

LONG-SHORT EQUITY STRATEGY: EFFECTIVENESS ANALYSIS BOTH IN BULLISH AND BEARISH MARKETS

BSAMC, Research, Strategic Evaluation

Authors

Anna Pia Dicorato, Head of Strategic Evaluation, Research
Camilla Papaleo, Team Leader, Strategic Evaluation, Research
Kaan Omer Efe, Analyst, Strategic Evaluation, Research
Alice Sozzi, Analyst, Strategic Evaluation, Research
Dominik Zhang, Analyst, Strategic Evaluation, Research



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Abstract

Long-short equity strategy is one of the oldest and most widespread in the financial scenario.

As opposed to a long-only fund whose return is derived more from broad market movement than manager skills, an equity long-short fund relies largely on stock picking capabilities: it consists in the identification of winning stocks, the buy candidates, and losing stocks, the short candidates. In other words, alpha can potentially be generated from both the long and the short sides, differently from traditional long-only funds where alpha is generated from the buy side only.

In the following paper, we will discuss the main characteristics of this strategy, its potential benefits and risks and the related costs and fees. After this qualitative description, we will conduct a more quantitative analysis focusing on different time windows. First of all, we consider two main different scenarios: long-short equity strategies during downturns, in particular we will consider the Dot-Com Bubble of 2000-2002, the financial crisis of 2007-2008 and the Sovereign Debt Crisis of 2011, and then during bull markets.

We analyze the performance in both upward and downward trends and we make some inferences about the main characteristics of these strategies, with respect to the broad market's returns during the same periods. What we find is a great mitigation of risk during bear markets, but a poor performance during bullish ones.

Finally, we may consider this worldwide pandemic as an opportunity to test the effectiveness of long-short equity portfolios about how they behaved in the past and try to see whether they are still profitable and risk mitigating, as they appeared to be during past downturns: a confirmation of our previous findings is given also during this turbulent period.

In conclusion, they behave well during bear markets, but provide poor performance in bullish ones.

1. Introduction to Long-Short Equity Investing

1.1. Overview

The concept of gaining from a drop in prices is not a new one. It is dated back to 1949 when Alfred Winslow Jones founded “The Jones Fund”, whose aim was managing market risk by introducing short sales to a portfolio of long equity positions while achieving high performances through a strong security selection on both long and short side. As time went on, this idea has broadened, encompassing a variety of styles and strategies designed to mitigate market risk as well as capture pricing anomalies and exploit market inefficiencies.

Consider a long-only investor, who has an extremely negative view about a specific stock: the only thing he can do is exclude the stock from his investment opportunity set, representing a limited benefit for the portfolio. Including the same stock but as a short position allows the investor to profit from the decrease in value. In this setting, more and more investors today are exploiting the benefits and opportunities of having a combination of long and short positions in a single portfolio: they put together long positions on undervalued stocks, which are expected to increase in value, with short positions on overvalued stocks, which are expected to decline in value. This mix *should* allow them to take advantage of both rises and falls in the market.

A hypothetical USD100 investment



Figure 1. The mechanic of Long-short Investing. Source: Pictet Asset Management

Assuming that the investment manager has selected the right securities, in a bullish market the gains from the long positions should outweigh losses from the short investments, whereas if the market is bearish, the gains from short positions will be greater than the losses on the long investments. Then, as shown in Figure 1, the profit of a long-short strategy is the difference in return between the long and short book (spread).

Indeed, the objective of this strategy is finding the right balance between risk mitigation and profit seeking.

In Figure 2, it can be noticed the specific function of long-short equity funds within a diversified portfolio: a substantial improvement of the volatility-adjusted return. Including more and more percentage of long-short equity funds in the portfolio results in an increase in the risk-adjusted performance.

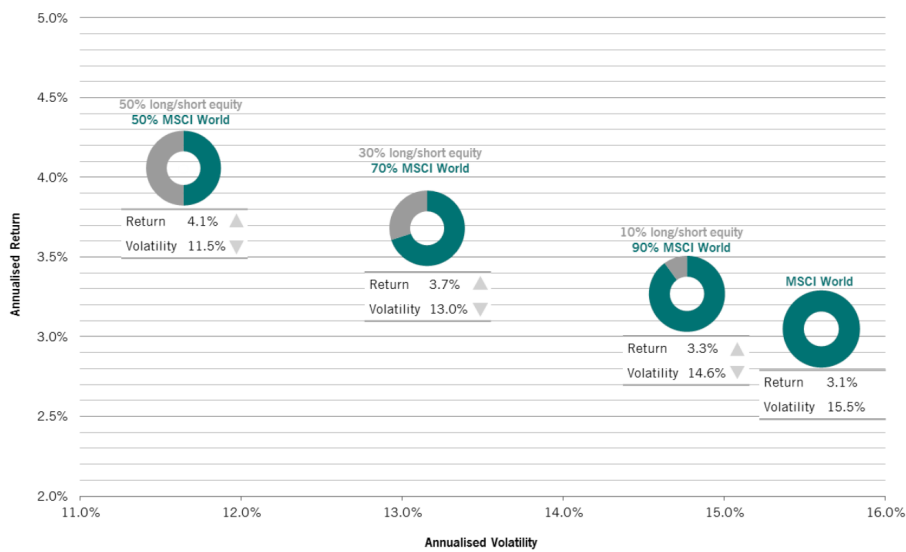


Figure 2. Improvement of volatility-adjusted return of equity portfolio. Source: MSCI, HFR. Data covers period 31.12.1999 - 30.12.2016

1.2. Potential Benefits and Risks

There are certain advantages of the long-short equity strategy which makes it very attractive for investors, but nevertheless it also has some limitations.

