LONGBOARD

Defense Wins Championships:

How to Build a Winning Alternatives Strategy

Long-term strategies can smooth out the ride

Abstract:

In any competitive environment, whether it's football or futures, our first instinct is to secure the top performers. That's certainly one way to play financial markets, too.

However, Longboard's research shows that to win over the long term, it's more efficient to strategically avoid the many underperformers. Chasing potentially high performers takes time and money — and since few investments do outperform the overall market, investors could still end up on the unprofitable side of a sustained downtrend.

Alternative investment strategies that focus on trimming long-term underperformers can protect portfolios from this downside risk. More importantly, they can add further diversification — potentially delivering results that are uncorrelated to the market and to other alternatives.

Investors can access these unique sources of stock market exposure by seeking alternative investment firms that stick to this distinct strategy: defensively positioned, long-term trend following.

Competition is running high in today's economic environment. As market conditions shift, we need the players in our portfolios to work harder for us, delivering both diversification and performance.

In today's environment of record high stock prices and arguably elevated risks, investors could benefit from strategies focused on playing defense, while still offering offensive capabilities. A new wave of promising alternative investment options is on the bench, but to many investors, they're unfamiliar, complex and seemingly unpredictable.

In any competitive environment, whether it's football or futures, our first instinct is to secure the top performers. That's certainly one way to play it — great performers do exist in today's markets.

But even the most consistent performer can't deliver exceptional results if he keeps tripping over teammates who perform well only sporadically. The more mediocre players in an investment strategy, the more likely they are to drag down the top talent.

What's a coach to do? Plan for attack by gathering as many stars as possible, or get defensive and cut the clutter from the team?

The case for a stronger defense

Today's market conditions call for a shift in thinking about investment allocations. It's time to start eliminating investments that don't deliver over the long term. Otherwise, investors may spend time and money chasing potentially high performers only to end up on the unprofitable side of a sustained downtrend.

In a challenging economic environment, a diversified portfolio can recover more quickly if it has fewer strategies trapped in sustained downtrends. What's more, some of the same strategies that can protect investors from this downside can add further diversification — potentially delivering results that are uncorrelated to the market and to other alternatives.

Investors can capture these benefits and position themselves more defensively by seeking alternative investment strategies that:

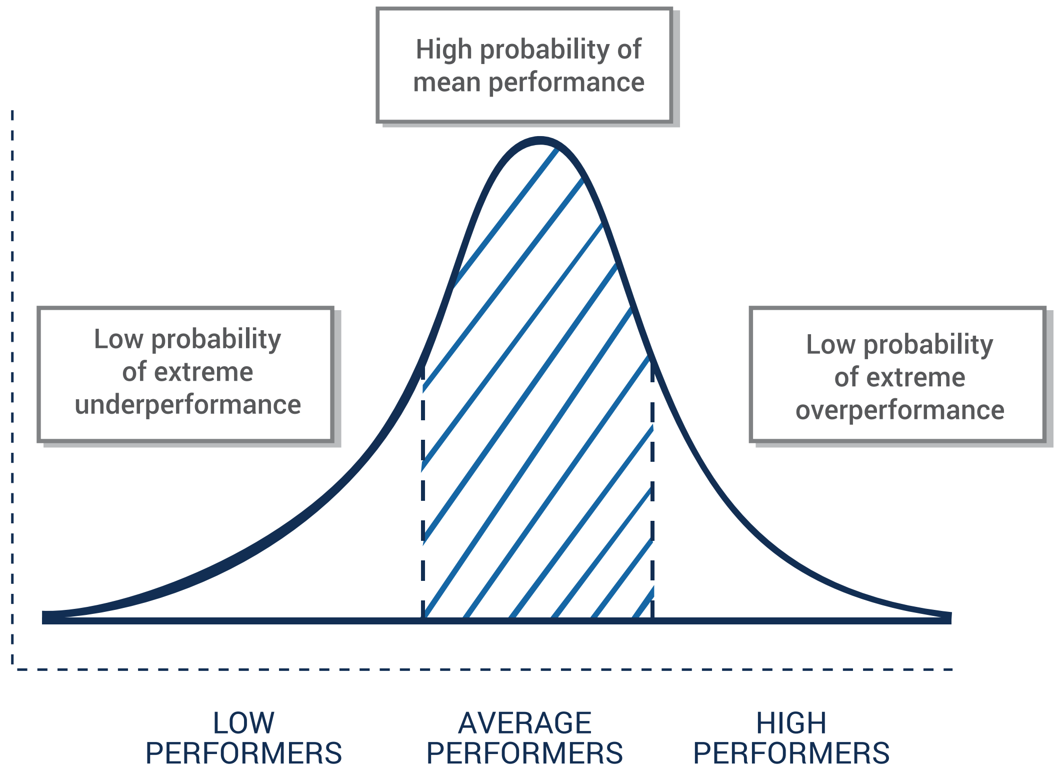
- Account for naturally occurring trends in financial markets
- Proactively trim investments that don't perform over time
- Apply these tactics across diverse markets, enabling investors to access unique sources of uncorrelation

