

The Dragon Fund Analyst Team FIN 341  
Prof. Daniel Dorn



# Drexel University The Dragon Fund

**Annual Update  
March 31, 2016**



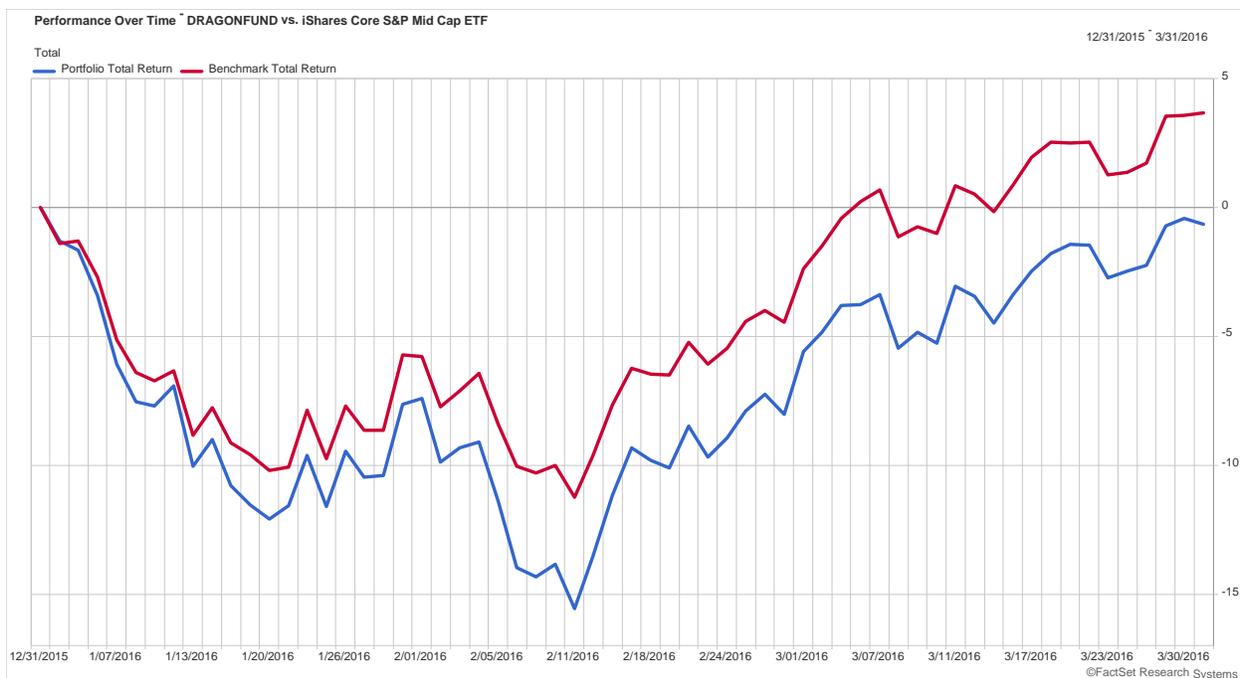
## The Dragon Fund

The Dragon Fund, which has been managed by Drexel undergraduates since the fall of 2007, seeks capital appreciation by primarily investing in U.S. stocks with a market capitalization of between \$500 million and \$10 billion. The student analysts apply a combination of sector analysis and discounted cash flow as well as multiples valuation techniques to identify attractive investment opportunities. The fund was started with \$250,000 and received additional infusions of \$100,000 in March 2011 and \$450,000 in June 2013. As of the end of March 2016, the fund's total assets stood at \$1.37 million.

### 1 Performance review

#### 1.1 Fund performance

The Dragon Fund had a tough first quarter, returning -0.6% for the quarter whereas its benchmark, the S&P 400, gained 3.6%. The fund also underperformed the broader market, proxied by the MSCI USA, which appreciated by 1%.



