

How Many Losers Are In the S&P 500?



GRANITESHARES INSIGHTS | RYAN GIANNOTTO, CFA, DIRECTOR OF RESEARCH

Finding winners is hard. What if it is easier to simply XOUT the losers? A new paradigm for excluding potential laggards in an age of technological disruption.

A Loser is a loser. This closing refrain to

Alec Baldwin's tour de force monologue in the 1992 classic Glengarry Glen Ross encapsulates why a team of underperforming salesmen were beyond redemption. "You are going out!" Baldwin's character exclaimed, powered by a vindictive fury masquerading as righteousness.

Theatrics aside, this dialogue underscores two key points: foremost that losers are costly, and second, that losers should be avoided whenever possible. How this philosophy extends to asset management is both intuitive and powerful- leave potential losers out of the portfolio. It also begs the sobering question, how many losers lurk among the companies and indices we all know and love?

It is this wisdom that underlies the GraniteShares XOUT U.S. Large Cap Fund (NYSE: XOUT), which flips the paradigm on one of Wall Street's oldest dogmas. Rather than chase elusive winners, the XOUT ETF simply seeks to exclude losers failing to adapt amidst unprecedented technological disruption. When no company or industry is immune from disruptive challenge, perhaps never has the number of potential losers been so plentiful, nor the disparity between winners and losers been so vast. Rather than succumb to conventional wisdom, perhaps the only thing more important than what you put IN your portfolio is what you XOUT.

Stop Chasing Winners, Start Excluding Losers?

Under the shadow of Dodd and Graham, for decades active managers have been enraptured by the allure of picking winners. The impulse is understandable— 4% of stocks have accounted for virtually all of the market's gains over the past century. ¹ If the smartest people in the room could get even a small amount of

money on these winners, so the thinking goes, the outperformance potential could be massive.

The challenge is, this premise has been proven to be flawed. The best that can be said about "the cult of the winner" mentality is that the track record has been a mixed bag, but a more accurate assessment may be that it has been a decades long fool's errand. The SPIVA® Scorecard painfully documents this reality, where over the past 15 years ending in 2018, 92.1% of U.S. equity funds underperformed their benchmarks.² Moreover, the Credit Suisse Hedge Fund Index, a composite of over 9,000 funds, has underperformed the S&P 500 by a staggering 193.6% over the last ten years.³ Ironically, picking winners may have only entailed chasing an outsized portion of losers.

As opposed to identifying winners, the XOUT approach is simple – look to cut out the losers and you're left with a portfolio that may be better positioned to outpace the broader market. Whereas even the most talented managers have struggled to select winners, even an unskilled manager may be able to identify multiple losers, especially those with business fundamentally challenged by technology.

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Part of the ease in picking losers—and just leaving them out of the portfolio—may be that the concept falls outside the purvey of most investment strategies and indexes; systemic inefficiencies may still thrive in even the largest, most liquid U.S. equity ecosystems. As demonstrated not only by *Glengarry Glen Ross* but

^{1.} https://www.etfstream.com/feature/6187_the-companies-that-make-the-index-win/

^{2.} S&P Dow Jones, SPIVA Statistics and Reports, December 31, 2018, https://us.spindices.com/spiva/#/reports

^{3.} Bloomberg data, as of 9/30/19.



also by esteemed managers such as Bridgewater, investors will aggressively cull losers from their portfolio of human capital, but seldom do they extend this logic to their financial capital.

Significantly, exclusion-based investing may not lack raw power in driving active share and achieving outperformance potential. As a case example, excluding only General Electric, once the most valuable and celebrated company in the U.S., from the S&P 500 in 2017 and 2018 would have resulted in 122 basis points of outperformance. (Disclaimer: As of 10/9/19, neither XOUT nor the XOUT Index currently hold, or have ever held, General Electric as a constituent). XOUT seeks to systematize this logic of exclusion, examining the 500 largest public U.S. companies, and aiming to exclude 250 names most vulnerable to technological disruption over the long run.

"Technological disruption is perhaps one of the most significant forward-facing risks impacting investors and companies today."

Curiously enough, while students everywhere have long sworn by "Process of Elimination," professional investors have not been able to eliminate what may be the biggest loser of them all—chasing winners. XOUT seeks to reconcile this discrepancy by leaving the losers out.