The main positive feature that could be highlighted is the additional flexibility. Long-short investing provides a broader opportunity set and more tools to work with (in the following table are listed the main ones). On one hand, each of them represents a tool to add value, but on the other, they also embody some risks, which may bring an amplification of losses.

	Potential Benefit	Potential Risk
No Relative Benchmark	The manager focuses on producing absolute versus relative returns	May prove difficult to distinguish manager alpha from beta
Short Selling	Can make money when markets or individual stocks fall	Can lose money when the market rise
Hedging with Derivatives	Derivatives can provide downside protection	Derivatives introduce counter-party risk
Leverage	Magnifies gains	Magnifies losses
Tactical Decisions	Can adjust market exposure to benefit from (or hedge against) both bull and bear markets	Markets can maintain significant biases longer than a manager may stay solvent

Table 1. Source: Meketa Investment Group, Long-Short Equity. November 2019

Starting from Table 1 we can analyze advantages and disadvantages of this strategy in more detail:

- No relative benchmark: unlike long-only portfolio managers, whose aim is to add value over their benchmark by holding approximately the same securities presented in it, long-short portfolio managers are able to identify a certain benchmark as their opportunity set, but the performance often diverges.
- Short selling: thanks to the incorporation of short-selling to the long-only investment strategies, market volatility can be better mitigated and the excess return on the investment can be increased, exploiting profit opportunities in both potential upside and downside expected price moves. This provides an element of protection (hedge) when the market declines because gains on short positions will offset losses on long positions. Mitigating market volatility is equivalent to obtaining a lower beta, which means that long-short equity funds will lag long-only strategies when equities are trending upward, but they should also resist much better during periods of market downturns.

However, the added positions theoretically expose a portfolio to unlimited potential losses, since there is no boundary for the rise. That may be taught first but, in reality, this risk is softened: it is unlikely, for example, that the prices of all the securities sold short will rise dramatically at the same time, with no offsetting increases in the prices of the securities held long. So, it can be said that the investor would not encounter a big loss in his return.

Moreover, when managers execute short sales, they must borrow the stock they intend to short: the cost of borrowing will vary depending on the liquidity of the stock and on the level of interest rates.

- Hedging with derivatives: portfolio protection can be achieved through the use of derivatives, but this can bring to different kinds of risks.
- Leverage: borrowing capital to generate returns comes with the benefit of higher highs, but also with the risk of lower lows.
- Tactical decisions: long-short managers often change the net market exposure, holding more or less cash, adjusting long and short positions and using derivatives, but their choices may be wrong.

After seeing these benefits and risks, the main question that comes to mind is: when are these benefits best exploited? Long-short equity strategy is especially efficient in big and liquid markets with decent trading access where corporate revelation is probably not ideal. This allows the long-short investor to take advantage through a thorough investigation of the company.

From the portfolio perspective, real advantages of long-short equity strategy come to the surface only when the portfolio is conceived of and constructed as an integrated portfolio of long-short positions. The long-short strategy is not a two-portfolio strategy: it is a one portfolio strategy that holds long and short positions together within an optimization by taking into consideration the expected returns of the individual securities, their standard deviations and the correlations between them.

2. Implementation of Long-Short Strategies

2.1. Identifying Investment Opportunities

The aim of investors is to reduce the market exposure of their portfolio, especially during downturns, and still having positive returns, possibly excess returns with respect to the market performance. As a matter of fact, one way to outperform the market is to have an advantage with respect to information gathering or forecasting. This method though, is not always feasible, since it would mean having access to information that no one else has. The best method therefore would be an analytical one, which would imply filtering information more effectively, rather than trying to make predictions. The end-result of the fund managers' stock research is the identification of winning and losing stocks.

Usually, managers look at different factors, such as:

- **Discounts:** the opportunity set can be narrowed to stocks selling at a discount to certain metrics including 1) historical valuations, sector or industry peers and/or 2) intrinsic value, whether calculated on current assets or expected future growth. The reverse is generally true for single name short positions, for example, they are selling at a premium to the aforementioned metrics. Discounts may be identified based on prices relative to certain trend lines or peer group comparisons. Although in most cases the opportunity set is identified by one of the criteria above, usually it is not the only factor considered when initiating positions.
- **Catalyst Driven:** catalysts are important factors both for the reduction of risk and for value creation. There are two primary types of catalysts and each of those can be further broken down into internal or external.
 - Hard catalysts are those with a high probability of occurring while soft catalysts are much more speculative.
 - Internal catalysts refer to an event that occurs at the company level, such as a change of management, spin-offs, new product line or a new business strategy. External catalysts are broader and fall into industry or sector related changes, such as an increase in merger activity or a change in business cycles.
- **Market Inefficiencies:** opportunities are often created due to short-term inefficiencies in the market. Inefficiencies may occur due to a broad misperception about a company or industry, or due to non-company specific technical factors which could cause a stock to trade at a discount or at a premium for some time. Over the long-term, markets tend to be more efficient, giving those with patience and the ability to see through market inefficiencies the chance to capitalize.