Sources: Dragon Fund model portfolio in FactSet

## 1.2 Attribution analysis

The underperformance of the fund was broad-based as securities in seven out of nine sectors underperformed their benchmark peers. Healthcare was the largest detractor from performance, yielding -19% versus -2% for the benchmark. The fund's overweight in pharmaceutical stocks hurt as specialty pharma stocks, especially Endo, were caught by the Valeant downdraft. Mylan's acquisition of Meda at a 90%+ premium was greeted by a 20% drop upon announcement and Akorn struggled with Nasdaq delisting issues – a perfect storm. Security selection effects in Industrials were negative as well with Trinity Industries leading the retreat as the company, a rail car producer and operator, cut their 2016 outlook and reported disappointing earnings, mostly due to energy exposure. Performance in Consumer Discretionary was negatively affected by the fund's position in two auto components stocks, BorgWarner and Lear.

Financials, the biggest sector in both the fund and the benchmark, slightly underperformed. Stock selection within industries was favorable throughout: fund banks outperformed benchmark banks, fund REITs outperformed benchmark REITs, fund capital markets stocks outperformed benchmark capital markets stocks, and the fund insurance stock outperformed its insurance peers. However, the negative effects of overweighting banks and capital markets stocks and underweighting of REITs overwhelmed positive selection within industries. These negative effects were primarily driven by lower interest rates, reflecting the Fed's more cautious assessment of future interest rate hikes.

Energy was the bright spot during the first quarter. Dragon Fund energy stocks, led by Carrizo (a new stock pick in February 2016), posted a 20% quarterly return whereas the benchmark stocks eked out a 1% return.

### Attribution analysis relative to ishares S&P 400 Midcap ETF, January 2016-March 2016

| DF 2016 Q1<br>Sector   | Dragon Fund |              | ishares S&P400 |             | Performance effects [%] |             |             |             |
|------------------------|-------------|--------------|----------------|-------------|-------------------------|-------------|-------------|-------------|
|                        | Weight      | Return       | Weight         | Return      | Allocation              | Selection   | Interaction | Total       |
| Cash                   | 0%          | 0.0%         | 0%             | 0.0%        | -0.1                    | --          | --          | -0.1        |
| Consumer Discretionary | 14%         | -1.3%        | 13%            | 5.0%        | 0.0                     | -0.8        | -0.1        | -0.9        |
| Consumer Staples       | 3%          | 4.9%         | 4%             | 2.6%        | 0.0                     | 0.1         | -0.0        | 0.1         |
| Energy                 | 4%          | 19.6%        | 3%             | 0.6%        | 0.0                     | 0.5         | 0.3         | 0.9         |
| Financials             | 25%         | -0.9%        | 26%            | 0.9%        | 0.0                     | -0.4        | 0.0         | -0.4        |
| Health Care            | 10%         | -18.7%       | 9%             | -1.5%       | -0.0                    | -1.8        | -0.1        | -2.0        |
| Industrials            | 15%         | -0.1%        | 15%            | 6.9%        | 0.0                     | -1.1        | -0.1        | -1.1        |
| Information Technology | 18%         | -1.5%        | 16%            | 0.5%        | -0.1                    | -0.3        | -0.1        | -0.4        |
| Materials              | 6%          | 8.9%         | 6%             | 13.7%       | -0.1                    | -0.3        | 0.0         | -0.4        |
| Utilities              | 3%          | 15.5%        | 5%             | 17.0%       | -0.2                    | -0.1        | 0.0         | -0.3        |
| <b>Total</b>           |             | <b>-0.6%</b> |                | <b>3.7%</b> | <b>-0.2</b>             | <b>-4.2</b> | <b>0.1</b>  | <b>-4.3</b> |

The table is based on the ishares S&P 400 midcap as opposed to the actual S&P 400 index (which is not included in our FactSet subscription). Dragon Fund holdings are based on a FactSet model portfolio of the Dragon Fund which is updated on a quarterly basis. Therefore,

the returns shown differ slightly from the actual fund and benchmark returns. “Weight” refers to the portfolio and benchmark allocation as of December 31, 2015.

## 2 Market review and outlook

Three months ago, we issued a cautious outlook for the stock market, which ended the first quarter at a similar level at which it started into 2016. We do so again, but for different reasons. The economic outlook improved during the first quarter, which presumably helped the stock market rebound from its intraquarter low. However, the rebound in stock prices was accompanied by downward earnings growth revisions, both for the short- and for the long-term. This divergence of stock prices and fundamentals does not bode well for the months ahead.