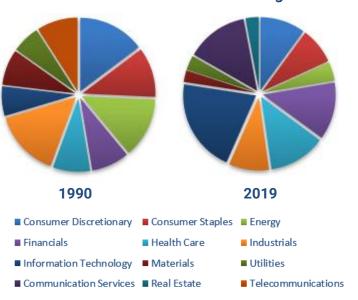
Addressing the Potential Risk of Disruption

Technological disruption is perhaps one of the most significant forward-facing risks impacting investors and companies today. We live in an unprecedented environment where yesterday's titans are today's potential bankruptcies; look no further than the cases of Pan Am, Polaroid, Blockbuster, Toys-"R"-Us, or RadioShack. Each was formerly a leader of its respective industry, before they were systematically disrupted by the accelerating rate of technological change.

Whether it is zero commission trading or Wells Fargo forecasting 200,000 bankers to be replaced by robots within 10 years,⁴ disruption is nothing short of a wholesale inundation. This is the opportunity set

XOUT intends to exploit, seeking to merely leave out companies unresponsive in the face of disruptive challenge, those who fail to innovate effectively.

Transformation in S&P Sector Weights



Why is technology producing such profound economic dislocations, across all economic sectors? The answer rests in the unique characteristics of the digital revolution, an unparalleled event in human history. Unlike past industrial super-cycles associated with the steam engine and electrification, digital technology is rapidly scalable and combinatory, meaning unit economics can not only approach zero, but also inspire follow-on applications.

Most influential however, is the exponential nature of computing power, and the inability of the human brain to comprehend the geometric function. While the doubling of processing speed every 24 months predicted by Moore's Law is common knowledge, its implications are genuinely difficult to fathom; not only does this imply 41% growth per year, but 8% growth every single quarter.

To illustrate the magnitude of the digital revolution, and its growing significance manifested through AI, robotics and 5G, consider the implications of if a base model Toyota Camry were to obey Moore's Law. Within 5 years, the Camry's engine would exceed 1,000 horsepower, within 6 years it would surpass the power of a 70-ton tank, and by the end of the decade it would be operating at over 5,800 horsepower. Confronted

^{4.} https://www.bloomberg.com/news/articles/2019-10-02/robots-to-cut-200-000-u-s-bank-jobs-in-next-decade-study-says



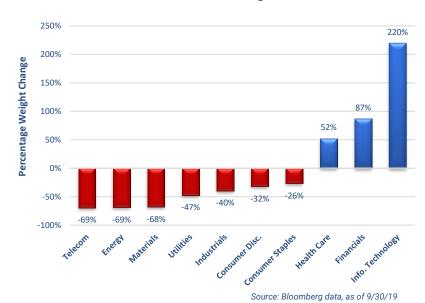
with such staggering numbers, the message for companies is clear—adapt or die.

Unfortunately it is the latter option an increasing number of U.S. companies have been embracing. Comprehensive analyses of corporate longevity have revealed that in the 1950's the average age of a company in the S&P 500 was roughly 60 years, but this past decade that value slipped below 20 years, and within the next decade it is forecasted to fall to 12 years or less.5 Poignantly, half of the companies currently in the S&P 500 are estimated to be superseded within 10 years, churned out amidst the gyrations of technological currents.6 XOUT seeks to identify candidates trapped in longterm secular decline, those who may succumb to the death rattle of disruption, and leave these potential losers out of the portfolio.

Saliently, these trends are not arbitrary but represent the plate tectonics of digital disruption, and this rate of innovation is occurring faster than the market can fully appreciate. Examine the evolution in market sector composition over the past decades—the walk is hardly random. In 1993, Telecommunications constituted 10.2% of the S&P 500, but this sector was disrupted so thoroughly that by 2018 it was reduced to 4 companies and 2.7% of index market cap. Ultimately, the entire segment of economic activity was effectively "X'ed Out," subsumed into a newly formed Communications sector dominated by social media companies.

Furthermore, Materials exhibited a similar decline from 7.9% to under 2.6% as of the beginning of Q4 2019. The real question investors may need to ask is how many more sectors will be eliminated over the next 5 to 10 years; exposure on a market cap basis may be immense. This thesis moreover meshes with the exclusionary investing strategy of XOUT, as while the disrupters driving this trend may prove elusive, the disruptees may be far more identifiable.

