# Large Cap Equity

*Q4 2016 Commentary*



## Market Commentary

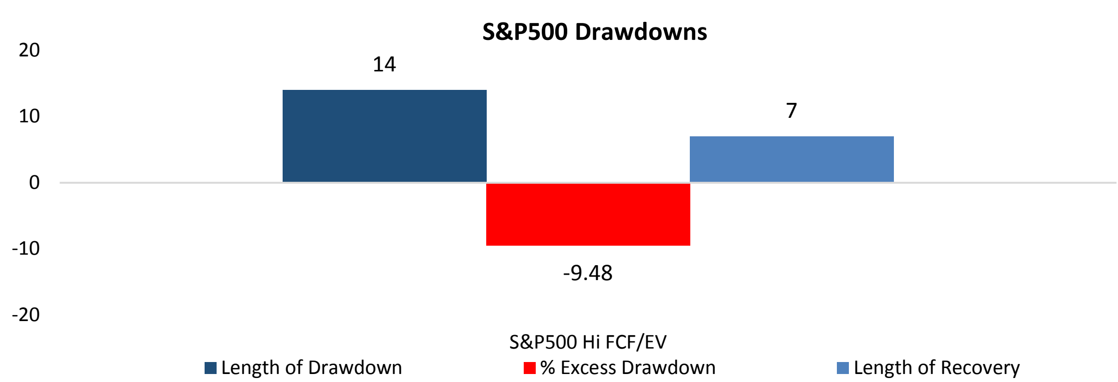
The Baird Large Cap strategy returned roughly 7% in the fourth quarter nearly doubling the return of the S&P 500. Based on the Large Cap Core category[1], the strong close to the year put our 2016 results 3% ahead of the peer group average and placed the portfolio firmly in the top quintile of peers. This performance was a welcome extension of the strong results we saw in the third quarter when the portfolio rose 7.0% while our typical peer[1] lagged the index and returned 3.8%. While we cannot pinpoint causality, we believe that the near 60% re-pricing of US debt, where we saw 10-year yields soar from 1.6% at the start of the quarter to a peak of nearly 2.6% in December, may have provided a reminder to investors around the world that money typically is not free. The knock-on effect when it comes to equities is that eventually undervalued profits take primacy over stocks whose value is based on promises of future earnings priced beyond perfection.

During the fourth quarter, real estate, health care and consumer staples—all sectors we were underweight—were the worst performers falling between 2% and 4% in a market up 3.8%. Since we fervently believe in the disciplined process we bring to stock selection there have been and will be many times when Mr. Market is rushing about, but our opinions and portfolio composition will remain largely if not wholly unchanged. In that vein we feel forced to simply repeat, near verbatim, our comments from the prior quarter regarding the performance of the worst-performing sectors. In our opinion many of the stocks in real estate, health care and consumer staples have been priced as if they were bonds with the market coveting their yields at the apparent exclusion of any fundamental consideration. Generically speaking we have found that when a market embraces a group of stocks due to a univariate feature at the exclusion of a more comprehensive assessment of intrinsic value, it proves to be a suboptimal time for investment. Should Mr. Market also mix in a case of overvaluation, as we believe has occurred in many of these stocks, it makes for fertile ground for sharp capital impairments. Conversely, financials, energy and industrials rose between 7% and 21%. In all three sectors our disciplined approach to stock selection and risk management allowed us to generate excess returns.