The goal then would be to reach the potential alpha. A long/short equity strategy can be very effectively implemented in a portfolio, provided that there is the right team that uses the right processes in order to create positive performance spreads between long and short positions.

Another way consists in using a systematic approach, in order to identify and buy stocks with the "genetic signature" and sell short ones with failure characteristics. With genetic signature, we refer to 3 main characteristics that make a stock "good", namely strong business fundamentals, positive business momentum and attractive value. Through the

implementation of this process, we can observe a persistently positive performance spread between the best-ranking (top 3) deciles and the worst-ranking (bottom 3) deciles.

The graph in Figure 3 shows this performance spread: the colored lines represent the spreads between the top and bottom deciles within the global equity universe as compared to the US equity universe. As it can be observed, there are higher performance spreads in the global universe compared to the US equity universe, during all the time period chosen (from March 2009 to March 2018). Therefore, we can say that the alpha opportunity is greater in global equities.

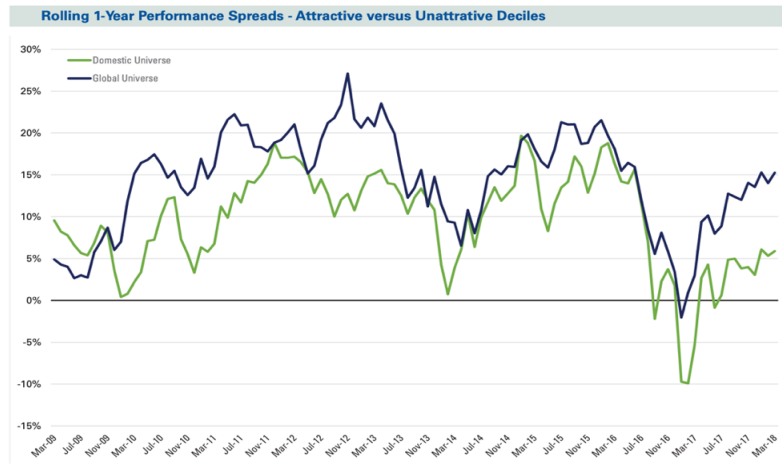


Figure 3. Global versus US Average. Source: Boston Partners. May 2018

2.2. Strategy Categorization

Over the years, long-short strategies have gained in popularity and different structures have been created in order to meet investors' needs and to provide a source of uncorrelated returns to the equity market. In particular, since the '90s the investment management industry has experienced big changes in the portfolio management process, leading to an expansion of the traditional long-only strategy and creating new ones.

Investment strategies relate to specific portfolio objectives, resulting from volatility range, beta target or net exposure, and this provides a unique contribution to the overall risk/return dichotomy. Specifically, each strategy's market exposure may significantly have an impact on the ability of the portfolio to participate in market rises and to protect from market downturns.

Four major strategy categorizations can be identified, based on the exposure to the market:

- Market Dependent - High beta: in which managers run long-biased portfolios without dedicated short books and may be willing to use margin leverage to increase market exposure above 100% of capital. They generally generate higher than market volatility, demonstrate high beta and may experience significant periods of loss.
- Core – Flexible/Directional (70-100% Market Exposure), in which managers are also long-biased but also maintaining short books for both alpha generation and hedging purposes. The orders are usually flexible, so they are designed to reduce exposure in poor environments and protect capital, but increase in upward moving markets to catch a good fragment of the market move.

- Core – Hedged (30-70% Market Exposure), in which managers have conservative orders with net exposures ranging from 30% to 70% which are expected to lag the market in favorable periods and provide protection in negative ones; in this case, short books are seen as a profit center as well as a hedge or volatility reducer.
- Market Independent – Low Beta (0-30% Market Exposure), they are considered market neutral: in bullish (strong) markets they will lag significantly but are expected to provide better performance when the volatility in the market is higher.

2.3. Main Strategies

For the purpose of this report, now we consider the two most important alternatives of long/short structures: market neutral, which may be classified as a market independent strategy, and enhanced active (also known as constrained), which falls into the market dependent category, with specific reference to the 130/30.

- **Market Neutral:**

A market neutral portfolio sells short securities that are expected to underperform and purchases an equal amount of securities that are expected to outperform. This approach tends to exhibit low or zero beta, so no market exposure and, for this reason, the returns provided by the portfolio's positions should not be affected by the direction of the market.

The profits come mainly in two ways:

1. from the portfolio manager who tries to exploit the spread between the prices of stocks held short and stocks held long, in addition to the interest received on the proceeds of the short selling action.
2. by constructing a portfolio with the beta of long positions that equals, and therefore offsets, the beta of the short positions.

Compared to the traditional long-only strategy, where the return is affected both by beta (investment gain attributable to market returns) and alpha (the excess return that stems from the skill of the investment manager), under a market-neutral approach beta is minimized, whereas alpha is maximized, by giving managers the discretion to build both long and short positions. By enabling investment managers to express both positive and negative views, security selection skills are exploited to the full.

