ReSolve
ASSET MANAGEMENT

2017 YEAR-END REVIEW

- Calendar 2017 was an exemplary year for ReSolve strategies.
- Strategies targeting long-term equity-like volatility produced almost double the return of U.S. stocks, with some mandates achieving over 40% growth.
- Strong results are a function of proven process + relentless discipline + favourable conditions. We offer a comparative analysis to cement the point.

2017 YEAR-END REVIEW

PERFORMANCE REVIEW

Table 1: Net 2017 performance of ReSolve USD mandates (daily scale).

Statistics	Return	Volatility	Sharpe Ratio	Max Drawdown	Calmar
AAA 16%	42.37%	16.3%	2.25	-5.72%	7.43
AAA 12%	29.57%	11.63%	2.28	-4.4%	6.75
AAA 8%	17.67%	7.62%	2.16	-3.08%	5.76
AAA 8% Un-Levered	15.47%	5.73%	2.52	-1.78%	8.7
Risk Parity 12%	24.06%	8.78%	2.49	-4.39%	5.49
Risk Parity 6% Un-Levered	12.66%	4.44%	2.69	-2.13%	5.97
Tactical Equity	17.66%	7.5%	2.2	-2.74%	6.47
Global Equities	24.50%	6.89%	3.21	-2.14%	11.51

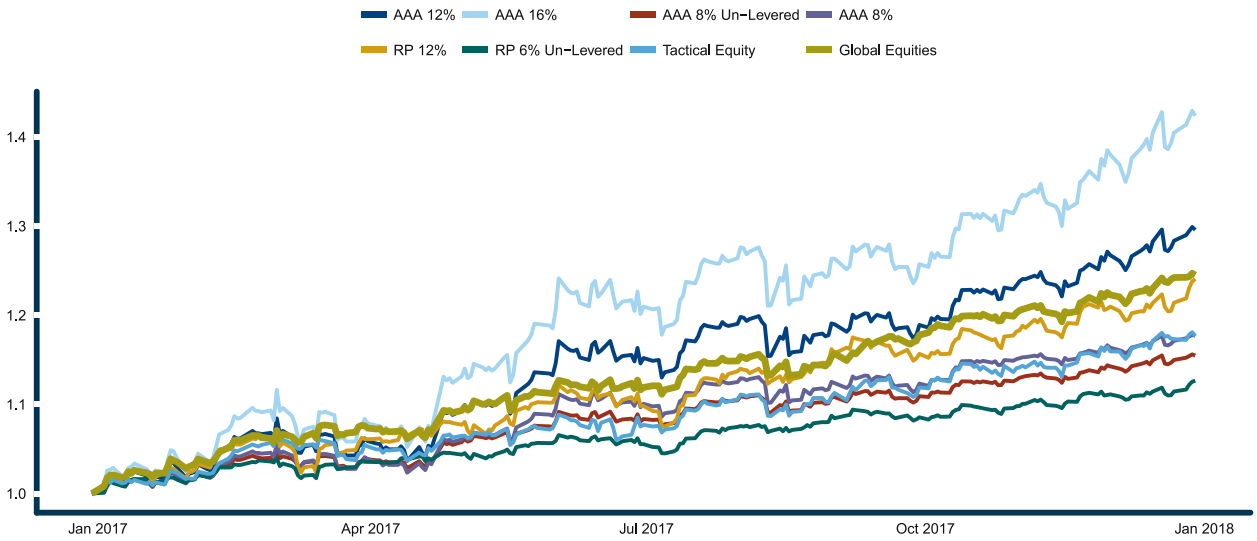
SOURCE: ReSolve Asset Management, PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS

Calendar 2017 was an exemplary year for ReSolve strategies. Per Table 1, at a 12% annualized volatility target, consistent with the long-term risk of a traditional 60/40 global balanced portfolio[1], performance of Adaptive Asset Allocation (AAA) and Global Risk Parity (RP) mandates rivaled most global equity benchmarks[2]. Adaptive Asset Allocation mandates targeting a volatility closer to the long-term profile of global equities (16%-20%) produced almost double the return of U.S. stocks, with some mandates achieving over 40% return.

[1] A portfolio consisting of 60% MSCI Global All-Cap World Index, 20% U.S. Aggregate, and 20% S&P/Citigroup International Treasury Ex-US total return indexes exhibited an annualized daily volatility of 11.7% since 1990.

[2] The Vanguard Total U.S. Stock Market ETF (VTI) returned 21.28%, and the global Vanguard Total Market ETF (VT) returned 24.57%.

Figure 1: Live geometrically linked net daily returns to ReSolve USD mandates in 2017.



SOURCE: ReSolve Asset Management.

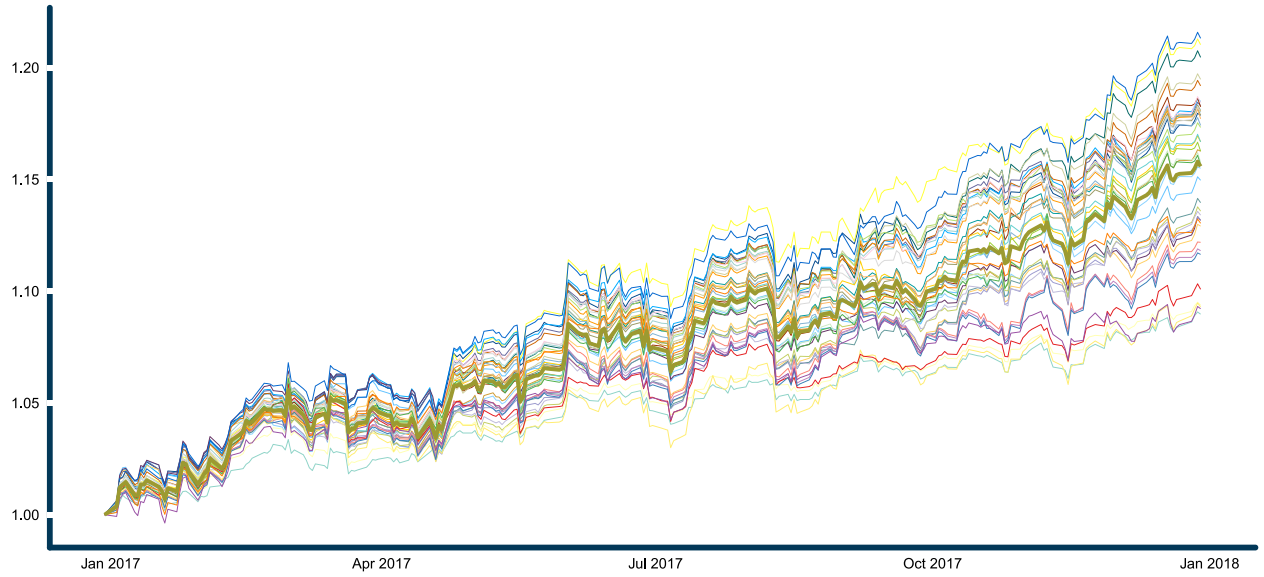
Figure 1 compares the net total return trajectories of ReSolve's Adaptive Asset Allocation, Risk Parity, and Tactical Equity mandates against global equities[3].