## Investment Process Update

In Fig. 1 below we have reproduced a portion of the chart we closed with in our Q2 2016 commentary. At that time we noted the strategy was carrying significant exposure to firms with very high free-cash flows as we felt there was as dearth of rationally priced and healthy growth. As a reminder, the bars below show that in roughly 30 years of history we could only identify eight instances where such free-cash flow rich firms underperformed by more than 5%. Looking from left to right, history indicated such drawdowns typically took 14 months to complete and resulted in -9.48% of relative underperformance. But, in the seven months subsequent to that drawdown, virtually all the underperformance was recovered. In the 12-months ending Q2 2016 the strategy had underperformed by just about 9% or almost exactly the amount identified in the below chart. In the six months since the end of Q2, the portfolio has outperformed by just under 7%—almost perfectly matching the pattern we identified below. We have to admit that history ***rhymes*** so the near perfect symmetry of what just transpired with what the history books foretold is surprising even to us (although we are not complaining!). With that said we think it speaks volumes about our process as money managers that when things are going "wrong" we are capable of identifying the systematic factors underpinning the moment of pain, give a simple and logical rationale for staying the course, and identify that moment of discomfort as one of the most compelling entry points for existing partners in the portfolio to add capital or prospective partners to join us.

**Fig. 1: Drawdown characteristics of high FCF yielding firms**




Source: Kailash Capital, Russell, Compustat; Data from 4/30/1989-5/31/2016

[1] Compared against the PSN Large Cap Core universe.

In Fig. 2 below we have also updated the performance of the low and high momentum quintiles from the end of Q2 2016 through the end of Q4 as well as the Portfolio's picks in each group. Looking at the first two rows, you can see that for a typical manager, just betting against the grain (i.e. buying low momentum stocks and avoiding all the high momentum stocks) when we published our findings, would have allowed you to beat the market. Looking down at the bottom two rows you can see the substantial value our process added to ***both groups***. In the third row, our picks in those low momentum firms which, despite powerful fundamental profiles, had become overlooked, ignored and outright feared, went on to utterly trounce the market, returning a whopping 28.9%. Looking at the fourth row, even our picks within the underperforming high momentum group went on to put up nearly double the market's rate of return and ~5x the returns of the low momentum group.

**Fig. 2: Low momentum firms trounced the market and high momentum firms, while our process added value in both groups**

| Performance 6/30/2016 - 12/31/2016 | Absolute Return | S&P500 | Excess Return |
|---|---|---|---|
| Low Momentum | 13.6% | 7.8% | 5.8% |
| High Momentum | 3.3% | 7.8% | -4.5% |
| Baird Large Cap in LoMom | 28.9% | 7.8% | 21.1% |
| Baird Large Cap in HiMom | 14.5% | 7.8% | 6.7% |

Source: Kailash Capital, Russell, Compustat; Data from 6/30/2016-12/31/2016
Note: Data is ex-financials

In Figs. 3 and 4 below we have updated the Portfolio's weighting in the low and high momentum cohorts through the end of Q4 2016. As can be seen in Fig. 3, our weightings in the low momentum quintile of stocks plummeted from record highs to near record lows. Similarly as can be seen in Fig. 4, our weighting in the quintile with the highest momentum for firms has gone from all-time lows to near record highs. You can follow the progression of our weightings by following the text boxes in the figures below in the order they are labelled, starting at "#1" and ending with "#4".