A naturally occurring trend: the competition gap

In any competitive environment, "performance" is a measure of success. Talented athletes score more, good students test well and skilled investors generate strong returns. We can learn a lot, including how to improve future assessments and decisions, by analyzing the distribution of performance.

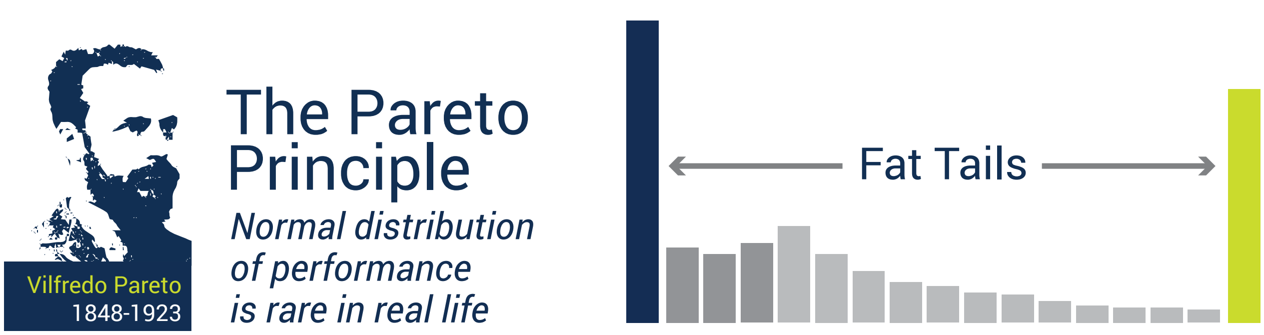
Traditionally, statisticians have used the normal distribution, or "bell curve," to do just that. Such analysis assumes that most performance clusters around a central, average value; extreme underperformance and outperformance are rare. The use of the normal distribution also reinforces the natural "normalcy bias," which causes people to underestimate the possibility of negative outcomes.