Equity market neutral funds are used to hedge against market factors and they are seen as a strategy for stock pickers. In fact, how the actual market performs does not matter too much, because gains and losses will offset each other. Nevertheless, this strategy may also have some downsides related to the fact of having a balance between long and short positions. As a matter of fact, if more opportunities exist on the short rather than on the long side of the market, having an equal dollar balance may require a return sacrifice from the portfolio. Hence, it can be said that this strategy delivers more risk-adjusted returns, but it lacks the naturally positive long-term equity risk premium that comes from a positive beta (since the beta of the portfolio is zero).

Such investments deliver returns that are genuinely uncorrelated with those of mainstream asset classes and their addition to a portfolio can help diversify sources of risk and return over the long run. Nevertheless, as we can see from

Figure 4, from 2010 onwards they completely missed the rally of the market: this is due to the fact that after the Great Financial Crisis a lot of fund managers, being scared, reduced the beta of their portfolios and failed to exploit the great subsequent opportunities.



Figure 4. HFRX EH: equity market neutral index versus S&P500. Source: Bloomberg. November 2020

Therefore, this kind of strategy is able to:

- help investors to secure returns that are independent from the trajectory of the market and dependent only on the portfolio manager's capabilities.
- mitigate losses during periods of market stress
- provide portfolio diversification.

▪ **Enhanced Active/Constrained:**

The constrained strategy is a relaxation of the long-only constraint in traditional investments: this means that the short constraint is not eliminated entirely as in the market-neutral case, but it is limited to a certain amount. It consists in an improvement of the performance of long-only portfolios by allowing for a constrained short-selling and a reinvestment of the proceeds in long-only positions.

Equity investors are increasingly seeking portfolios that can yield as much alpha as possible, while maintaining systematic risk constant. One way of obtaining this, is implementing long-only portfolios with short-investing techniques in order to improve the magnitude and efficiency of excess return that is being generated: for this reason, these are also known as "active extension" strategies.

In a nutshell, an investor could sell short 20\$ of securities and invest the proceeds from the short selling, along with 100\$ of capital, to purchase 120\$ of long positions. This results in a 120/20 portfolio, which has a net equity exposure of 100\$ and so fully exposed to the market. Alternatively, the investor could build a 130/30, 150/50 or 200/100 in the same way.

The most common variation of this approach is precisely 130/30. The numbers "130" and "30" indicate that a manager has a 130% weighting in long positions (stocks that he expects to outperform relative to the market) and a 30% weighting in short positions (stocks that he expects to underperform) within the same portfolio. The result is a 100% net long portfolio.

Therefore, unlike an active long only strategy, which may seek beta exposures that differ from the market to achieve excess returns, the 130/30 manager uses the blended long-short strategy to target the same risk as the market, i.e. “beta one” strategy. With the same systematic risk as the market, the goal is then to produce a return greater than the market (i.e., positive alpha) without taking on added market risk.

How can these proportions be determined? The optimal level of extension can be defined using the Fundamental Law of Active Management:

$$IR = IC \sqrt{N}$$

It states that the information ratio IR of a manager is a function of his information coefficient IC, which is the correlation between forecasted and actual stock returns and takes on values between 0 and 1, applied over N independent security selections. However, even with definable IC and known N, rarely the realized information ratio is equal to the one expected.

One of the fundamental assumptions in the derivation of the Law of Active Management is that manager insight can be optimally expressed in the construction of a portfolio and that there are no constraints limiting the manager from expressing his views. The only constraints are tracking error targets and single stock exposure limits. Given those constraints, the Fundamental Law of Active Management proceeds in this way:

$$IR_C = TC * IR$$

where IR_C , represents the information ratio of the constrained portfolio, and TC represents the “transfer coefficient”, which is used to measure the effectiveness of translating the manager’s insight into the portfolio. If the long-only constraint is relaxed and leverage is employed, the transfer coefficient rises dramatically, until the fund reaches the 125/25 - 150/50 range, where it starts to slow down. As a consequence, this is considered a “sweet spot” for the active extension approach. The exact ratio depends on a variety of factors including investment objective (e.g., tracking error budget), market conditions, index construction, stock-picking skill, risk management skill and experience in short-selling. For this reason, 130/30 seems to be a comfortable starting point.

Table 2 demonstrates the key differences between the 130/30 portfolios, long-only portfolios and market neutral hedge funds.

	Long-Only	130/30	Market Neutral
Investment Style	Relative return	Relative Return	Absolute return
Benchmark	Market Index	Market Index	Risk-free rate
Net exposure	100 %	100 %	0 %
Gross exposure	100 %	160 %	Depends on amount long/short
Average beta	1.0	1.0	0

Short-Selling	No	30 %	Depends on amount long/short
Assets under management	\$63,7 tril.	\$53,3 bil.	\$2,48 tril.
Management fee	30-80 bp	60-150 bp	> 150 bp
Performance fee	0 %	0-20 %	15-40 %

Table 2. Comparison of similar equity management strategies. Source: Tabb and Johnson. 2007

3. Performance analysis of long-short equity funds

3.1. The Broad Picture

As we have already said, the right mix of long and short positions should allow us to gain positive returns during bullish market periods as well as bearish ones.