Long-time investors know that ReSolve takes an ensemble approach to strategy design to minimize the risk of specifying the exact wrong model for the current market environment. The current version of Adaptive Asset Allocation uses resampling to draw many combinations of lookback and weighting parameters to estimate momentum, correlations, and volatilities, each time we create an optimal portfolio. In addition, the Strategy uses four techniques to measure momentum and trend; three transforms of momentum data; and five portfolio optimization methods.

One of these methods is thematically consistent with the toy model we described in our seminal whitepaper, Adaptive Asset Allocation: A Primer (2012 rev 2015), where assets are ranked on average momentum, and the top half of assets are held in minimum variance weights. But we also apply forty other combinations of momentum measures, transforms, and optimization methods when we form portfolios. Final portfolios represent a thoughtful combination of all forty-one sub-strategies. While the long-term performance profiles of these sub-strategies are statistically indistinguishable, we observe fairly wide dispersion in performance from year-to-year.

[3] Total return index of the Vanguard Total Stock Market ETF (VT)

Figure 2: Return trajectory of Adaptive Asset Allocation sub-strategies in 2017. Live aggregate strategy performance is highlighted in gold.



SOURCE: ReSolve Asset Management.

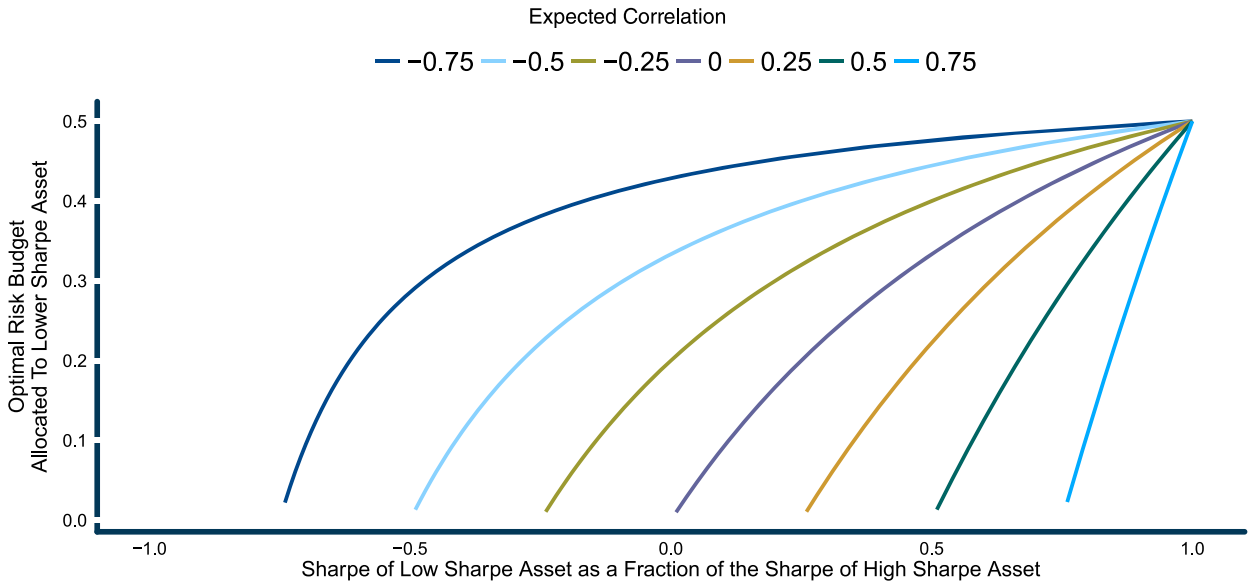
Figure 2 illustrates how each of the forty-one sub-strategies that comprise ReSolve's Adaptive Asset Allocation approach performed this year, without any volatility targeting. The worst strategy produced less than 9%, while the best generated almost 21%. This is quite a range given that the strategies all seek to maximize momentum and trend while minimizing portfolio volatility. Meanwhile, the live aggregate strategy[4] delivered net returns of 15.5%.

Some investors may be wondering why the unlevered version of Adaptive Asset Allocation lagged global stocks. After all, global equities produced one of the best trends ever in 2017. The reason is that ReSolve's strategies, in contrast with many other ostensibly similar strategies, explicitly account for the fact that adding assets with lower expected Sharpe ratio, but low correlation to other portfolio assets, will improve the expected risk-adjusted performance of the portfolio. Take the case of a two asset portfolio, where one asset has twice the expected Sharpe ratio of the other asset. If the two assets are perfectly correlated, an investor should simply choose to invest all her capital in the asset with the best expected performance. However, if the assets are uncorrelated, the investor is always better off, in terms of expected risk-adjusted performance, to invest in a combination of the two assets rather than simply investing all her funds in the asset with the best expected performance.[5]

[4] ReSolve Adaptive Asset Allocation: 8% Volatility (USD) unlevered mandate.

[5] Note the repeated emphasis of the word expected. Obviously if an investor has perfect information about which asset will outperform in the coming period, they should invest all their capital in that asset, with maximum leverage. Unfortunately, markets rarely present investors with perfect information, so investors must act to optimize their expected future wealth under conditions of uncertainty, which supports diversification.

Figure 3: Optimal risk budget for a lower Sharpe asset given different correlation assumptions.



SOURCE: ReSolve Asset Management.

Figure 3 considers the case of a two asset portfolio, and quantifies the risk budget[6] that should be allocated to an asset with a lower expected Sharpe ratio (with the remainder in the higher Sharpe asset), to maximize the portfolio's expected risk-adjusted performance. Given the example where one asset has half the expected Sharpe ratio of the other asset, the violet line in the chart shows that the most efficient portfolio would combine about 63% in the higher Sharpe asset with a 37% position in the lower Sharpe asset, when the correlation between the two assets is zero. Indeed, assets with negative Sharpe ratios may improve the efficiency of a portfolio given sufficient negative correlation. The light blue line tracks the optimal allocation to a lower Sharpe asset given a correlation of -0.5 with the higher Sharpe asset. You can see that an asset with a Sharpe ratio that is negative and 0.25 times as large as the higher Sharpe asset would still deserve a risk budget allocation of almost 30% !