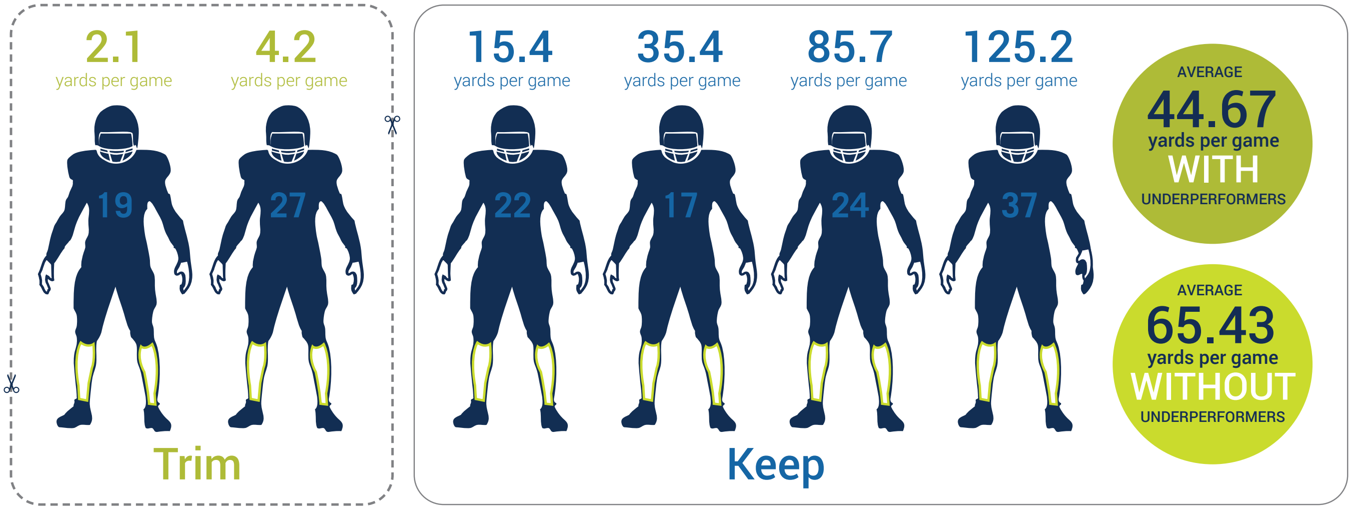
However, if you look deeper, the bell curve theory loses its luster in real life. According to a statistical theory called the Pareto Principle, a normal distribution of performance is rare in practical applications.



This is because when individuals compete, a small minority performs more efficiently than the majority. The minority accumulates a disproportionate amount of the total rewards, creating a "fat tail" distribution of extreme outperformers and underperformers with a large gap between them — the "competition gap."

Fat tails, and the resulting competition gap, occur naturally and persistently in every competitive environment, including financial markets.





Trim long-term underperformers

Because this extreme performance is persistent across financial markets over time, it's possible to navigate through the competition gap with long-term trend following.

Trend followers achieve performance by taking a defensive position toward the competition: removing the underperforming fat tail. If a small minority of investments performs more efficiently than the majority, which is a more effective use of time and money over the long term?

1. Pursue the ever-changing minority of outperformers
2. Proactively and consistently trim underperformers

Over the long term, it's more efficient to strategically avoid the many underperformers. Trend followers constantly prune their portfolios, trimming failing investments instead of chasing the smaller fat tail of exceptional performers. Over time, this process will create a remaining portfolio concentrated with outperformers, without the need to predict them in advance.

Tackle downtrend defense

With this defensive positioning, long-term trend followers may be able to avoid sustained downtrends. Taking a long-term view of the market enables trend followers to spot early indicators of downtrends and eliminate those positions before they cause significant damage to a portfolio.

In a challenging economic environment, downtrends can more severely impact a portfolio. Deep, sustained downtrends are particularly worrisome because they can trap your capital. The longer your capital is tied up, the more time and positive performance your portfolio will need to rebound. It could take a long time for your portfolio to reach the rate of return it delivered before the downtrend.

However, a diversified portfolio with fewer strategies trapped in sustained downtrends can recover more quickly.

Trend followers use weighting to balance their investment exposure as performance shifts over time, enabling them to manage downside risk more clearly and predictably. Many strategies accomplish this by underweighting the low performers and overweighting strong performers, the minority of the group.