**Fig. 3: We have experienced a sharp reduction in our weightings in firms with the lowest momentum….**

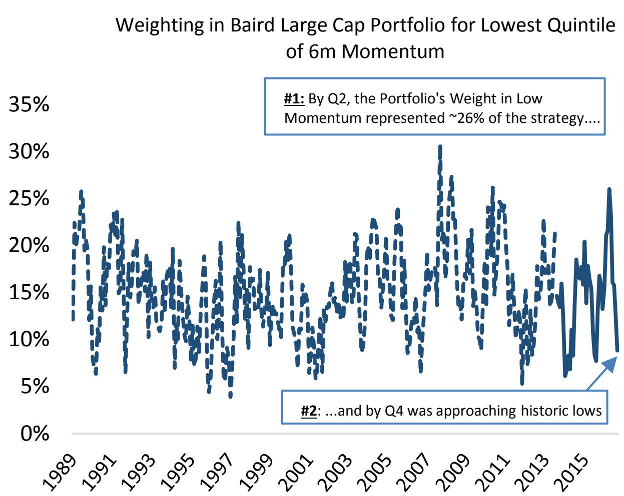
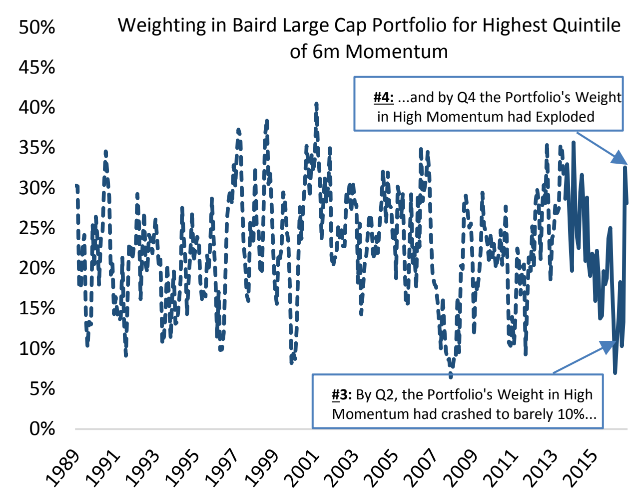



**Fig. 4: …and an explosive expansion in portfolio weights in those firms with the highest six month momentum**




Source: Kailash Capital, Russell, Compustat; Data from 4/30/1989-12/31/2016, prior to 12/23/2013, all data is hypothetical portfolio weights represented by the dashed line vs. actual during in the period post 12/23/2013, represented by the solid line
Note: Data is ex-financials

One of the things we want to be very clear about is that we chose to use high and low momentum as grouping factors because in our custom internal risk tools we noticed that our momentum loading had crashed to multi-standard deviation lows. The very fact this can happen is likely the most powerful evidence we can supply, while we use computers and quantitative processes to drive our stock selection, the factors informing the process are ***fundamental***. Traditional quantitative investing can bring the benefits of lower costs, discipline, reduced turnover, and a dispassionate approach to stock selection that eliminates traditional behavioral errors of investors who use a manual approach to stock selection. However, unlike traditional quantitative processes we are not some variant of "smart beta" trying to parse out the increasingly slim alpha available to those combining a very high momentum loading with a high loading on cheap price-to-book ratios with a simple quality factor. We have used the interaction of a large number of fundamental factors with histories of providing ex-ante predictive power to identify firms more likely to outperform.

Unlike traditional quantitative managers with large portfolios, miniscule bet-sizing and low active share, we aggressively pursue idiosyncratic opportunities and run with very high levels of active share and conviction. Fig. 5 below shows that our stock selection is more than willing to buck the emotionally comfortable but often economically unfortunate predispositions of Mr. Market when the ***fundamentals*** tell us it is the right thing to do. Looking at the rows next to "High Return" for example we show you the portfolio's weight at the end of Q2 2016, Q3 2016 and Q4 2016 within the high momentum group at each point in time as well as some of the fundamental features of those high momentum firms. You can see that from Q2 through the end of Q4, the Portfolio's weighting nearly tripled from ~10% to 28%. Looking across the rows you can see that over those quarters the characteristics of high momentum firms experienced a remarkable improvement with price-to-earnings ratios going from negative 138x by the end of Q3 to a positive 51x by the end of Q4. Looking down at the final row in the high return category you can see that our stocks within the high momentum group have FCF yields and ROEs that are 100% higher than the high momentum group average despite having substantially lower leverage (17% vs 25% for the group). We present low momentum immediately below where our weighting has fallen from 22% at the end of Q2 to below 10% today and you can see here a mirror image of what has happened in the high momentum group: falling FCF yields and deteriorating ROEs combined with rising leverage. **The larger point being: we go where there is fundamental opportunity – we are not chasing after Mr. Market like many quantitative managers.**

