Deutsche Asset Management

Exchange-Traded Funds

Strategy Insights December 2017

Xpert Spotlight

Spotlight on DEUS' Q4 and 2017: Clinging to the market’s coat tails


Robert Bush


Abby Woodham


Eric Legunn

Our U.S. multifactor fund lagged the market in 2017, but still ekes out some positive alpha

2017 was the second full calendar year of live performance for DEUS, our Russell 1000 Comprehensive Factor ETF, a smart beta offering that tilts towards value, size, momentum, quality and low volatility stocks. It’s a little disappointing to report that, in total return terms, it lagged the vanilla, market-cap, benchmark (the Russell 1000) by –1.77%. DEUS returned 19.92% in 2017 (total NAV return) versus 21.69% for the Russell 1000. In the final quarter of the year, it returned 6.43%, versus 6.59% for the Russell 1000.

Contributors
- Rob Bush, ETF strategist
- Abby Woodham, ETF strategist
- Eric Legunn, ETF strategist

Figure 1: ETF (DEUS) 2017 performance

	Q4 2017	1 year	Since inception
NAV	6.43%	19.92%	14.63%
Market price	6.39%	19.78%	14.64%
Russell 1000 Index	6.59%	21.69%	14.77%

Source: Deutsche Asset Management 12/31/17. Gross/net expense ratio for DEUS is 0.19%. DEUS inception date is 11/23/15. **Performance data quoted represents past performance and does not guarantee future results. Investment returns and principal value of an investment will fluctuate so that an investor’s shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data quoted. Market price returns are based on the midpoint of the bid/ask spread at 4pm ET and do not represent the returns an investor would receive if shares were traded at other times. ETF shares are bought and sold at market price (not NAV) and are not individually redeemed from the fund. To obtain the most recent month-end performance data visit www.Xtrackers.com or call 855-329-3837.**

That said, we are still encouraged, for three reasons. First, a large proportion of the underperformance came from our underweights in a handful of tech stocks (effectively the FANGs) which had a stellar year. Second, 2017 was a year when large cap stocks put in one of their strongest performances versus small caps in some time (indeed, over the last 16 years, 2017 was the worst for small caps by one measure). Finally, it's important to remember that comparing headline returns only tells half the story. The beta of DEUS is around 0.90, so the fund needs to be compared to a beta-adjusted Russell 1000 for a fairer comparison. By that metric DEUS eked out around 0.18% of positive alpha. And generating positive alpha remains the ultimate goal.

In this short paper, we'll review:

— factor returns in Q4 2017, and for the full year
— the fund's highlights at the sector, and stock levels, over the same periods, and
— finish with a few more details on the above reasons to be encouraged

Factor returns in Q4 2017 and for the full year

The simplest way to look at what happened at the individual factor level over Q4, and for the year as a whole, is to show them in a table, which is presented on the next page. To be clear, these are the total and excess returns to six different indexes – the standard Russell 1000, and then the same index tilted towards value, size, momentum, quality and low volatility. These are the five factors that DEUS exposes investors to, but, by showing the factors individually, we are simply hoping to glean some insights into what each factor did on a standalone basis.

Figure 2: Q4 2017, and full year 2017 total and excess returns to various indexes

Index	Q4 Total Return	Q4 Excess Return	2017 Total Return	2017 Excess Return
Russell 1000	6.59%		21.69%	
Russell 1000 Value	7.58%	0.99%	19.74%	-1.95%
Russell 1000 Size	6.61%	0.02%	18.25%	-3.44%
Russell 1000 Momentum	7.34%	0.75%	22.83%	1.14%
Russell 1000 Quality	7.55%	0.96%	28.07%	6.38%
Russell 1000 Low Volatility	6.68%	0.09%	20.00%	-1.69%

Source: Bloomberg as of 12/31/17. Past performance is not indicative of future results. It is not possible to invest directly in an index.

In looking at the table, our main conclusion is that it was not a great year for multifactor-based strategies given that only quality generated a significant excess return to the market, and three of the five factors underperformed. Within this context, it is not hard to see why DEUS lagged the market on a headline basis.

The other point that's interesting to note is that we generally think of quality as a defensive factor that has performed better in business cycle downturns. Clearly, that has not been the case this year with strong economic growth, a positive market performance and low volatility. Our view is that this highlights another of the difficulties with factor timing. Not only does an investor have to be right on their call for the economic or market environment, but they are also at the whim of particular factors not behaving as they have historically. It's this double layer of risk that gives further ammunition to multi factor approaches in our view.