We want to conduct empirical analysis in order to go deeper into this aspect and see whether we find supportive or disproving data. Considering the HFRI Equity Hedge index to represent long-short funds, Russell 3000 to represent US Stocks, MSCI ACWI (ex-US) to represent international stocks and MSCI World Net as a market index, to make comparisons during different windows of time.

Firstly, we focus on the January 1990 - May 2019 period: before this date, the performance of long-short equity funds was not tracked. As shown in Table 3, the overall returns obtained by long-short funds are higher than the ones related to US and international stocks, but there are some caveats.

	Long-Short (net of fees)	US stocks	International stocks
Annualized return	10.9%	9.6%	4.62%
Standard deviation	8.7%	14.6%	16.83%
Correlation with Russel 3000	0.78	1.00	0.78
Sharpe ratio	0.93	0.47	0.11

Table 3. Comparison between long-short funds, US and international stocks. Meketa Investment Group, Long-Short Equity. November 2019

Most hedge fund return composites are self-reported, so managers are not usually required to provide data on them. This self-reporting characteristic, though, leads these funds to be subject to significant survivor and selection bias, that can result in the overestimation of historical performance and the general attributes. Therefore, that is why they should be viewed skeptically. Since 1990, long-short equity funds have reported a return approximately 1.3% higher than the US broad equity market every year (Table 3), with much less risk, as indicated by the standard deviation being 5.9% lower.

This is exactly what managers and investors experienced in the 1990s; the performance during this period caused an attractive track record for long-short equity funds for the entire time window represented in Table 3.

Moreover, for several reasons, hedge fund returns reported during the 1990s are likely to be less useful in forecasting future returns than the returns reported for the past two decades:

- Survivorship bias is more likely to be present the longer the time period chosen.
- Hedge Fund Research, Inc. (HFRI) imposed strict criteria on self-reporting only in 1994, meaning that data prior to this time should be viewed with even greater skepticism.
- The advent of the internet and the adoption of Regulation FD4 made company research more of a commodity than it was in the 1990s. This development reduced the information advantage that some hedge funds possessed.
- As the hedge fund universe has grown, the strategies used by managers have become more common, resulting in portfolios more closely resembling each other and the market, compared to how they did in the 1990s.

Therefore, in order to reduce the biases related to that period, we reduced the time window, taking into consideration the time span from 2000 to 2019.

The data reported in Table 4 are more representative of what investors expect from long-short funds in the future. Indeed, after having introduced the regulations and criteria on self-reporting, we can see that the average results of long-short funds are not skewed upwards anymore, meaning that they do not appear to perform better than the other funds anymore.

As a matter of fact, long term strategies performed worse than the broad equity market in the long run (as it is evident by the lower annualized returns), but at the same time they mitigate risk (as it can be deducted by looking at the lower standard deviation).

	Long-short (net of fees)	US stocks	International stocks
Annualized return	4.8%	5.7%	3.3%
Standard deviation	8.2%	15.0%	16.9%
Correlation with Russel 3000	0.83	1.00	0.87
Sharpe ratio	0.38	0.27	0.09

Table 4. Comparison between long-short funds, US and international stocks. Meketa Investment Group, Long-Short Equity. November 2019

3.2. A Focus on Downturns

After having described how long-short strategies behaved over the last twenty years, we can now better analyze how they coped with economic downturns, focusing on the two biggest and most recent ones. It is well known that capital losses for long-short equity funds are much less steep when the market falls, whereas returns are less volatile over the long run. To better understand this statement, let's have a look at some data. When looking at MSCI World Net returns and HFRI Equity Hedge returns during the two major downturns, that one of 2000-2002 and the other one of 2007-2008, we can see the following behavioral trends:

- During the Dot-Com Bubble, we witnessed an overall increase in returns by 2.3% in HFRI equity hedge versus an overall decrease of 46.3% in MSCI World Net;
- During the financial crisis of 2007-2009, a decrease emerged in both returns, but still HFRI was able to provide some protection against this market fall. Indeed, long-short equity funds experienced an overall performance decrease of 30.6% versus the 54% decrease in the market.

Overall, the losses incurred by the market were much greater than those (if any) incurred by the long-short equity funds. The benefits of the long-short strategies when the market falls are related both to higher reported returns and to lower volatility.

During the bear markets of 2000-2002, 2007-2008 and also during the downsides of mid-2011, long-short equity strategies have been able to mitigate downside risk relative to the overall market, offering a higher return than the MSCI World net.

Globally, the performance of long-short equity funds has been proven to be higher than the market one, during economic recessions. Furthermore, the maximum drawdown reached by HFRI Equity hedge fund is lower, thanks to the shield this strategy has against a drop in market values.

In particular, among long-short equity strategies, the market neutral one has proven to be particularly effective in managing downside risks in the long run, especially because of their peculiarity of being “neutral” to market movements.