### 2.1 Macroeconomy

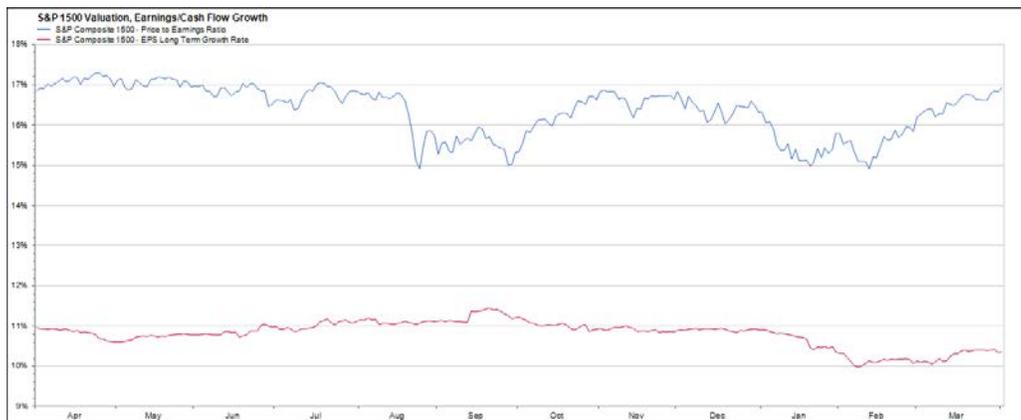
Our economic outlook is positive, primarily based on a robust employment picture, with solid nonfarm payroll expansion and some wage growth. Recent readings of supply side indicators are mixed, but we are encouraged by the positive surprises in the ISM index, purportedly Alan Greenspan’s “desert island statistic.” The housing market continues to slowly grind higher which came as a bit of a disappointment to our team, which had predicted a more robust expansion.



Source: Bloomberg

## 2.2 Equity valuations and earnings growth expectations

S&P 1500 valuations, measured in terms of average forward P/E ratios based on earnings estimates for the next twelve months, rebounded strongly after their January decline and ended the quarter at close to 17, near 10-year highs. This rebound comes as a bit of a surprise as long-term earnings growth estimates declined from an average of 11% at the beginning of January to 10.5% at the end of March (though up from their February low of below 10%).



Source: FactSet

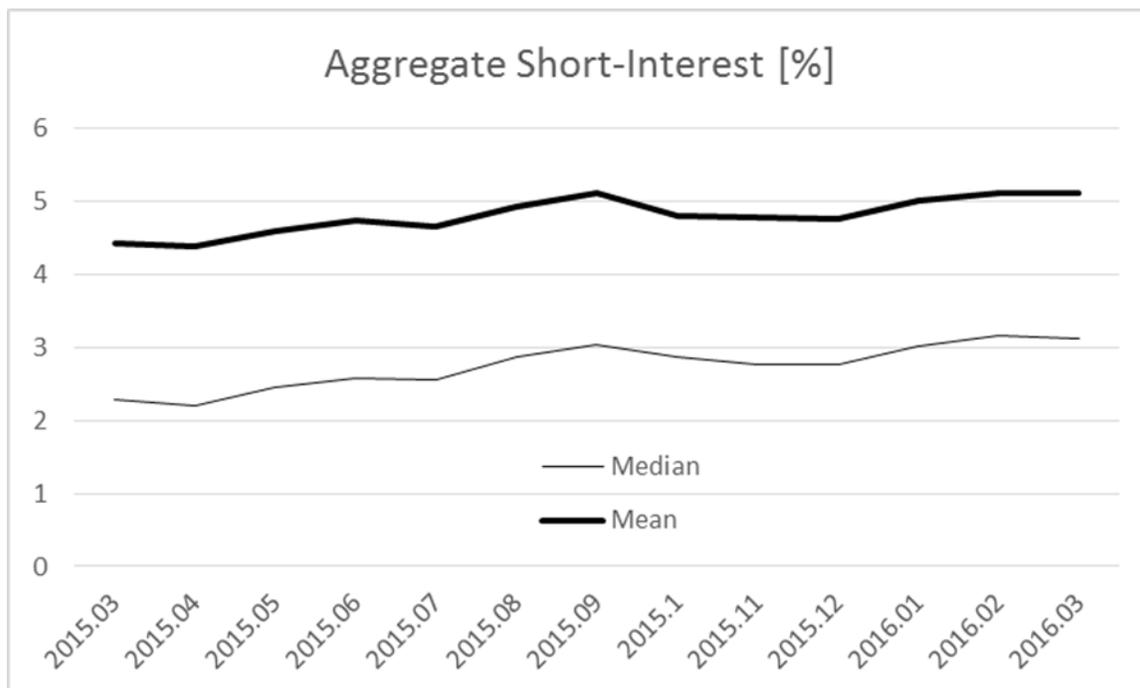
Moreover, analysts have also lowered their expectations for short-term earnings growth. The Bloomberg chart below shows that, during the last month of the quarter, consensus estimates for EPS for the upcoming two years of S&P 1500 stocks have been revised downwards. Given these negative adjustments to earnings growth expectations, we view the strong rebound in valuations with concern. At a minimum, it appears that the positive economic outlook is fully incorporated into stock prices at this point.