Q4 sectors

However, as we do each quarter, let's look at some of the sector and stock stories over each period to see what other insights can be drawn out.

The situation in the fourth quarter was not that interesting from a sector perspective. As we already discussed, DEUS lagged the market by just 0.16% over these three months, so there weren't any particularly large contributors or detractors at the sector level. We won the most to an underweight in Healthcare (DEUS held 9.48%, the Russell had 13.49%) which returned just 1.49%, lagging the 6.59% of the market. Our worst performance at the sector level was in Utilities, which was the fund's third most over weighted sector (behind Industrials and Consumer Discretionary). We held an average weighting of 6.29% versus 3.11% in the Russell 1000, and the sector returned just 0.55% in the fourth quarter.

Q4 stocks

At the individual stock level, the three largest detractors in the fourth quarter were Microsoft, Amazon and Apple. These three tech titans returned 15.42%, 21.65% and 10.20% respectively over the quarter and accounted for 8.44% of the Russell 1000. DEUS held just a 0.15% weighting in the stocks over the same period, practically eliminating them, largely because of their poor size scores (the bigger the company the worse its size score).

Q4 stocks (Continued)

In terms of contributors to performance, the fund's biggest win came from NetApp, a storage and data management firm. We took the stock from its 0.06% in the Russell 1000 to 0.60% in the fund, and the stock returned 26.98% over the quarter. The rationale for the overweight was the 79th percentile score for Quality, and the 96th percentile score for Momentum that the stock achieved at the last rebalance, and note the fairly high conviction approach that DEUS is prepared to take. Moving the stock from 0.06% to 0.60% is weighting the stock at around 10 times its market cap equivalent. This is a critical result of DEUS' multiplicative approach to factor scores, one that we believe is a key differentiator to other methodologies.

2017 sectors

Turning the microscope back from the last quarter of 2017 to the full year, the situation at the sector level, is really summarized in the following way – DEUS' two largest active sector underweights were in the two sectors that put in both the worst performance of the year, and the best.

Taking the worst performer first (which was good for us given we are talking about underweights!), that unhappy title went to the Energy sector. Over the course of 2017, it returned -1.36%. On average, DEUS had a weighting of 0.78% to the Energy sector over the course of the year, versus the 6.01% it accounted for in the Russell 1000. It's easy to see therefore why this was our strongest sector performance. Why does DEUS underweight energy stocks, on average? The answer is that they have historically tended to be above the median for size and for volatility. So the sector is, on the whole, made up of riskier, larger cap names that a low vol and size tilt shuns. And this accords with intuition when one thinks of some of the big oil majors operating in an industry that is relatively exposed to volatile commodity prices.

The best performing sector in 2017 (which was bad for us now given our underweight) was IT. The sector returned 38.45% over the course of the year, far outstripping the market's return. DEUS allocated just 13.38% to the sector as opposed to the 22.19% that it makes up in the Russell 1000. Why does DEUS tend to underweight IT? Well, historically the sector has scored poorly on value, quality and low volatility (although it has improved in the last few years on these last two as IT companies have become more profitable and their stock prices have ground higher). But the other reason is that the sector is dominated by a number of large firms that, by definition, score very poorly on size.

2017 stocks

When one looks at the top and bottom stock contributors over the course of 2017, it's consistent with the above takeaways that 2017 performance has really been defined by our underweight positions in the tech giants. Four of the biggest detractors were Apple, Microsoft, Amazon and Google, all of which returned more than 30% (details below), and alone account for more than 10% of the Russell 1000. DEUS held just 0.14% total in these four names.

However, as we will discuss below, we are actually prepared to make a fairly bold claim: that in a year which has seen some significant outperformance from the tech giants, a fund that has effectively eliminated them has, in some sense, put in a credible performance to lag the market by less than -2%, and to generate a positive alpha.

In terms of our four biggest contributors for the year, they were NVR Inc, NetApp Inc, Progressive Corporation and Lear Corporation, a disparate selection of stocks that operate across different segments of the economy from homebuilding (NVR) and data management (NetApp), to insurance (Progressive) and automobile parts (Lear).

NVR was taken from 0.04% in the Russell 1000 to 0.39% in DEUS because of its strong scores in quality (95th percentile), momentum (77th percentile), and low volatility (70th percentile). The stock was up 110.20% for the year. NetApp was taken from 0.05% to 0.41% and returned 59.93%. The stock scored well for quality (79th percentile) and momentum (96th percentile). Progressive accounted for 0.12% in the Russell 1000 in 2017 but was taken to 0.53% in DEUS due to its high scores for value (75th percentile) and low volatility (89th percentile). The stock returned 61.57%. Finally, Lear was moved from 0.05% to 0.54% and returned 35.21%. It scored well for quality (86th percentile), and value (99th percentile). In our view, it's good that the portfolio benefited from stocks that are spread across a variety of industries, and which scored well across the factor gamut.