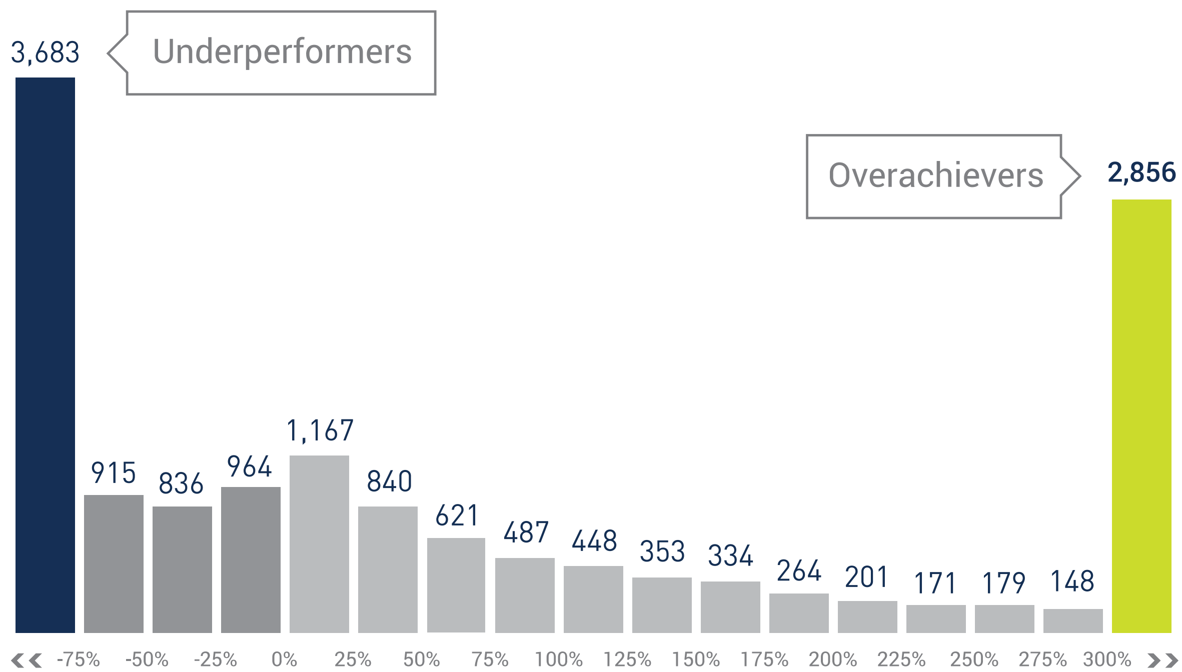
Of course, an additional benefit to this defensive positioning is the ability to naturally gravitate more of the portfolio toward the fat tail of exceptional — and potentially more profitable — performers, adjusting as trends dictate.

Defensive play: trend following on stocks

For a look at the competition gap in action, investors can turn to the U.S. stock market.

Longboard's original research proves that over the long term, a small minority of stocks drives returns for the overall market.

Total lifetime returns of individual U.S. stocks, 1989-2015



** Please see the methodology section for details on how we used dynamic point-in-time liquidity filters to limit our universe to the approximately 4,000 most liquid stocks each year.*

We analyzed 14,500 active stocks between 1989 and 2015, identifying the best performing stocks on both an annualized return and total return basis. Our research revealed that 1,120 stocks (7.7% of all active stocks) outperformed the S&P 500 Index by at least 500% during their lifetimes. Likewise, 976 stocks (6.8% of all active stocks) lagged the S&P 500 by at least 500%. The remaining 12,404 stocks performed somewhere in between. We used dynamic point-in-time liquidity filters to limit our universe to the approximately 4,000 most liquid stocks each year. For simplicity's sake, those are the figures we use in the graphics for the remainder of this paper.