Why does this matter? Many popular Global Tactical Asset Allocation strategies simply emphasize assets with favorable characteristics, which often leads to portfolios that are fully allocated to just one asset class. In years like 2017, this approach works well, because there are no trend reversals, and the best approach in retrospect was simply to hold 100% in emerging stocks all year. However, under conditions of uncertainty, portfolios that account for correlations will hold more diverse assets, which positions them to capture a smaller proportion of losses on reversals, and to transition into alternate asset classes more quickly.

This is one of the reasons why even a simple Adaptive Asset Allocation strategy is the top ranked strategy by Sharpe ratio, and second-best strategy by annualized total return, over the past twenty years (in simulation) according to a popular GTAA portal.[7]

[6] If the assets have equal expected volatility then risk budget is the same as portfolio weight.
[7] See the "Strategies" page in the member's section at Allocate Smartly https://allocatesmartly.com

PERFORMANCE ATTRIBUTION ANALYSIS

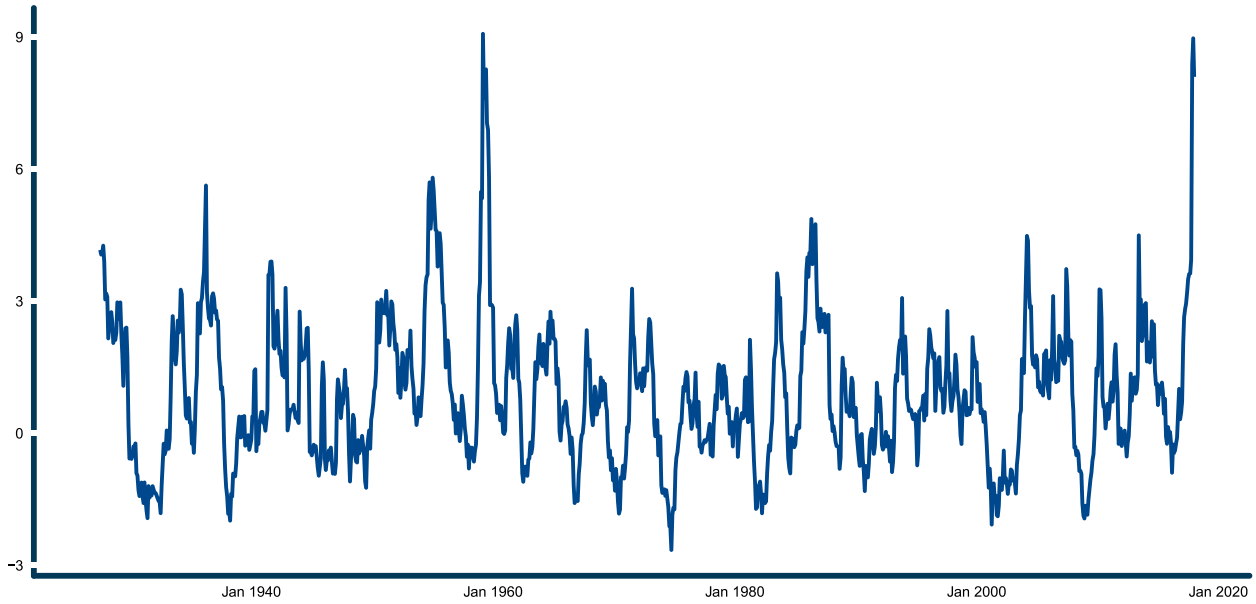
The relatively strong performance of ReSolve's strategies this year accrued from a confluence of factors. First, most global assets delivered positive returns on the year, and several markets produced spectacular growth. Indeed, the top performing assets produced their returns with low volatility and high Sharpe ratios, so that it was possible to amplify returns using the Capital Market Line. Second, there was a large disparity between the top and bottom-performing assets, which made it easy for our momentum indicators to separate the wheat from the chaffe. In addition, the best performing assets outperformed the worst performing assets very consistently all year, with few rank-reversals.

At the end of 2015, we produced a report to explain some of the reasons why ReSolve's strategies had struggled that year. We described the necessary conditions for long-only active asset allocation strategies to thrive, and compared the conditions that prevailed in 2015 with conditions during other calendar years over the previous two decades. The analysis made clear just how extraordinarily challenging that year was relative to other years on a wide variety of dimensions. We thought that this year it would be interesting and instructive to contrast conditions in the current year with conditions that prevailed in calendar 2015, using the same analytical tools.

This exercise is useful because, while we have made incremental improvements to our strategies over the past few years, the fundamental mechanics that inform our strategies have not changed materially. By revisiting the metrics that we used to explain the unexciting performance in 2015, and demonstrating how current conditions would have predicted strong performance this year, it will become clear that results in any one year do not reflect on the value of our strategies, but rather reflect the role of luck on short term investment results.

To kick-off our analysis, let's first examine just how amazing the current year was for equity investors. While investors in U.S. equities have enjoyed outstanding returns for the past nine years, 2017

Figure 4: Rolling 12-month annualized Sharpe ratio.



SOURCE: Global Financial Data from 1926 - 2015, CSI Data for VT ETF from 2015 - 2017.

rewarded investors from virtually every corner of the globe. Moreover, per Figure 4, equities produced their mouth-watering returns with vanishingly low monthly volatility, leading to stratospheric Sharpe ratios at monthly scale.

In fact, 2017 was the only calendar year since 1926 that global equities offered investors positive returns in every single month.[8]

Recall that ReSolve's Adaptive Asset Allocation and Risk Parity mandates are long-only. These strategies will produce positive returns only if one or more markets are rising. In most years, this is not an issue, as there is almost always a strong bull market somewhere. During periods of strong global growth surprises, equity markets should produce good returns. In other years characterized by negative growth or outsized inflation shocks, other assets, like high grade bonds or commodities, should do well. But there are usually good opportunities for dynamic, long-only strategies to prosper, as evidenced by the top row of Figure 5.

[8] Actually, the twelve months ending November and December 2017 represent two of just sixteen twelve month rolling periods in the past 1075 months where global equities offered investors positive returns in every single month.

Figure 5: Total returns to major asset classes in calendar years 2000 - 2017, sorted from highest to lowest.