Three key takeaways from 2017

Despite a disappointing headline result for our multifactor fund in 2017, we believe there are three things that are important context for evaluating its performance.

1. FANGMA performance

The first point is that 2017 was an extremely strong year for the six FANGMA stocks - Facebook, Amazon, Netflix, Google, Microsoft, and Apple.

1. FANGMA performance (Continued)

Together, these six names alone accounted for around 11.5% of the weight of the Russell 1000, but, in DEUS, they represented just 0.14% of market cap. Or, put another way, they were effectively eliminated in a year when they all had strong, market beating returns. The table shows the details and demonstrates that, if just these six stocks had been held at their market weight by DEUS, then a -1.77% underperformance would have become around a 3.46% outperformance. We don't cite this as an excuse, we're merely pointing out the quite concentrated nature of the major detractors. The table shows the main reason why these stocks are removed – their size.

As some of the biggest stocks in the Russell 1000 (indeed Apple is the biggest), they receive the very worst possible scores for size. Of course, it might be argued that eliminating them on account of their size alone would be unfortunate if it turned out that they exhibited other positive factor characteristics. However, the table shows that not to be the case. All of the stocks are at, or below, the median for value and some also score fairly poorly for low volatility (meaning they are, on average, riskier than the median stock). Only the momentum and quality scores tend to be good, indicating stocks with strong positive price trends (momentum), and high levels of increasing cash earnings (quality).

Figure 3: Benchmark and fund weights, performances, and factor scores for the FANGMA stocks in 2017

FANGMA Stock	2017 Weighting			2017 Performance		Factor Scores				
	Benchmark%	DEUS%	Active Weight	Total Return	Detraction	Value	Size	Momentum	Quality	Low Vol
Facebook	1.53%	0.00%	-1.53%	53.38%	-0.82%	0.19	0.00	0.70	0.86	0.10
Amazon	1.62%	0.01%	-1.61%	55.96%	-0.90%	0.19	0.00	0.76	0.80	0.45
Netflix	0.29%	0.00%	-0.29%	55.06%	-0.16%	0.07	0.05	0.97	0.03	0.00
Google	2.37%	0.02%	-2.35%	34.26%	-0.81%	0.27	0.00	0.76	0.83	0.66
Microsoft	2.31%	0.03%	-2.28%	40.72%	-0.93%	0.30	0.00	0.79	0.64	0.67
Apple	3.42%	0.08%	-3.34%	48.48%	-1.62%	0.50	0.00	0.97	0.68	0.60

Source: FactSet, FTSE Russell as of December 2017. Past performance is not indicative of future results.

2. Small cap underperformance

The second broader feature of 2017 that hurt DEUS was its exposure to relatively smaller cap names. The fund applies a size score which means that it relatively favors smaller firms. We believe that this approach has been empirically validated, and like the degree of differentiation that it lends the fund. However, we note that, over the last 16 years (the beginning of data available) there has never been a lower excess return to the small cap index. Or, put more simply, 2017 was the worst year for tilting to smaller firms in the last 16 years. Coupled with the IT rally already discussed, we do regard this as somewhat of a perfect storm for underperformance.

The basis for this result was comparing the returns from the FTSE Russell Size Factor Total Return Index (which tilts towards smaller stocks) against the market cap Russell 1000. The difference between the two can be thought of as a "size premium" earned (or paid) by those holding smaller cap stocks. For the 16 years we looked at the average premium, it was 3.26%, and the return to the size index was bigger in 10 out of 16 years. To be sure, this is more anecdotal evidence in favor of small tilts than a rigorous statistical validation, but we make the point to illustrate that, for a fund like DEUS which tilts towards size, 2017 was a particularly poor year in that regard.

3. Beta Adjustment

Finally, as we noted at the top of this piece, we need to keep in mind that DEUS has a lower beta than the Russell 1000, at around 0.90. This means that comparing the market's return to that of DEUS is not an entirely like-for-like comparison unless we beta-adjust. On a beta-adjusted basis, DEUS should return around 90% of the market's performance, which would be about 19.74% for last year (the market's return of 21.69% multiplied by 0.90). That suggests that the 19.92% that DEUS achieved was actually alpha generative to the extent of around 0.18% (19.92% - 19.74%), not much to be sure, but, nevertheless, positive alpha in a world where alpha generation is key.