| S&P 1500 Composite Index       |        |        |          |         |          |         |          |
|--------------------------------|--------|--------|----------|---------|----------|---------|----------|
| Measure                        | Actual | Y Est  | 4Wk Chg% | Y+1 Est | 4Wk Chg% | Y+2 Est | 4Wk Chg% |
| 1) Earnings Per Share          | 25.09  | 27.03  | -0.70%   | 30.75   | -0.35%   | 34.43   | -0.93%   |
| 2) EPS Positive                | 25.92  | 28.06  | -0.68%   | 31.22   | -0.31%   | 34.67   | -0.90%   |
| 3) Cash Flow Per Share         | 43.70  | 39.97  | -0.47%   | 44.41   | -0.17%   | 49.39   | -0.43%   |
| 4) Dividends Per Share         | 10.20  | 10.36  | -0.45%   | 10.92   | -0.23%   | 11.32   | -0.49%   |
| 5) Book Value Per Share        | 175.11 | 187.37 | -0.26%   | 197.35  | -0.12%   | 213.52  | 1.14%    |
| 6) Sales Per Share             | 276.07 | 282.15 | -0.27%   | 299.63  | -0.24%   | 313.89  | 0.42%    |
| 7) EBITDA Per Share            | 44.07  | 54.07  | -0.78%   | 59.10   | -0.45%   | 64.18   | -0.59%   |
| 8) Long Term Growth            |        | 13.75  | 50.58%   |         |          |         |          |
| 9) Net Debt Per Share          | 98.53  | 95.11  | -0.31%   | 90.31   | -0.26%   | 54.09   | 1.88%    |
| 10) Enterprise Value Per Share | 585.42 | 575.52 | 2.77%    | 570.83  | 2.81%    | 533.06  | 3.23%    |
| Valuation Measure              |        |        |          |         |          |         |          |
| Measure                        | Actual | Y Est  | 4Wk Chg% | Y+1 Est | 4Wk Chg% | Y+2 Est | 4Wk Chg% |
| 11) Price/EPs                  | 19.05  | 17.68  | 4.08%    | 15.54   | 3.72%    | 13.88   | 4.33%    |
| 12) Price/EPs Positive         | 18.44  | 17.03  | 4.06%    | 15.31   | 3.67%    | 13.78   | 4.29%    |
| 13) Price/Cash Flow            | 10.94  | 11.95  | 3.84%    | 10.76   | 3.52%    | 9.68    | 3.80%    |
| 14) Dividend Yield             | 2.13   | 2.17   | -3.68%   | 2.29    | -3.47%   | 2.37    | -3.71%   |
| 15) Price/Book                 | 2.73   | 2.55   | 3.62%    | 2.42    | 3.47%    | 2.24    | 2.19%    |
| 16) Price/Sales                | 1.73   | 1.69   | 3.63%    | 1.59    | 3.60%    | 1.52    | 2.92%    |
| 17) Price/EBITDA               | 10.84  | 8.84   | 4.16%    | 8.09    | 3.82%    | 7.45    | 3.96%    |
| 18) EV/EBITDA                  | 13.28  | 10.83  | 3.50%    | 9.91    | 3.15%    | 9.12    | 3.30%    |
| 19) Net Debt/EBITDA            | 2.24   | 1.82   | 0.76%    | 1.67    | 0.43%    | 1.54    | 0.57%    |

Source: Bloomberg

### 2.3 Equity valuation indicators

Short selling may be indicative of future returns because it captures the actions of relatively sophisticated investors who may be better informed. Consistent with our valuation concerns, aggregate short interest as calculated as in Rapach et al (2015)<sup>1</sup> has trended up 10% over the course of the first quarter.