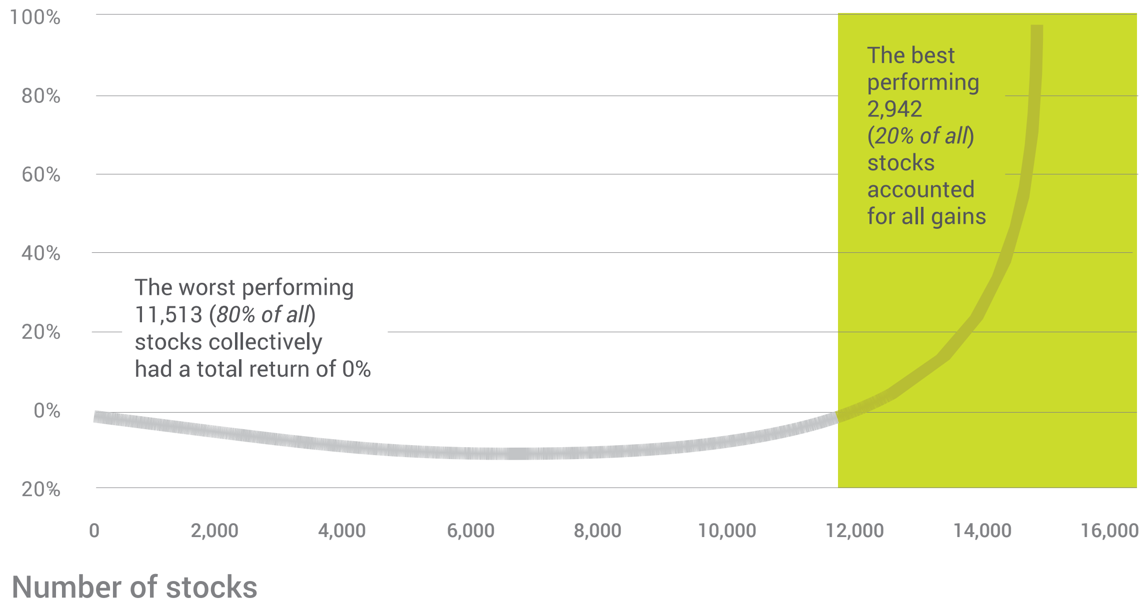
The principle of the competition gap remains true in practice: The minority accumulates a disproportionate amount of the total rewards, creating a "fat tail" distribution of extreme outperformers and underperformers with a large gap in between.

Avoiding underperforming stocks is as important as embracing outperformers

What's more, the left tail in the stock market's competition gap (or distribution) is significant: 3,431 stocks (23.7%) dramatically underperformed the S&P 500 by 200% or more during their lifetimes.

So, let's say an investor's portfolio missed the 20% most profitable stocks between 1989 and 2015. Instead, he invested in only the other 80%. His total gain would have been 0%.

Attribution of collective return, 1989-2015



** Please see the methodology section for details on how we used dynamic point-in-time liquidity filters to limit our universe to the approximately 4,000 most liquid stocks each year.*

Once again, the principle holds true: Over the long term, the more efficient approach is to strategically avoid the many underperformers.

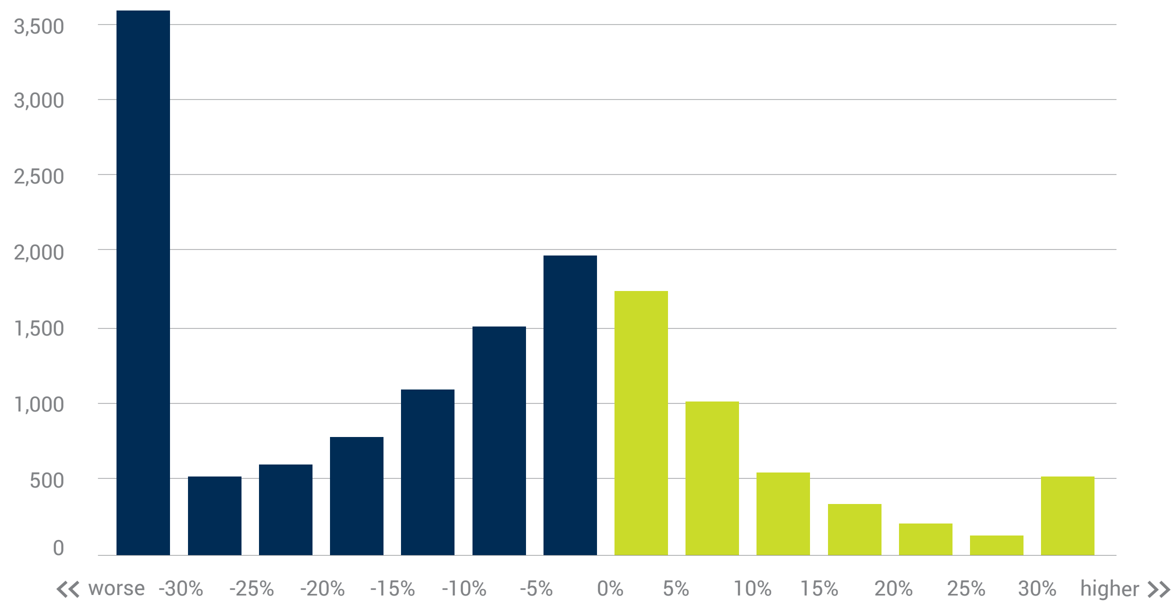
Stock indices can deliver short-term results

Despite the dreary odds, investors can still realize short-term, positive returns by investing in stock indices like the S&P 500. That's because most indices are market capitalization weighted.