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average 2000-2017
Commodities 32.75%	REITs 3.90%	Commodities 34.36%	Emerging 57.83%	REITs 33.67%	Emerging 32.63%	REITs 37.72%	Emerging 33.33%	T-Bonds 33.95%	Emerging 68.95%	Gold 29.27%	T-Bonds 34.00%	REITs 25.80%	USA 33.45%	T-Bonds 27.30%	Japan 9.17%	Commodities 18.50%	Emerging 31.60%	REITs 9.11%
T-Bonds 19.25%	T-Bonds 3.38%	T-Bonds 16.35%	REITs 45.99%	Commodities 28.18%	Japan 24.34%	Europe 33.05%	Commodities 31.58%	Gold 4.92%	REITs 32.00%	REITs 24.18%	Gold 9.57%	Europe 21.56%	Japan 26.00%	REITs 18.67%	REITs 1.00%	USA 12.82%	Europe 27.10%	T-Bonds 7.35%
REITs 13.56%	Emerging -2.26%	REITs 5.27%	Europe 38.93%	Emerging 24.64%	Gold 17.76%	Emerging 31.21%	Gold 30.45%	Japan -26.97%	Europe 31.34%	USA 17.43%	USA 0.97%	Emerging 19.05%	Europe 24.35%	USA 12.55%	USA 0.36%	Emerging 10.87%	Japan 23.40%	Emerging 6.46%
Gold -5.87%	USA -11.61%	Emerging -6.56%	Japan 38.74%	Europe 19.63%	Commodities 17.50%	Gold 22.55%	Europe 13.26%	Commodities -31.80%	USA 28.90%	Emerging 16.52%	Commodities -2.58%	USA 16.45%	REITs 2.39%	Gold -2.19%	T-Bonds -1.79%	Gold 8.03%	USA 21.30%	USA 5.93%
Europe -5.93%	Gold -19.72%	Japan -9.86%	USA 30.74%	Japan 13.74%	REITs 13.43%	USA 15.70%	T-Bonds 10.30%	USA -36.99%	Gold 24.03%	Japan 13.59%	REITs -3.01%	Japan 9.22%	Emerging -3.65%	Emerging -3.90%	Europe -1.94%	REITs 3.90%	Gold 12.80%	Commodities 4.16%
USA -9.22%	Commodities -19.94%	Europe -17.77%	Commodities 23.81%	USA 12.78%	Europe 10.34%	Commodities 11.27%	USA 5.37%	Europe -44.65%	Commodities 16.19%	Commodities 11.90%	Europe -11.67%	Gold 6.60%	Commodities -7.63%	Japan -6.23%	Gold -10.67%	Japan 2.76%	T-Bonds 9.20%	Europe 3.88%
Japan -26.29%	Europe -21.82%	USA -20.48%	Gold 18.09%	T-Bonds 8.71%	T-Bonds 8.60%	Japan 5.85%	Japan -5.50%	REITs -45.99%	Japan 3.14%	T-Bonds 9.01%	Japan -14.76%	Commodities 3.50%	T-Bonds -13.38%	Europe -7.09%	Emerging -16.17%	T-Bonds 1.17%	REITs 5.15%	Gold 3.19%
Emerging -32.87%	Japan -30.31%	Gold -34.52%	T-Bonds 1.60%	Gold 6.66%	USA 6.30%	T-Bonds 0.71%	REITs -12.46%	Emerging -48.88%	T-Bonds -21.81%	Europe 6.05%	Emerging -18.79%	T-Bonds 2.41%	Gold -28.33%	Commodities -28.10%	Commodities -27.59%	Europe -0.42%	Commodities 4.90%	Japan 0.94%

SOURCE: Calculations by ReSolve Asset Management. Data from CSI, S&P Dow Jones, Deutsche Bank. PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS

Most years present good opportunities for long-only active asset allocation strategies to prosper, but some years, like 2001 and 2015, conspire to produce few profitable opportunities.

A historical case study will help cement the point. Imagine that on January 1st of each year, we knew in advance which major global asset classes[9] would deliver returns above the group's average, as well as positive returns, in the coming year. Of course, knowing the future in this way is impossible, but it helps to illustrate the available opportunity set for an active long-only global asset allocation strategy. Perhaps unsurprisingly, an investor with this type of perfect foresight - who allocated capital equally among the top half of positively performing assets each year - would have produced average annual returns of 21.5% since 1991.

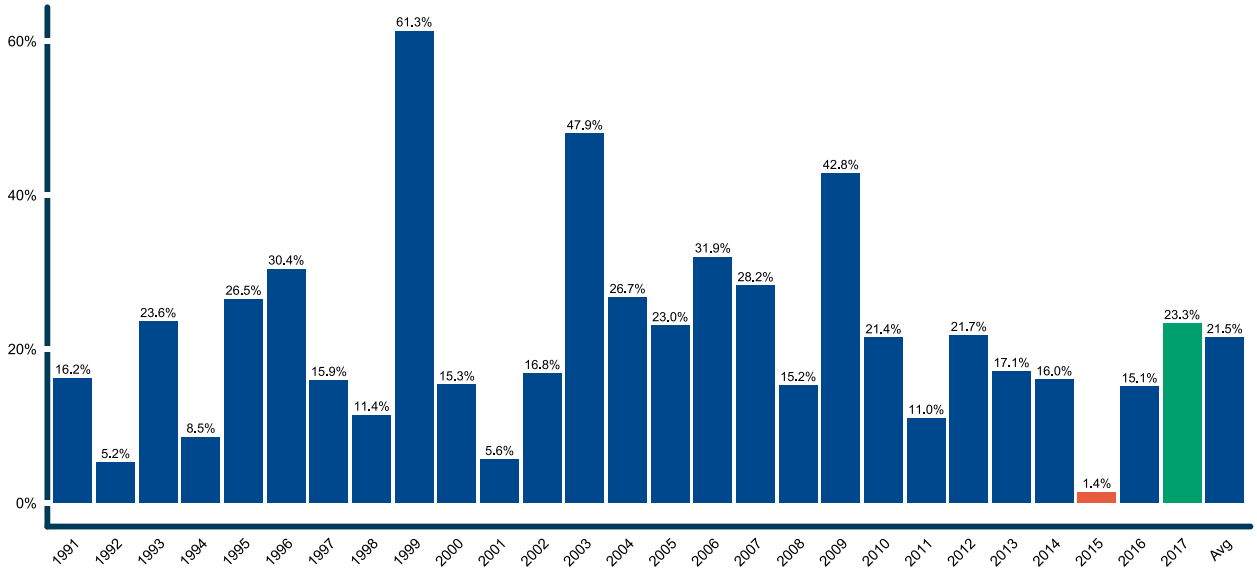
Moreover, as can be seen in Figure 6, this strategy would have generated returns over 15% in 21 out of 27 years, and gains of more than 10% in 23 of the years. Fully 26% of years provided returns of greater than 25%! Any investor in his right mind would gleefully invest in this 'crystal ball' strategy.

