fund managers based on past performance

It is extremely difficult to forecast manager returns using historical performance. Randomness (luck) is a dominant driver of ex-post performance for the majority of managers, especially in the short run. Expected (ex-ante) alpha is unobservable and can differ significantly from realized (ex-post) alpha. Alpha opportunities are not riskless – they are associated with significant risk.

Investor preferences influence the success of a manager in the short run. Preferences are broader than what return and risk imply. Fear of contrarianism and the safety of following the herd, the allure of gambling and loss aversion are all human behavioral biases that affect manager success. In fact even if we could define and quantify what constitutes intrinsic quality of a hedge fund manager, short term performance and feedback would still be the driving factors that determine winners and losers in the industry. Historical return data are non-stationary. Limited data and short term histories make it extremely difficult to detect change in the data.

Financial markets are complex systems which are influenced by human behavior. The predictability of such complex systems is low, whilst the uncertainty surrounding our predictions cannot be reliably assessed, for three reasons:

- "Wild randomness": In most cases, prediction errors are not independent of one another. The distribution of errors is not normal and the variance of the distribution is not constant. This means that the variance itself will be either intractable or a poor indicator of potential errors.
- "Black swans": There is always a chance of totally unexpected occurrences materializing — and these can have massive impact.
- Model (epistemological) uncertainty: Probabilities of outcomes are not observable, and it is uncertain which probabilistic model to use. The true underlying return generating process cannot be uncovered by data.

Manager personality traits

Managing hedge fund portfolios is inherently a people business. Beyond qualitative and quantitative analysis of a manager's strategy, there are distinctive personality traits that characterize successful portfolio managers.

One of the most important identifiers of successful hedge fund managers is the difference between a good analyst and a successful portfolio manager[7]. Investors overestimate the importance of fundamental bottom-up expertise in choosing portfolio managers. Bottom-up knowledge is a necessary criterion for picking successful analysts, but a poor indicator of identifying successful hedge fund managers. It inherently biases the selection process towards concentrated long-term fundamentally driven hedge funds. The key difference between average and great hedge fund managers is to know when to sell positions and reduce risk. Having fundamental knowledge and monetizing it are very different things. What matters is whether the manager understands the trade-off between fundamental conviction in a position and flexibility in adapting to changing market conditions.

The success of quantitative funds provides support to the assertion that bottom-up domain specific knowledge is less important than risk management, sizing, and timing for picking successful hedge fund managers. Quantitative funds hold hundreds or even thousands of individual positions and have high turnover relative to fundamental stock pickers. They know a lot less about individual positions and yet can generate returns that are highly competitive to the returns of fundamental long biased managers.

In a recent paper, Dmitri Balyasny, the CIO of Balyasny Asset Management – a well-known multi-manager hedge fund – identified humility, confidence, a "growth mindset", long-term goal orientation and perseverance as the five personality traits of a successful portfolio manager[8].

Humility helps managers admit they are wrong and prevents them from holding on to losing positions. This provides the impetus for focusing on finding new investment opportunities. Confidence in themselves and in their process allows managers to take meaningful risk and to recover from drawdowns. A "growth mindset" and a relentless focus on incremental improvement facilitate learning from mistakes. Focus on long-term goals demonstrates the willingness of a manager to tradeoff short-term costs for long-term benefits. Finally, the survival of a manager over time – his perseverance – relates to his tenacity to overcome great challenges, especially during periods of crisis. How a manager deals with extremely stressful market and/or business environments provides invaluable information for successful manager selection.

Construction of Hedge Fund Portfolios

Hedge fund portfolio construction has three primary aims: (i) invest in a group of select managers who diversify across different systematic risks, (ii) do this in a manner that minimizes the exposure of the portfolio to traditional market beta, and (iii) maximize manager alpha at the portfolio level. Properly constructed portfolios will tend to be fairly concentrated in the number of managers, will have low exposure to equity market beta, and when evaluated over a full cycle, would likely have higher risk adjusted returns and significantly lower drawdowns than equity markets.

Views on systematic risk factors and on the sustainability of manager alpha drive portfolio construction. Sizing of individual holdings is driven by conviction and the value of fundamental diversification that the position brings to the portfolio. The level of conviction in a manager is a natural outcome of the manager selection process outlined above. Conviction is high for managers who perform in line with their profile over extended periods of time and deliver limited surprises. In contrast managers with erratic performance relative to expectations are low conviction managers. And by "fundamental diversification" we mean investing in managers who are qualitatively different as opposed to "statistical diversification" that is based on estimated volatilities and correlations across managers. Statistical diversification tends to be unstable and can evaporate especially during periods of crisis.

Liquidity also plays an important role in hedge fund portfolio construction. Market liquidity is time varying and driven by both structural and cyclical factors. There are times when investors can significantly profit from being liquidity providers to hedge fund

managers. What is important to keep in mind is that liquidity does not exist for the market as a whole.

Discretionary overlay (portfolio insurance)

Even the most carefully constructed portfolio of hedge funds would have exposure to systematic risk factors that can lead to significant drawdowns. To the extent that these drawdowns are unwanted, investors can deploy a portfolio overlay strategy to hedge some of these unwanted risks.

A discretionary overlay should use only the most liquid instruments available in markets. It requires a detailed understanding of each hedge fund's risk exposures and how these exposures vary over time. There is of course a cost associated with implementing an overlay, and this cost is highest in periods of market turmoil. Purchasing portfolio insurance selectively in periods when such insurance is cheap and looking for protection across asset classes can mitigate some of that cost.