Sector Scale Factor Change: 1990-2019



Response to Passive Investing

The rise of passive indexing has been a textbook example of disrupter successfully challenging an industry incumbent, namely active stock picking, that failed to effectively innovate. Despite passive's momentous growth, which this year eclipsed active's assets under management,⁷ the strategy is not perfect. Potentially, the greatest flaw of index investing is that the strategy buys indistinctively every stock in the market, even those in long-term secular decline.

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Simply because a company exists and is large does not automatically impute an invulnerability to disruption; the churn in the top weighted companies evidences this point. Of the top 10 market cap companies in the S&P 500 from 25 years ago, only one remains in that premier echelon today.8 Passive indexing will potentially buy any company, irrespective

^{5.} https://www.cnbc.com/2017/08/24/technology-killing-off-corporations-average-lifespan-of-company-under-20-years.html#targetText=The%20average%20age%20of%20an,blames%20the%20disruption%20from%20technology 6. https://www.innosight.com/insight/creative-destruction/

 $^{7. \} https://www.institutionalinvestor.com/article/b1fg0jnvbpc536/History-Made-U-S-Passive-AUM-Matches-Active-For-First-Time$

^{8.} Bloomberg data, as of 9/30/19.



of whether its business model is under threat from disruptive technology. This grave shortcoming comes as a consequence of humans thinking linearly in a world that is changing exponentially.

XOUT responds to this unpriced disruption risk with an intuitive and pragmatic proposition—seek to not own the companies whose business models may be disadvantaged, even outright eliminated, by technological growth. Considering the *Wall Street Journal* lauded General Electric for its mastery of disruption as late as May 2017, just how many losers may be residing in the S&P 500, buoyed by easy lending and inexpensive debt service? 10, 50, 100? Potentially more?

Confronted with this dilemma, XOUT's rules-based methodology analyzes a series of real-world criteria, such as ability to scale revenue, employee growth, research and development, profitability, stock repurchases, earnings expectations and management skill. The bottom half of ranked companies are evaluated as facing the highest risk of disruption, and are thus excluded from the portfolio.

The practical basis of these parameters is immediately evident—why give money to companies that are firing instead of hiring, or enterprises that refuse to invest in

themselves? No one is forcing an investor to buy the very companies poised for disruption. This no nonsense, unapologetic approach underlies XOUT's strategy of weeding out corporate laggards. In Darwinian terms, perhaps just do not own the dodo birds.

Throughout this entire discussion, most striking of all is a quick examination of where the market heaps its attention, and consequently where passive flows may be directed. While investors remain focused on deciphering the hourly developments in the trade conflict, or parsing Fed chair Jerome Powell's latest slip of the tongue, many ignore the potentially insurmountable risk of disruption at their own peril. This schism, this cognitive dissonance, is jarring.

XOUT aims to firmly align itself with this long view perspective on macroeconomic trends, seeking to exclude companies at risk of being separated from their customers and cash flows by disruption. As Baldwin's character might retort, "let's talk about something important."



Disclosures

Investors should consider the investment objectives, risks, charges and expenses carefully before investing. For a prospectus or summary prospectus with this and other information about the Fund, please call (844) 476 8747 or visit the website at www.graniteshares.com. Read the prospectus or summary prospectus carefully before investing.

Past performance does not guarantee future returns.

XOUT is passively-managed and attempts to mirror the composition and performance of the Index. The Fund's returns may diverge from that of the Index due to costs and expenses incurred by the Fund or holdings may deviate from a precise correlation with the Index.

The Index uses proprietary methodology to exclude certain securities and there can be no assurance this will result in positive performance. The Fund may concentrate its investments to the same extent as the index and may be exposed to the risk of loss from adverse developments facing those industries.

One cannot directly invest in an index.

The XOUT U.S. Large Cap Index utilizes a proprietary, quantitative methodology developed by XOUT Capital, LLC designed to identify companies that have a risk of being disrupted and as a result could underperform their relevant sector. The companies identified are then excluded from the index selection.

There is no guarantee the index will be successful in excluding companies that are at risk of being disrupted or possibly underperform their relevant sector. Exclusion or inclusion of a security within the index is not a recommendation or solicitation to buy, hold or sell any security.

The Credit Suisse AllHedge Index is an assetweighted hedge fund index derived from the market leading Credit Suisse Hedge Fund Index. The Credit Suisse AllHedge Index provides a rules-based measure of an investable portfolio. Index performance data is published monthly and constituents are rebalanced semi-annually according to the sector weights of the Credit Suisse Hedge Fund Index.

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