While most investors would be quite happy with these returns over the long term, they would probably have been left scratching their heads over the performance in 2015. Even with perfect foresight about which assets would deliver the best performance, this approach only produced 1.4%. Little wonder that long-only global strategies of every type struggled in that year. Now let's fast-forward to the current year, which offers a strong contrast to 2015. In 2017, an equal weight portfolio of top-half assets with positive performance produced 23.3% growth. Better to be lucky than smart.

While a 23.3% return is only just above average for the perfect foresight strategy under discussion, some readers may still be surprised at just how good

[9] All returns are derived from the following investable ETFs: DBC for commodities, EWC for Canadian equities, GLD for gold, IEF for 10-year Treasuries, IYR for US REITs, RWX for international REITs, TLT for T-bonds, VGK for European equities, VPL for Pacific equities, IVV for US equities, and VWO for emerging equities. Where necessary, data is extended using underlying indexes, proxy indexes, or proxy mutual funds. Data extension information is available upon request.

Figure 6: Average annual returns to asset classes with above average and positive returns.



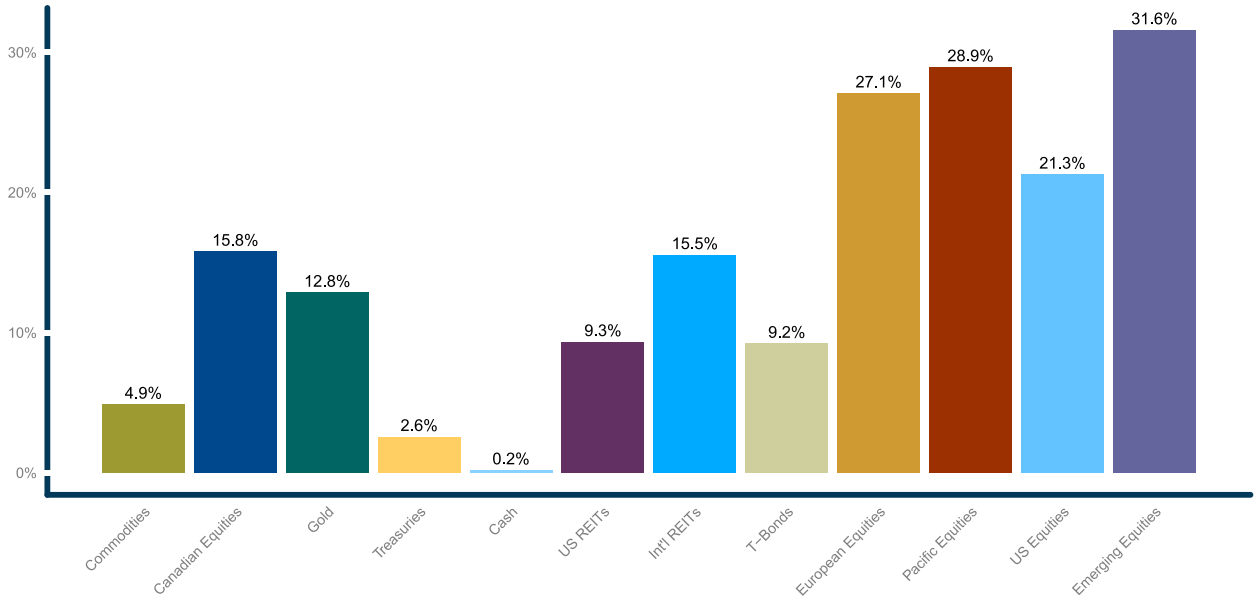
SOURCE: Calculations by ReSolve Asset Management. Data from CSI, S&P Dow Jones, Deutsche Bank. HYPOTHETICAL RESULTS, PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS

returns have been this year. In fact, while all major asset classes produced positive total returns, Figure 7 shows it was equity assets that really shined. Every major equity region, including U.S., Europe, Asia, and emerging markets produced returns above 20% in USD terms. U.S. stocks lagged ex-US markets by about 4.7%. Bonds and commodities were laggards, with the latter hovering around the zero mark, despite a major recovery in the back half of the year.

A particularly notable feature of 2017 was that many asset classes, and equity indexes in particular, produced their returns with extremely low volatility and drawdowns. Let's take our crystal ball analysis one step further, and imagine that in each year we knew not only the assets with the best returns, but also the portfolio with the best return in relation to the amount of risk you had to take to achieve the return. This is equivalent to knowing the mix of assets each year that produced the maximum Sharpe ratio, which is the ratio of the portfolio's return to its volatility.

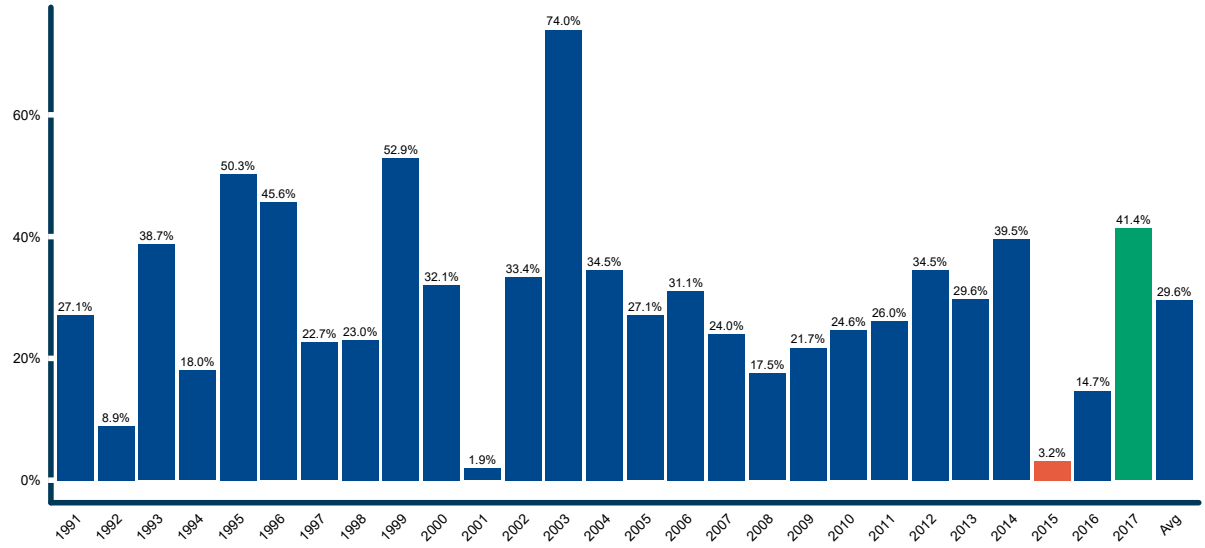
Figure 8 shows that in a typical year since 1991, markets offered investors with perfect foresight the opportunity to earn 29.55% excess returns on the most efficient portfolio, when that portfolio was scaled to 10% volatility by borrowing or lending at the risk free rate. Calendar 2017 was a better than average year in terms of opportunity to generate efficient returns, as the most efficient portfolio produced 41.36%. However, in 2001, 2015 and 2016, lower returns coupled with higher volatilities conspired to offer investors just 1.92%, 3.16% and 14.68% growth on efficient portfolios, respectively. These represented the first-, second-, and and third-worst opportunities for risk-adjusted performance of the past 27 years.