Performance	HFRI EH: equity market neutral index	HFRI equity hedge (total) index	MSCI World Net (USD)
2000-2002	23%	4%	-42%
2007-2008	-1%	-19%	-35%
Q2/3 2011	-6%	-12%	-16%
Q4 2018	-2%	-9%	-13%
Q1 2020	-3%	-14%	-21%

Table 5. Source: Total return data from Bloomberg as of May 12, 2020

Max drawdown	HFRI EH: equity market neutral index	HFRI equity hedge (total) index	MSCI World Net (USD)
2000-2002	-2%	-10%	-47%
2007-2008	-8%	-29%	-46%
Q2/3 2011	-6%	-13%	-20%
Q4 2018	-2%	-9%	-13%
Q1 2020	-3%	-14%	-21%

Table 6. Source: Total return data from Bloomberg as of May 12, 2020

3.3. The Rally of the Last Decade

With this analysis, we can go more in depth of the poor performance of long-short equity funds during upward periods of the market. Indeed, there is a yawning gap between the promise of equity long-short funds and the reality of their performance and strong evidence is provided by Table 7.

After having focalized on how long-short equity funds performed during downturns, we now want to see how they behave taking into consideration a more generic time frame, in which we consider both bearish and bullish periods. Table 7 takes into consideration the last ten years, namely from 2009 to 2019 and it is highlighted how their aggregate correlation with the US stock market has been quite high, even if their beta with respect to the market has been more modest.

This reflects the unsuccessful promise of long-short equity funds to provide high returns with general market conditions. As a matter of fact, the annualized performance of long-shorts, in this case, is lower than both US and international stocks.

	Long-short (net of fees)	US stocks	International stocks
Annualized Return	5.1%	13.9%	5.8%
Beta vs Russel 3000	0.48	1.00	0.97
Correlation with Russel 3000	0.91	1.00	0.86

Table 7. Comparison between long-short funds, US and international stocks. Meketa Investment Group, Long-Short Equity. November 2019

Narrowing down the time period again, we finally focus on the past five years in which investors have experienced a particularly poor environment for long-short investors. The returns of stocks and long-only portfolios have increased a lot of thanks to the outstanding performance of US stocks during these last five years.

Besides the outperformance of the market, there also has been a tight dispersion, meaning that the gap between winners and losers has started to tighten.

This makes it harder for skilled managers to increase the value of their portfolios through stock selection, both by going long and short.

Another reason why long-short managers have performed badly is that many of them invest outside the US, and non-US investments have lagged the US for the past decade.

Lastly, the fact that interest rates have been extremely low over the past decade, has caused the cash that is being held in long-short portfolios to provide a much lower return than it had during past, higher rate environments, such as the 1990s.

But if we do an analysis of the five years through the end of March, this shows a very different aspect. Investors in the average equity long-short hedge fund gained returns that represented about one-quarter of the upside in stock markets and 100% of the downside in the equity market. That is why investors invest in these funds to protect their portfolios during stock market declines.

	Long-short (net of fees)	US stocks	International stocks
Annualized return	3.2%	9.2%	1.31%
Standard deviation	6.4%	12.0%	12.29%
Correlation with Russel 3000	0.91	1.00	0.80
Sharpe Ratio	0.38	0.70	0.04

Table 8. Comparison between long-short funds, US and international stocks. Meketa Investment Group, Long-Short Equity. November 2019

3.4. Main Findings

The analysis conducted so far has led us to obtain some interesting results.

First of all, we can affirm that long-short equity funds perform well during downturns and not during bullish periods. This happens because they have exposure in the market but at the same time they mitigate market risk. They can protect investors really well during downturns but, in the long-run, when markets are bullish, they produce lower returns than their benchmark.

In Figure 5 we can visualize what we are saying on performance diversity based on different market conditions.

Long-short funds have proven to be particularly effective in managing and shielding from downside risks providing much higher returns than market ones. Viceversa, during upward market movements.

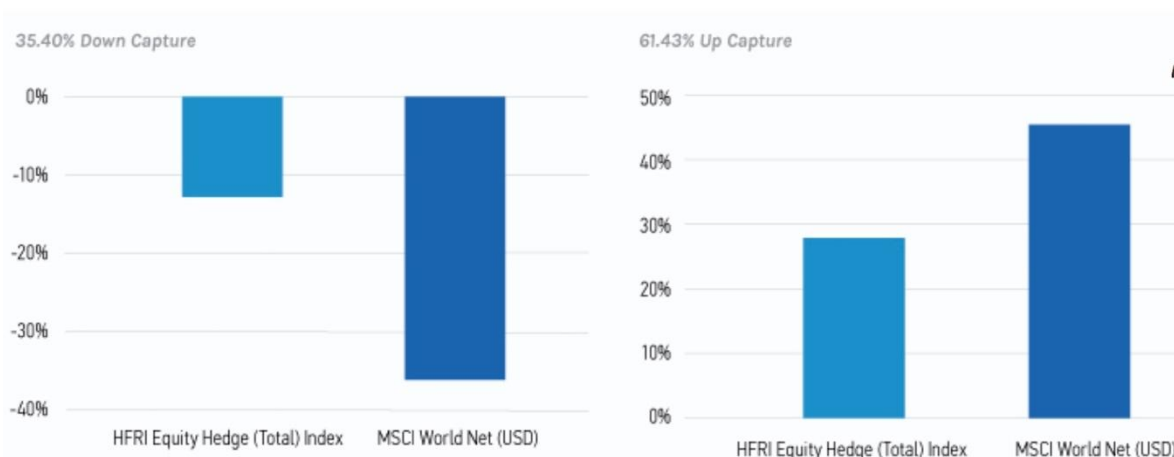


Figure 5. Comparison between HFRI equity hedge and MSCI World Net over the period Jan 1999-March 2020. Source: Bloomberg, May 2020

Market neutral strategy can provide investors with positive returns, while the rest of the market performs very badly during market downturns. On the contrary, the performance is worse when considering the scenario of a bullish market.