**Fig. 5: The high momentum cohort has experienced a significant improvement in fundamental well-being**

| | | Portfolio Weight | FCF/EV | P/E | ROE | ROA | Net Debt/Price | 6m Momentum |
|---|---|---|---|---|---|---|---|---|
| High Return | Historical Average | | 3% | 31x | 18% | 8% | 16% | 43% |
| | Q2 Ending 6/30/2016 | 11% | 3% | 31x | 9% | 5% | 31% | 22% |
| | Q3 Ending 9/30/2016 | 10% | 1% | -138x | -2% | 0% | 19% | 44% |
| | Q4 Ending 12/31/2016 | 28% | 3% | 51x | 17% | 4% | 25% | 34% |
| | Baird Large Cap Portfolio Today | | 6% | 20x | 43% | 7% | 17% | 43% |
| Low Return | Historical Average | | 3% | 20x | 19% | 8% | 28% | -15% |
| | Q2 Ending 6/30/2016 | 22% | 5% | 19x | 26% | 8% | 21% | -15% |
| | Q3 Ending 9/30/2016 | 16% | 5% | 17x | 37% | 9% | 24% | -4% |
| | Q4 Ending 12/31/2016 | 9% | 4% | 24x | 23% | 7% | 22% | -10% |
| | Baird Large Cap Portfolio Today | | 6% | 14x | 25% | 7% | 45% | -12% |

Source: Kailash Capital, Russell, Compustat; Data from 4/30/1989-12/31/2016
Note: Data is ex-financials

## Key Contributors to Relative Returns:

- Despite our significant overweight in **information technology** which as a group underperformed the broad benchmark, we were fortunate to benefit from strong stock selection which drove nearly half the Portfolio's relative performance. Generically speaking our penchant for highly profitable boring "old tech" and reasonably priced growth firms while avoiding the novel, new and overvalued generated significant returns for our partners in the strategy. Our max-limit overweight in Nvidia in particular helped out as it was finally recognized both for its potent historic rate of free-cash flow growth and future potential. Many viewed the company merely as a maker of PC chips for video games and obsessed about the timing of various video game releases in the next one or two quarters. With our longer time horizon, we saw the company as one that managed to rapidly grow cash profits creating ample resources to return substantial dividends to owners while still leaving ample funds to expand their position. In our view it was the most likely winner in the enormous addressable markets of virtual reality, augmented reality and autonomous driving vehicles, all while potentially democratizing supercomputing and accelerating the rate of scientific discovery.
- **Industrials** were our second largest contributor to relative returns. Despite being underweight the sector which rose over 7% vs. the benchmark rising only 4%, our weighted pick return was over 16% as stock selection drove results. In our Q3 commentary we

noted that the simple math around some of our more cyclical names had become almost impossible to ignore with some trading at levels more indicative of bankruptcy than the record profits they were currently experiencing. In many ways our industrial stocks were the epitome of this sentiment with the vast majority of returns coming around our overweights in airlines like Alaska Air, American and United Continental, as well as our position in Boeing. With all these names returning between 19% - 40% in the quarter we feel it worthwhile to note that in the first two quarters of 2016 these four stocks cost the portfolio just shy of 100 basis points (bps) of relative performance! In the first half of the year, the market decided that despite booming profits, a newfound discipline around capacity and capital allocation and single-to-low double digit multiples, these stocks were not worth owning at any price. In the back half of the year those pessimistic views came to a head with simple algebra. When emotion, bias and empirically bereft opinions cause Mr. Market to price firms earning record profits as if they were on the brink of bankruptcy it almost always represents a rich opportunity set for those willing, as we are, to ignore the crowd and make our decisions based on the facts and lessons of history.