Figure 7: Total returns to major asset classes in 2017.



SOURCE: Calculations by ReSolve Asset Management. Data from CSI. PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS

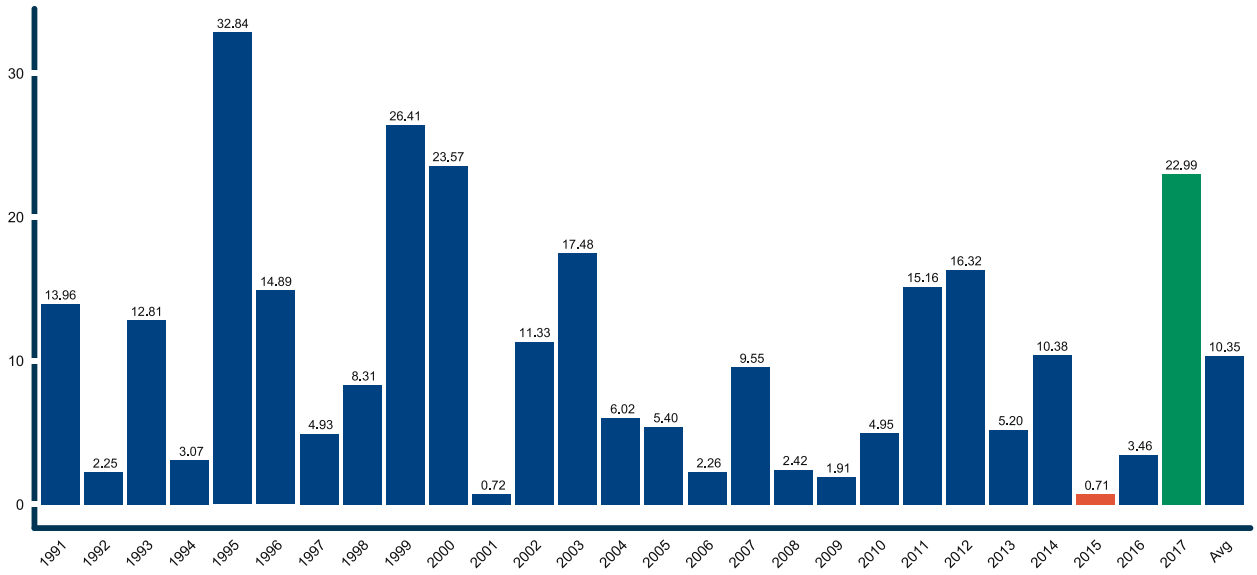
Figure 8: Calendar year excess returns for optimal Sharpe portfolios at 10 percent volatility given perfect foresight.



SOURCE: Calculations by ReSolve Asset Management. Data from CSI, S&P Dow Jones, Deutsche Bank. HYPOTHETICAL RESULTS, PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS

Consistent with what one might expect from an extremely low volatility environment, the most efficient portfolio inflicted much smaller than average maximum drawdowns this year. The maximum drawdown to the most efficient portfolio was just -1.8% in 2017, which is the 4th smallest maximum drawdown experienced by a maximum Sharpe ratio portfolio in any calendar year since 1991. On the other hand, in 2015 and 2016, peak-to-trough drawdowns were worse than average, which meant investors had to face lower returns with a considerably bumpier ride, as quantified in Figure 9.[10]

Figure 9: Calendar year Calmar ratios for optimal Sharpe portfolios scaled to 10 percent volatility.

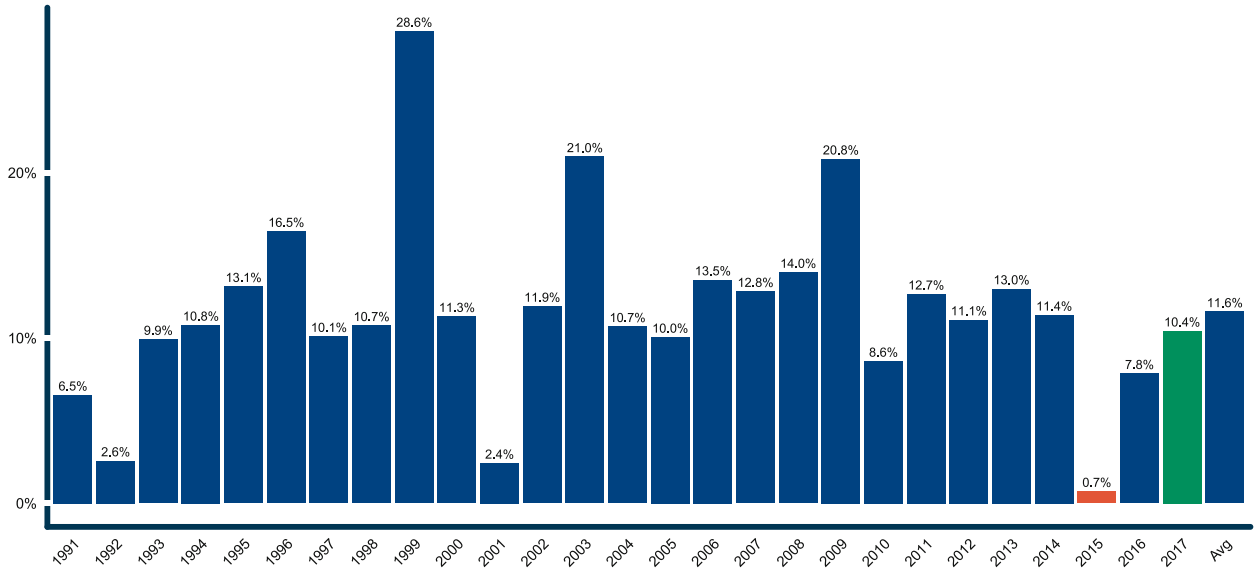


SOURCE: Calculations by ReSolve Asset Management. Data from CSI, S&P Dow Jones, Deutsche Bank. HYPOTHETICAL RESULTS, PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS

The availability of assets with strong returns, and particularly strong risk-adjusted returns, represents a substantial tailwind for long-only asset allocation strategies. But other factors are important as well. Given that ReSolve's Adaptive Asset Allocation and Global Risk Parity strategies seek to constantly emphasize assets with the strongest trends, it is helpful when these assets stand apart from the crowd. If the assets with the strongest momentum have very similar returns across most lookback horizons, momentum oriented strategies will trigger a large number of unproductive trades as assets make small moves above or below each other in quick succession.