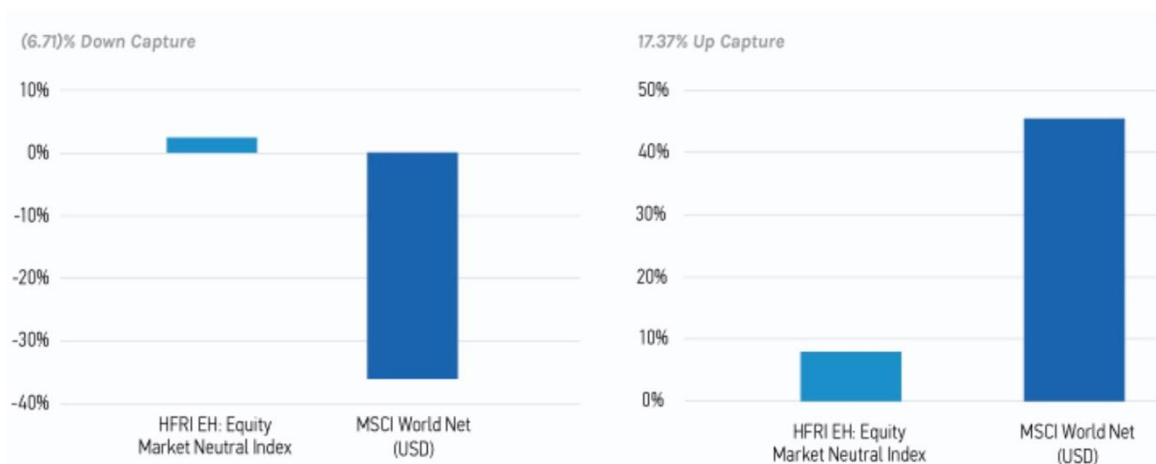


Figure 6. Comparison between HFRI EH market neutral and MSCI World Net over the period Jan 1999-March 2020. Source: Bloomberg, May 2020

Therefore, the ability of long-short funds to protect capital during downturns can increase the probability of investors in meeting their long-term goals. However, in order to really meet long-term financial goals, investors should be able to produce solid returns under normal conditions as well as in bullish conditions.

Any portfolio that is not 100% invested in equities will lag the broad stock market during a bull market. Hence cash, bonds, and long-short equities (assuming they are not 100% net long) will not be able to keep pace when stocks are producing outstanding returns.

Finally, Table 9 wraps up all the comparisons we made between long-short funds and the market, both during downturns and during bullish markets.

As a matter of fact, long-shorts had a much better performance than US stock and international ones during the Global Financial Crisis, with a return of -23.9% versus -41.6% of US stocks and -47.2% of international stocks.

However, they lagged significantly during the subsequent rebound, (last row of the table). This could have been likely due to lower market beta or imperfect market timing.

	Long-short (net of fees)	US stocks	International stocks
Return during the GFC (Nov. '07-Feb. '09)	-23.9%	-41.6%	-47.2%
Return in year post-GFC (Mar. '09 -Feb '10)	28.0%	56.0%	63.5%

Table 9. Comparison between long-short funds, US and international stocks. Meketa Investment Group, Long-Short Equity. November 2019

3.5. Covid-19 Outbreak: Confirm or Contradiction?

Covid-19 has brought much uncertainty and especially in the financial markets, therefore it could be appropriate for investors to consider the risk-mitigating characteristics of long-short equity strategies.

Nevertheless, this pandemic has shown unprecedented effects on the markets and when they tumbled in March, the 87% of equity hedge funds in a Bloomberg index lost money, with half declining more than 10% (Figure 7).

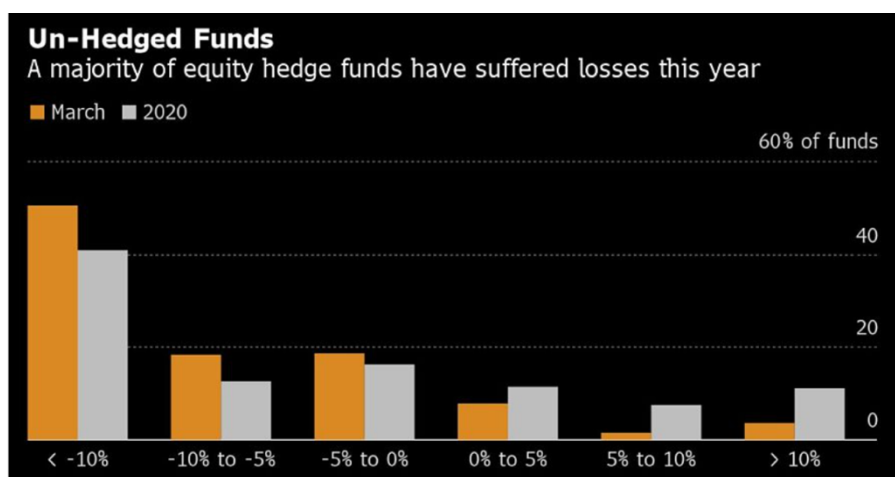


Figure 7. Source: Bloomberg. June 2020

Focusing on 2020, we notice even more how this kind of strategy is able to protect from downturns but missing, at the same time, risk premia offered by the market during recoveries.