Source: FactSet

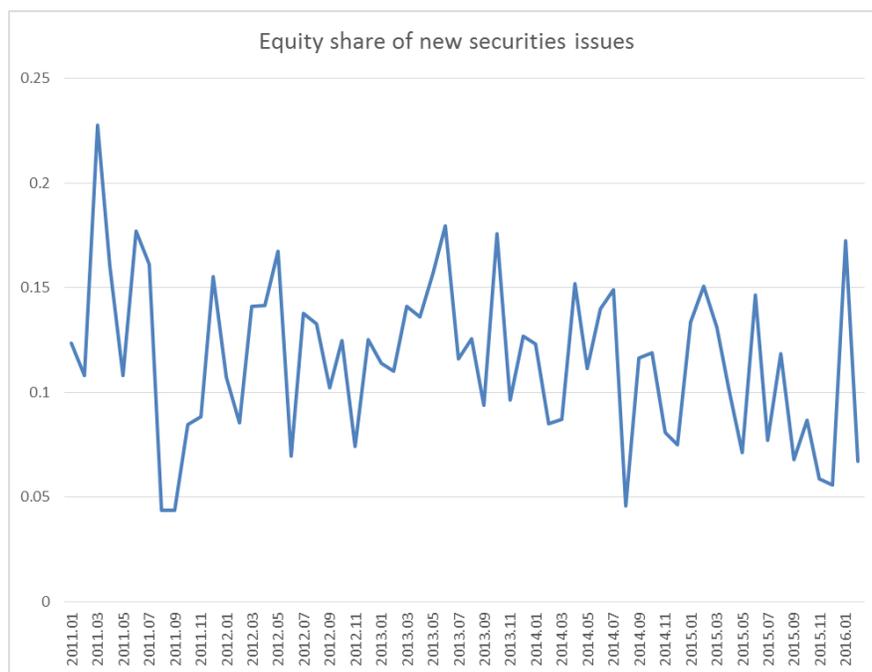
Top management constitutes another group of informed market participants. We track two decisions of this group: 1. the choice of management to issue equity versus debt, and 2. insider trades.

If managers have information about their stock that has yet to be incorporated into prices, they might be reluctant to use equity financing when they think that current stock prices are lower than warranted by fundamentals. Conversely, they may be inclined to issue equity when stocks are overvalued. The equity share, that is, the volume of equity financing as a fraction of the sum of equity and debt financing obtained by U.S. corporations (as reported by the Federal Reserve Board in Table 1.46 of its Statistical Supplement to the Federal Reserve Bulletin<sup>2</sup>), has indeed been

<sup>1</sup> Available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2474930](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2474930)

<sup>2</sup> Available at <http://www.federalreserve.gov/econresdata/releases/corpsecure/current.htm>