[10] Calmar is the ratio of excess return to maximum drawdown calculated on a daily scale.

Figure 10: Average dispersion of global asset class returns in calendar years.



SOURCE: Calculations by ReSolve Asset Management. Data from CSI, S&P Dow Jones, Deutsche Bank.

Dispersion measures the cross-sectional standard deviation of returns in a period[11]. In years with high dispersion, assets exhibit a wide range of returns, so top assets really stand out, and vice-versa. Figure 10 shows the dispersion of returns to assets with above average and positive returns in each calendar year. It's clear that calendar 2015 was especially challenging in this respect, as the returns to top performing assets were closely bunched together, making it difficult for more active strategies to choose between them. In fact, calendar 2015 was the most challenging year on this metric in the past 27 years. You can imagine that, in this type of environment, assets enter and leave the portfolio with great frequency, as they lose and retake leadership positions relative to other assets. This triggers lots of trading, but produces very little progress for the portfolio. Shifting the focus to 2017, we observe a material improvement in market conditions on this measure, as the best assets soared far beyond the returns of the worst assets.

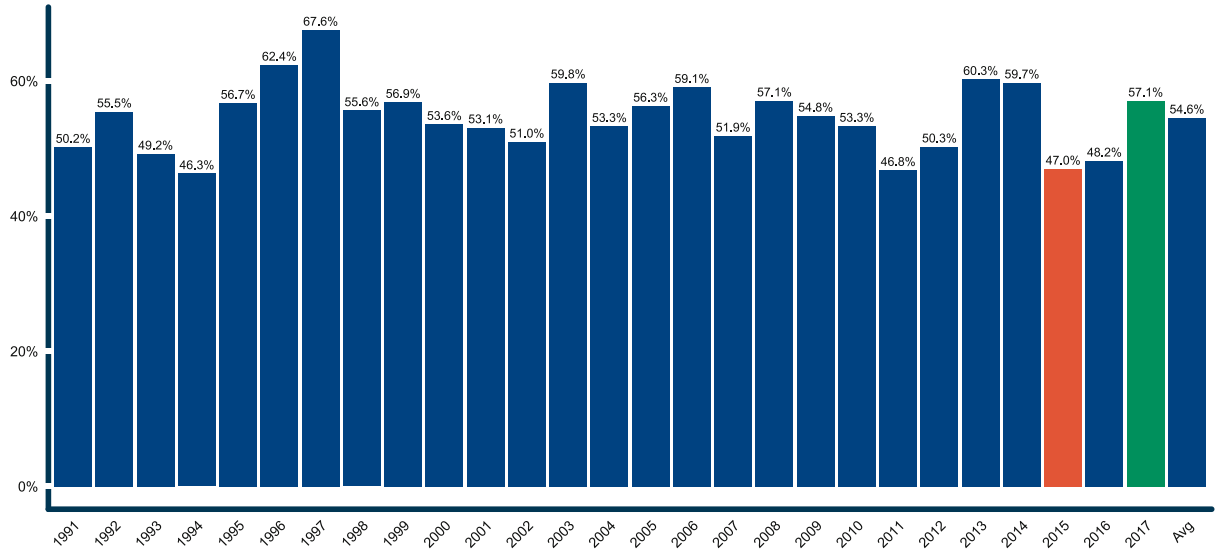
High dispersion in returns over the full calendar year is helpful to long-only active asset allocation strategies, but it doesn't measure the stability of relative returns during the year, which is central to active momentum strategies. Momentum strategies can only be successful if the assets with the strongest returns over standard lookback horizons persist in producing above average returns after assets are purchased. We can proxy this propensity for high momentum asset returns to persist by measuring the percentage of times that an asset ranked in the top half over standard momentum lookbacks continues to be ranked in the top half by returns over the subsequent month. If we examine this metric each year, we can identify years where momentum strategies are positioned for success, and other years where they were likely to struggle.

[11] $Dispersion = \sqrt{\sum_{i=1}^{n} w_i \left(r_i - P\right)^2}$

Figure 11 shows that 2015 and 2016 may have caused investors to question whether the momentum effect had been arbitraged away, as high momentum assets were more likely to produce below average returns in those years. However, where the previous two years may have tested investors' faith, 2017 offered substantive redemption, with stronger than average momentum persistence.

It's tempting, and quite natural, to want to blame a lack of effort, or insight, or talent for poor investment results in any given year. The analyses in this section should make clear the fact that results for even very good investment strategies are, at times, naturally confounded by market conditions. The secret to long-term success is to understand the random nature of strategy returns, and cultivate the discipline to stick with a dependable strategy during the inevitable challenging periods. It takes wisdom and grit to succeed in markets over the long term. Wisdom alone is not sufficient.

Figure 11: Probability that an asset ranked in the top half by average 1, 3, 6, 9 and 12 month momentum will produce better than average returns over the next 20 days.



SOURCE: Calculations by ReSolve Asset Management. Data from CSI, S&P Dow Jones, Deutsche Bank.

CAPITAL MARKETS

As our minds shift to thoughts of the new year, it's worth taking stock of the main themes that investors focused on in 2017, and what they suggest for the new year ahead. The main story of 2017 was, undoubtedly, the synchronized growth in most G7 and emerging market economies. The global consumer confidence index hit a new record high in September, and the IMF forecasts that the 2018-2021 period will have the least amount of countries undergoing a recession since 1980.

Positive momentum in global GDP combined with persistently loose monetary conditions in the developed world (central bank stimulus has likely peaked for this cycle, but a combined USD $100 billion is still being pumped into markets every month), and easing cycles in several developing nations, have supported record-breaking global stock market gains, tighter credit-spreads and a generally robust performance by risky assets everywhere. Commodities were a mixed bag; while both oil and base metals staged huge rallies off mid-year lows to close at multi-year highs, sending promising growth signals for 2018, the weak performance in grains and natural gas capped overall progress in the raw materials complex.

The US continues its 9-year recovery at full steam, with little (if any) economic slack and an unemployment rate close to 4%. With Republicans in control of both houses in Congress and the White House, approval of the much-awaited tax reform appears to be a matter of weeks, which will add to strong consumer and broad economic sentiment. Despite the sanguine mood in equities, the low differential between long-term and short-term Treasuries (usually a leading recessionary indicator) suggests investors are skeptical that inflation will in fact rebound. As Janet Yellen prepares to step down as Fed chair, markets will watch her successor closely for signals about the magnitude and pace of the 3 rate hikes expected in 2018.