Conclusions

Overall we are, of course, disappointed to report that DEUS produced a lower return than the market in 2017. The fund's headline performance of 19.92% was 1.77% lower than the Russell 1000's 21.69%. However, the underperformance is largely explained by a large-cap tech rally in stocks that the fund effectively eliminates, and by the weakest return to the small cap index over the standard market cap index in 16 years. Additionally, on a beta-adjusted basis the fund did still manage to eke out a positive alpha of 0.18%.

Top 10 holdings (12/31/17)	(%)
Baxter Intl.	1.05%
Corning Inc.	0.79%
Lear Corp.	0.72%
Equity Residential	0.69%
Aptiv Plc	0.66%
FNF Group	0.66%
Lamb Weston Holdings Inc.	0.58%
Cigna Corp.	0.52%
ManpowerGroup Inc	0.51%
Progressive Corp.	0.51%

Holdings-based data are subject to change.

Alpha refers to returns in excess of a benchmark's return. Beta measures a security's sensitivity to the movements of the fund's benchmark or the market as a whole. A beta of greater than one indicates more volatility than the benchmark or market, while a beta of less than one indicates less volatility. FANGMA - Facebook, Amazon, Netflix, Google, Microsoft and Apple. Overweight means the fund holds a higher weighting in a given sector or security than the benchmark. Underweight means the fund holds a lower weighting. The Russell 1000 Comprehensive Factor Index is a benchmark designed to capture exposure to five factors – Quality, Value, Momentum, Low Volatility and Size. These factors represent common factor characteristics for which there is a broad academic and practitioner consensus, supported by a body of empirical evidence across different geographies and time periods. The Russell 1000 Index tracks the performance of the 1,000 largest stocks in the Russell 3000 Index, which consists of the 3,000 largest U.S. companies as measured by market capitalization. The Russell 1000 Momentum Factor Index is a benchmark designed to capture exposure to the momentum factor. The Russell 1000 Quality Factor Index is a benchmark designed to capture exposure to the quality factor. The Russell 1000 Size Factor Index is a benchmark designed to capture exposure to the size factor. The Russell 1000 Value Factor Index is a benchmark designed to capture exposure to the value factor. The Russell 1000 Volatility Factor Index is a benchmark designed to capture exposure to the volatility factor. The Russell 1000 Momentum Factor Index is a benchmark designed to capture exposure to the momentum factor.

Nothing contained herein is fiduciary or impartial investment advice that is individualized or directed to any plan, plan participant, or IRA owner regarding the advisability of any investment transaction, including any IRA distribution or rollover.

Important risk information

Investing involves risk, including possible loss of principal. Stocks may decline in value. Foreign investing involves greater and different risks than investing in U.S. companies, including currency fluctuations, less liquidity, less developed or less efficient trading markets, lack of comprehensive company information, political instability and differing auditing and legal standards. Emerging markets tend to be more volatile than the markets of more mature economies and generally have less diverse and less mature economic structures and less stable political systems than those of developed countries. Funds investing in a single industry, country or in a limited geographic region generally are more volatile than more diversified funds. Because the fund seeks to provide exposure to stocks based on the following multifactors – value, momentum, quality, low volatility and size – it is expected exposure to such investment factors will detract from performance in some market environments, as more fully explained in the fund's prospectus. Performance of the Fund may diverge from that of the Underlying Index due to operating expenses, transaction costs, cash flows, use of sampling strategies or operational inefficiencies. An investment in any fund should be considered only as a supplement to a complete investment program for those investors willing to accept the risks associated with that fund. Please read the prospectus for more information.

Carefully consider the fund's investment objectives, risk factors, charges and expenses before investing. This and other information can be found in the fund's prospectus, which may be obtained by calling 1-855-329-3837, or by viewing or downloading a prospectus from www.Xtrackers.com. Read the prospectus carefully before investing.

Investment products: No bank guarantee | Not FDIC insured | May lose value

On 10/2/17 "Deutsche X-trackers" ETFs changed its name to "Xtrackers" ETFs. A complete list of the new names is available at www.Xtrackers.com. Xtrackers ETFs ("ETFs") are managed by DBX Advisors LLC (the "Adviser") and distributed by ALPS Distributors, Inc. ("ALPS"). The Adviser is a subsidiary of Deutsche Bank AG and is not affiliated with ALPS.

Shares are not individually redeemable, and owners of Shares may acquire those Shares from the Fund, or tender such Shares for redemption to the Fund, in Creation Units only.

Deutsche Asset Management represents the asset management activities conducted by Deutsche Bank AG or any of its subsidiaries.