Successful companies with rising stock prices carry larger weightings in the index. Likewise, unsuccessful companies with declining stock prices receive smaller weightings. Companies with continued declines are eventually delisted to make way for growing companies. So, despite the fact that the average annualized return for all stocks on the S&P 500 index is negative, the index can still deliver an overall positive rate of return.

Market capitalization weighted indexation is like a simple short-term trend following system that rewards short-term success and punishes failure — but because it's short-term, it doesn't account for the fat tails at both ends of the competition gap.

Annualized returns of individual stocks vs. S&P 500 index 1989-2015



** Please see the methodology section for details on how we used dynamic point-in-time liquidity filters to limit our universe to the approximately 4,000 most liquid stocks each year.*

Eliminating underperformers can boost long-term returns

Long-term trend following strategies can be successful when applied to stock indices, too. Fat tails and competition gaps in performance occur naturally and persistently in financial markets.

To improve stock performance, investors can remove the underperforming fat tail. As with all investments, a small minority of stocks performs more efficiently than the majority. This creates a portfolio tilted more towards the outperforming left tail, without the need to attempt to predict these future winners. So, trend following in stock markets can be a more effective use of time and money over the long term.

Such defensive positioning can enable long-term trend followers to avoid sustained downtrends, focusing on the fat tail of outperformers and adjusting as trends dictate.

Building a winning alternatives strategy

Defensively positioned alternative investment strategies can make portfolios more durable during challenging economic environments.

To get more benefits from alternative allocations, investors can seek long-term trend following strategies that proactively trim investments that don't perform over time. These more defensive strategies are better positioned to avoid sustained downtrends — and a diversified portfolio with fewer strategies trapped in sustained downtrends can recover more quickly.

What's more, some of the same strategies that can deliver this downside protection can add further diversification, potentially delivering results that are uncorrelated to the market and to other alternatives. The opportunity exists for alternative investment firms to tap into unique sources of uncorrelation in longstanding financial markets, such as stocks, with a distinct strategy: defensively positioned, long-term trend following.

Methodology

This research was originally published by Cole Wilcox and Eric Crittenden of Blackstar Funds in 2006. Since then, Blackstar Funds has become Longboard Asset Management, and the organization updated its research in 2016 to focus on data from 1989–2015.

Our database covers all common stocks traded on the NYSE, AMEX and NASDAQ since 1989, including delisted stocks. Stock and index returns were calculated on a total return basis (dividends reinvested). Dynamic point-in-time liquidity filters were used to limit our universe to the approximately 4,000 most liquid stocks each year, representing approximately 99% of the investable U.S. equity market. In total, over 14,400 stocks were evaluated (variance is due to index reconstitution, delisting, mergers and other factors). The lifetime of each stock in our universe varies as determined by our filter for the 4,000 most liquid stocks each year:

- Some stocks stayed for the duration of the time period from 1989 to 2015 (for example, IBM)
- Other stocks dropped off before the end of 2015 (for example, Sun Microsystems).
- The third group of stocks came in after 1989 (for example, Google).

The return on each stock over their lifetime in our universe was compared against the returns on the S&P 500 over that same lifetime. For example, if a stock made an appearance in our universe for only one year, that stock's return was compared against the return on the S&P 500 over that same year.

Disclosure

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All portfolios are rebalanced on a quarterly basis.

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S&P 500: A stock market index based on the market capitalization of 500 leading companies publicly traded in the U.S. stock market, as determined by Standard & Poor's. In this presentation, the S&P 500 is presented as a total return index, which reflects the effects of dividend reinvestment.

Diversification does not eliminate the risk of experiencing investment losses.

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