Across the Atlantic, the mood in Europe has been broadly optimistic. Early in the year, pundits had warned of mounting uncertainty as the Dutch, French, Germans and Italians voted in national elections, but those fears were mostly over-played. As the political tail-risks waned, GDP picked up throughout the continent, unemployment crept lower and most confidence indicators showed healthy economic momentum. The ECB has played no small part, as continued quantitative easing under Mario Draghi's "whatever it takes" banner has been instrumental to this positive scenario. Tapering of bond purchases will begin in the new year, and should be cut to half the current rate by 3Q18.

A similar, albeit less vigorous, tale can be told of Japan. Having experimented with negative interest rates on sovereign debt, the Bank of Japan has kept rates at 0% and their own bond-purchasing scheme apace. GDP growth has remained relatively strong, as well as exports and imports, while positive sentiment surveys and improving labor markets have increased expectations for a rebound in consumption and inflation, which has eluded the country for almost three decades.

The Chinese government has continued to use its monetary toolkit to curtail the shadow banking sector and keep the economy running at a healthy, although slightly lower, growth level. Tighter credit conditions have spurred concerns, particularly in the infrastructure and housing sector, but authorities have thus far been successful in softening the slowdown. Fear of a possible hard landing in the Middle Kingdom has been one of the main 'known unknowns' in recent years, yet growth has proven resilient, although fueled by an ever-growing mountain of debt. The Communist Party will likely push supply-side reforms forward in 2018, and GDP growth should gradually decelerate but remain supportive for risk assets.

2018 - THE YEAR OF THE BEAR?

Despite several analysts and investors calling for a market reversal, the fact is that economic growth has been robust across the globe and the 20,000 odd-companies that make up global equities markets have been reporting higher profits, a positive trend which has persisted since mid-2016.

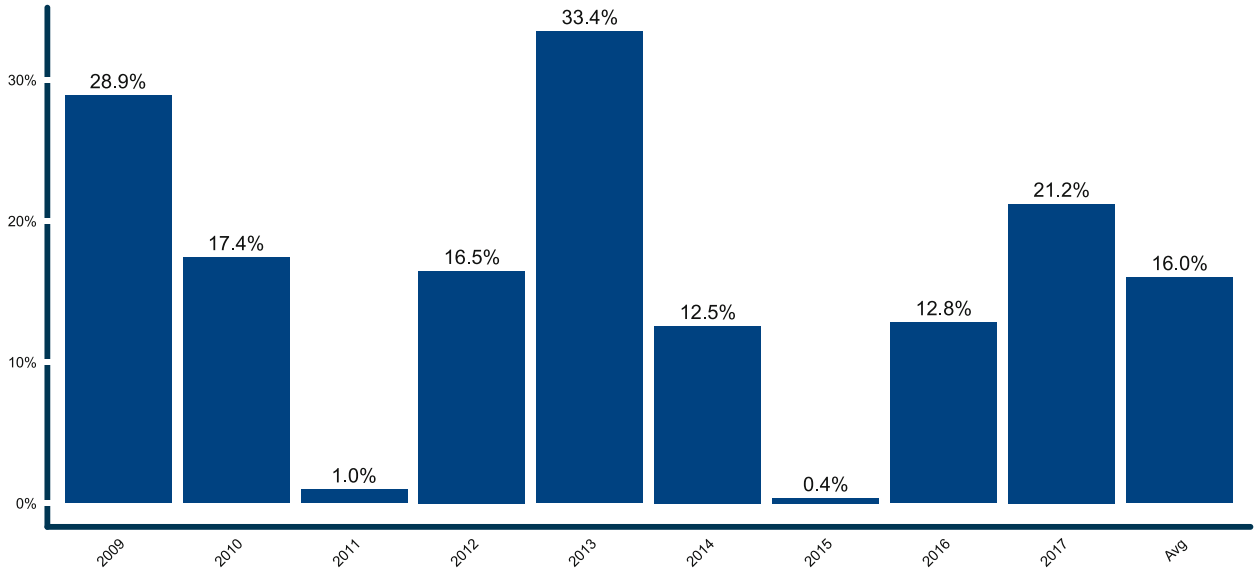
No doubt, ultra-low volatility and stretched valuations (as shown by the Shiller PE Ratio, currently at its second-highest level since the late-1800s) will keep equity investors on alert. But as history has shown, excesses may endure for longer than most investors can expect, especially with such solid momentum, and bear markets seldom occur outside of an economic recession (only 2 out of the 10 bear markets since the 2nd World War). Moreover, studies point to a low correlation between valuations and next-12-months stock performance, so it seems unwise to bet that expensive equity prices will, on their own, buck the current trend.

One thing is certain: 2017 will be a very tough act to follow.

THE LAST CRUSADE

It may seem strange, after almost a decade of above average returns from the world's most closely watched benchmark asset class, to continue to bang the drum on diversification. After all, you can see from Figure 12 that the Vanguard U.S. Total Stock Market ETF has produced positive returns in each of the past nine years since the Global Financial Crisis, averaging 16% per year. Investors - especially those who began their investment careers in the past decade, might be forgiven for thinking that the S&P500 is essentially a risk-free asset.

Figure 12: Annual total returns to the Vanguard U.S. Total Stock Market ETF (VTI).



SOURCE: Calculations by ReSolve Asset Management. Data from CSI. PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS

Notwithstanding this extraordinary period for U.S. stocks, equities are really only designed to produce these types of returns in periods with persistent upside growth shocks, benign inflation, and abundant liquidity. As ever, the Holy Grail of investing is to have many dependable, but uncorrelated sources of return, which respond to very different economic and market conditions. Most investors fail to take advantage of even a small fraction of the available opportunity set, choosing familiarity and orthodoxy over evidence and results.

Granted, for the past few years it has seemed fruitless to strive for diversification given the high returns and low volatility provided by home-grown equity markets. But it should be clear to the astute investor that this feeling of "higher for longer" in stocks has been the product of abnormally stimulative monetary conditions worldwide, and cannot last forever. Over longer time-horizons, wise investors understand that a well-diversified portfolio with many uncorrelated investments and dependable strategies offers the greatest chance of achieving most investors' financial objectives.

As always, in 2018 ReSolve will continue to focus on diversified and adaptive strategies to offer the strong, stable investment experience our investors signed up for, regardless of the inevitable challenges that lie before us. Thank you for accompanying us on our journey.

Sincerely,
Your ReSolve Team.

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PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS.

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