Risk Management – Risk Factors unique to hedge fund managers

Human risk

The most important risk of investing in hedge funds comes from the behavior of the hedge fund manager. Hedge funds are led by highly talented individuals, who at times trade aggressively in order to achieve their return targets. Use of leverage can only exacerbate the consequences of risk taking. Recent evidence from neurobiological studies indicates that behavioral/cognitive heuristics, perceptions and emotions are the drivers of choice under uncertainty in financial markets. Functional Magnetic Resonance Imaging (fMRI) studies show that the prediction of a financial gain activates different parts of the brain than the prediction of a loss[9]. The activation of a particular neural circuit can lead to shifts in investor risk preferences. And the excessive activation of these neural circuits can lead to investment mistakes.

The manager selection process outlined above tries to mitigate human risk by relying on both qualitative and quantitative information to provide early warning signals of change in a manager's strategy.

Hedge fund risks are misunderstood by the investment community. What is particularly poorly accounted for by investors is business risk resulting from the complex interaction between manager performance, drawdowns, leverage, margin calls, counterparty risk, liquidity and the performance fee option embedded in hedge fund fees. Hedge fund managers have contractual obligations to their counterparties and investors. These obligations can be thought of as options that the fund is short[10].

- A "funding" option that the hedge fund is short to his counterparties that would force the fund to reduce leverage during crises. This option depends on the fund's performance and volatility and can lead to the fund's forced deleveraging especially in the presence of significant mismatches between fund assets and liabilities (investment horizon vs. funding terms).
- A "redemption" option to provide liquidity to investors when assets are needed the most. This can be especially costly for a fund with mismatches between the fund's underlying position liquidity and investor liquidity.

Diseconomies of scale

Manager size (assets under management) is a significant factor impacting hedge fund performance. The hedge fund industry lacks the discipline to face its biggest delusion; that hedge funds can get endlessly large and still deliver the benefits that made them "alternatives" in the first place – diversification, absolute returns and alpha.

Alpha is finite and not scalable. As alpha is a zero sum game, increasing alpha requires not only finding additional market inefficiencies but also an increasing number of suboptimal investors to profit from. Portfolio managers consistently and significantly overestimate the scalability of their process and their ability to generate returns as assets grow. Only a fraction of the skilled managers who can generate consistent performance with a $300M-$500M portfolio can do the same with $3bn-$5bn of assets.

Inevitably, asset growth leads to style drift, changes in both the risk profile of a fund and the way the business is managed. Large hedge funds can become too concentrated with their largest positions in crowded names that tend to be similar across many other funds. As managers search for performance they may increasingly utilize leverage and invest in illiquid securities. Such funds can become highly volatile and can experience uncharacteristically large drawdowns even relative to market losses. They end up becoming the ultimate beta fund – they don't just act like the market, they become the market.

Investors have time and time again ignored to their peril the impact of asset growth on fund performance. They chase performance by allocating capital to funds that have performed well in the recent past. Disappointed by the occurrence of large drawdowns they redeem from such managers at precisely the wrong time thereby exacerbating fund losses.

Drawdown Monitoring

Whilst no single risk measure can summarize the risks assumed by a hedge fund, drawdowns (both expected and realized) can be used to monitor and manage manager risk. Unlike other measures of risk, drawdowns are path dependent and tail correlated.

Market extremes provide a very useful laboratory for testing one's beliefs regarding hedge fund risk management. In order to risk manage a portfolio of hedge funds, it is essential to

- Monitor a manager's ability to manage portfolio exposure (gross and net) and leverage, especially during periods of crisis
- Analyze the manager's survival and recovery from large drawdowns
- Monitor growth in assets under management and its impact on performance and alpha. Does he take more directional market risk and does his position concentration increase?
- Monitor client behavior to assess the riskiness of the redemption option offered to clients
- Monitor asset liability mismatches and the true inherent liquidity of underlying portfolio.

Conclusion

In this note we presented a rigorous investment process tailored to hedge fund investing. Our framework combines multiple sources of qualitative and quantitative information for manager selection, portfolio construction and risk monitoring.

Hedge funds are exposed to complex market and business risks that are poorly understood by investors. Successful hedge fund investing necessitates a detailed understanding of the precise sources of hedge fund returns and risks.

End Notes

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Kostas Iordanidis is currently Managing Partner of KI Capital GmbH, a Swiss financial advisory firm he founded in 2010. KI Capital specializes in asset allocation, hedge fund manager research and hedge fund portfolio construction.

Previously, Kostas was Managing Director and Head of Hedge Funds at Unigestion SA, a Geneva-based fund of hedge funds with $3.2 billion of assets under management. Prior to that, he was Co-Chief Investment Officer of Olympia Capital Management (2005 – 2008), responsible for managing the company's $6 billion alternative investment portfolio. He has also been a member of the Board of Directors of the Fortelus Special Situations Fund, a European focused distressed hedge fund.

Kostas was First Vice President and Head of Asset Allocation at Julius Bear Asset Management (2003 – 2005), Co-Founder and Managing member of Z.I. Investments LLC (1999 – 2002) and Principal and Portfolio Manager at Lincoln Capital Management Co. (1994 – 1998).

He received his Ph.D. in Elementary Particle Physics and his MS in Quantitative Finance from the University of Wisconsin-Madison.