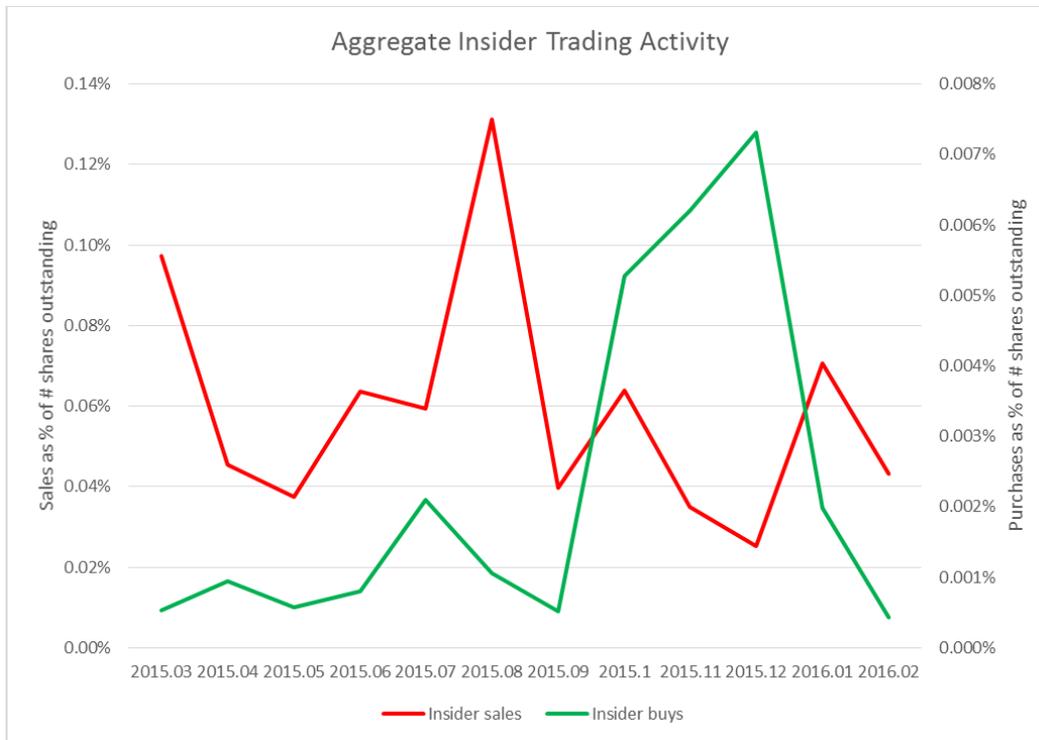
shown to predict stock returns, based on annual data from 1926-1994.<sup>3</sup> In a 2013 research note, Dragon Fund analysts have shown that the equity share has a negative correlation with subsequent stock market returns out-of-sample (after 2004) and at a higher frequency (monthly and quarterly, as opposed to annually). As can be seen below, the equity share has been quite volatile around a declining trend over the past five years. This could be viewed as a positive fundamental signal for stocks; alternatively, it might reflect management trying to exploit the low interest rate environment by issuing more debt than they would have under a different Fed policy regime.



Source: Federal Reserve

The intuition behind insider trading activity and future stock performance is even more straightforward, but the relation is complicated by trading motives other than future performance, such as diversification and incentive alignment. Another issue is that insider purchases tend to be very infrequent and it may be thus unrealistic to expect a precise aggregate valuation signal from positive insider purchases across a handful of S&P 1500 firms. The spike in insider purchases during the fall of 2015 that can be seen in the chart below appears ill-timed given the correction in January. Looking forward, both purchases and sales have declined; thus, insider trading activity does not send a clear valuation signal.

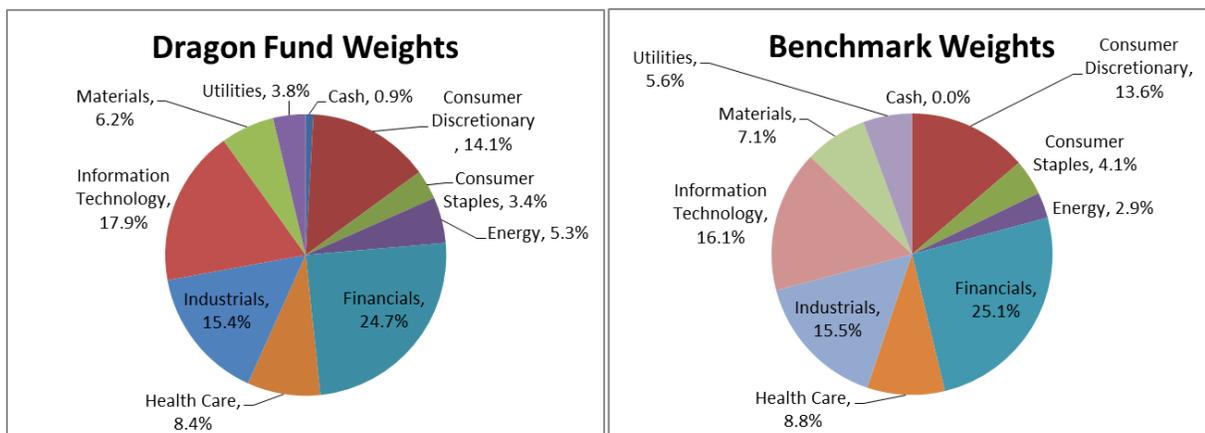
<sup>3</sup> See Baker and Wurgler (2000), available at <http://onlinelibrary.wiley.com/doi/10.1111/0022-1082.00285/abstract>