## Key Detractors from Relative Returns

- The Portfolio had a strong quarter and made money in virtually every sector excluding **utilities** and **health care** where we underperformed by 10 bps and 2 bps, respectively. With numbers that small we view the performance in the two groups as perfectly acceptable and the relative underperformance little more than statistical noise and will eschew wasting your time trying to make insightful commentary about such small numbers.
- With the above said we would like to address the issue of **financials**. In the attribution reporting software the sector comes up as our worst performer, detracting 26 bps from the Portfolio's relative returns while in our minds financials actually ***made*** a 10 bps contribution to relative returns. We would like to explain how the intersection of our stock selection model and our penchant for risk management conspired to create this optical confusion. The model continued to pick one of the large integrated financial companies as a favorite with many of its peers not that far down the list. In doing our traditional fundamental research on the name we recognized and acted on several important items. First, we have allowed the ranking engine to create a considerable overweight in the name. Second, we came to the conclusion that these large integrated financials as a group appeared to be trading at "trough on trough" valuations and profits. Despite having substantially improved their capital positions since the 2008 crisis, carrying significantly lower leverage and having incredibly high-quality loans, these firms were operating in a brutal NIM environment yet making profits at or above pre-crash levels. In our minds these companies were safer and more profitable than any time we could remember yet the market was pricing them around or below book value. To us this represented a major opportunity. With that said we have the humility to remember that no matter how many footnotes we read on the balance sheets, negative surprises can occur and do considerable damage to equity holders. Finally, with that in mind we bought nearly a 2% position in a financials ETF to give us significant exposure to the space while distributing the risk across a large number of names we liked. The ETF puts us 200 bps over the sector and contributed 36 bps to the Portfolio's excess returns. Netted against the -26 bps of sector attribution we made 10 bps in financials.

As always we would like to thank our partners in the strategy for sticking with us through a volatile year that challenged investors like us who believe what the history books teach: over longer time horizons sticking to a disciplined approach to stock selection predicated on identifying unwarranted and temporary dispersions between market prices and true fundamental value is the most prudent method of adding significant value over a cap-weighted benchmark.

Sincerely,

L2 Asset Management

| Baird Large Cap Equity | | | | | |
|---|---|---|---|---|---|
| **Top 5 Portfolio Contributors** | | | **Bottom 5 Portfolio Contributors** | | |
| **Security** | **Avg. Weight** | **Contribution** | **Security** | **Avg. Weight** | **Contribution** |
| NVIDIA (NVDA) | 2.20 | 0.96 | Varian Medical Systems (VAR) | 0.86 | -0.10 |
| Discover Financial Services (DFS) | 2.01 | 0.50 | Jazz Pharmaceuticals (JAZZ) | 0.81 | -0.11 |
| JPMorgan Chase & Co (JPM) | 1.69 | 0.47 | AES Corp. (AES) | 1.62 | -0.13 |
| Vanguard Financials Index Fund (VFH) | 1.83 | 0.36 | Waters Corp. (WAT) | 1.31 | -0.26 |
| Synchrony Financial (SYF) | 1.33 | 0.36 | Amgen Inc. (AMGN) | 1.82 | -0.27 |

**The Baird Equity Asset Management Large Cap Equity commentary is incomplete if not accompanied with the most recent performance report.** Performance data quoted represents past performance. Past performance does not guarantee future results.

The S&P 500 index is an unmanaged, market capitalization weighted index of 500 common stocks widely regarded to be representative of the US market in general. The Russell 1000 Index is a stock market index that represents the highest-ranking 1,000 stocks in the Russell 3000 Index, which represents about 90% of the total market capitalization of that index. The Russell 2500 Index measures the performance of the 2,500 smallest companies in the Russell 3000 Index, or about 19% of its total capitalization. The Russell 3000 index measures the performance of 3,000 publicly held US companies based on total market capitalization, which represents approximately 98% of the investable US equity market. Indices are unmanaged and direct investment is not possible. Past performance is no guarantee of future results. The strategy invests primarily in equity securities of large-capitalization companies. At times, large-cap stocks may underperform as compared to small- or mid-cap stocks, and vice versa. The strategy may also invest in ETFs which are subject to the same risks as their underlying securities, trade on an exchange throughout the day and redemptions may be limited.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