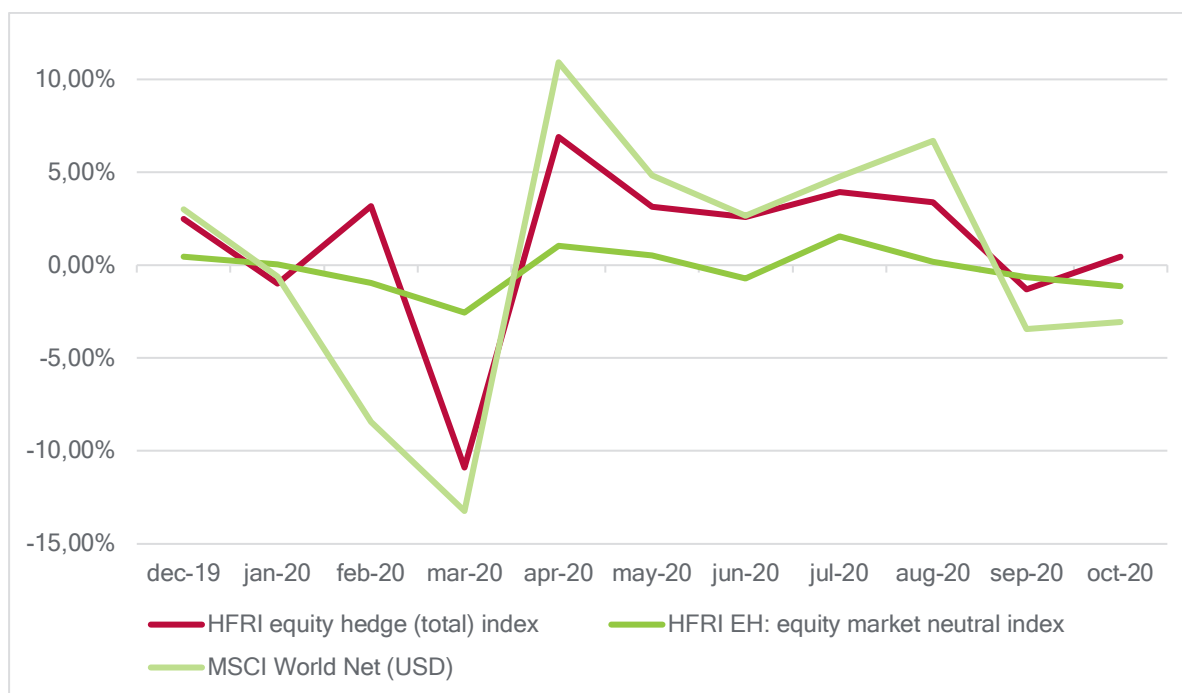


Figure 8. Source: MSCI, HFRI.

Specifically, in March MSCI World Net registered a -13.23%, whereas the HFRI equity hedge and market neutral indices were -10.89% and -2.55%, respectively (Figure 8). On the other hand, we can see a jump up of MSCI World Net to 10.92%, while the other two increased less (6.90% and 1.05%).

Furthermore, looking at annualized standard deviations, the MSCI World was the most volatile (23.18%), comparing it with HFRI indices (15.27% equity hedge, 3.80% market neutral). From these pieces of evidence, we have further confirmation of our previous results:

- the market neutral strategy, identified with the HFRI EH index, is always anchored to the 0% level, with a very little jump up and down compared to the overall market;
- the long-short strategy, represented by the HFRI equity hedge index, follows the general trend, with a reduction of losses and gains, during negative and positive periods respectively.

However, market dynamics have been changing rapidly in past periods, with big deviations also from one month to the other. Therefore, it is important to enhance flexibility towards market movements.

4. Conclusions

The ability of long-short strategy to mitigate volatility and to limit losses is particularly relevant for investors as it reduces market declines impacts. During the major bear markets of the last 20 years, these characteristics have proved to be very helpful because they offered to investors a far greater degree of capital protection.

In recent years, since equities were surging, the ability to slow down the volatility of equity investments was not so needed. This was due to two elements that kept a lid on equity market volatility: low interest rates and quantitative easing, creating the conditions for individual stocks to move up more or less in lockstep with one another. Market dynamics have changed rapidly in recent months. These are unprecedented times and investors need to increase resiliency of their portfolios. From our results, noted that past performances cannot give the certainty of obtaining the same results in the future, there is evidence which supports long-short equity investing as downside risk-mitigating benefits provider.

In conclusion, we believe that current market conditions require a more agile approach to equity investing. Including long-short equities as part of a broader portfolio allocation to stock markets can offer a degree of capital protection but not the possibility to reap rewards once markets recover. This is likely to become even more important in a post-coronavirus world.

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