Source: FactSet

### 3 Current holdings profile as of March 31, 2016

#### 3.1 Sector allocation



Source: Dragon Fund model portfolio in FactSet, FactSet, benchmark refers to the iShares S&P 400 ETF

### 3.2 Top ten holdings

| Ticker       | Name                            | Weight [%]  |
|--------------|---------------------------------|-------------|
| NVDA         | NVIDIA Corporation              | 3.7         |
| JAH          | Jarden Corporation              | 3.0         |
| SNA          | Snap-on Incorporated            | 2.6         |
| WAL          | Western Alliance Bancorporation | 2.6         |
| SBNY         | Signature Bank                  | 2.5         |
| GEO          | GEO Group Inc                   | 2.4         |
| HF           | HFF, Inc. Class A               | 2.3         |
| BX           | Blackstone Group L.P.           | 2.3         |
| DLTR         | Dollar Tree, Inc.               | 2.2         |
| AEE          | Ameren Corporation              | 2.2         |
| <b>Total</b> |                                 | <b>25.8</b> |

Source: Dragon Fund model portfolio in FactSet

### 3.3 Characteristics of Dragon Fund holdings

The forward price to earnings ratio is based on consensus estimates for the next fiscal year. The Dragon Fund statistics do not reflect the fund's ETF holdings.

| Characteristics (medians) | Dragon Fund | S&P 400 |
|---------------------------|-------------|---------|
| Market Capitalization     | 5,033       | 3,344   |
| # of Securities           | 60          | 404     |
| Dividend Yield            | 1.1         | 1.5     |
| P/E using FY1 Est         | 15.1        | 18.1    |
| Price/Cash Flow           | 12.6        | 11.6    |
| Price/Book                | 2.8         | 2.4     |
| Price/Sales               | 1.9         | 1.7     |
| Est 3-5 Yr EPS Growth     | 11.0        | 10.0    |
| ROA                       | 5.7         | 4.7     |
| ROE                       | 13.4        | 10.5    |
| Operating Margin          | 14.1        | 12.7    |
| Net Margin                | 8.5         | 7.0     |
| LT Debt/Capital           | 39.0        | 36.8    |

Source: Dragon Fund model portfolio in FactSet

#### **4 Dragon Fund analyst team and contact information (Spring 2015/16)**

Please feel free to contact us regarding more in-depth research reports, recruiting information, or other inquiries about the Dragon Fund.

##### Consumer Discretionary:

- Yiming Liu, [yl644@drexel.edu](mailto:yl644@drexel.edu)
- Gayle Tadler, [gpt27@drexel.edu](mailto:gpt27@drexel.edu)
- Kenneth Wu, [kw534@drexel.edu](mailto:kw534@drexel.edu)

##### Financials

- Joseph Adie, [jra75@drexel.edu](mailto:jra75@drexel.edu)
- Syed Hidzam, [ss3778@drexel.edu](mailto:ss3778@drexel.edu)
- Jane Wang, [rw485@drexel.edu](mailto:rw485@drexel.edu)

##### Healthcare

- Vasilis Psomas, [vap43@drexel.edu](mailto:vap43@drexel.edu)
- Michael Spina, [mjs553@drexel.edu](mailto:mjs553@drexel.edu)

##### Industrials

- Michael Hart, [mth56@drexel.edu](mailto:mth56@drexel.edu)
- Robert Kemmler, [rrk48@drexel.edu](mailto:rrk48@drexel.edu)

##### IT

- Dillon Kadakia, [dnk28@drexel.edu](mailto:dnk28@drexel.edu)
- Aisyah Mohd Zin, [aim36@drexel.edu](mailto:aim36@drexel.edu)

##### Materials

- Dave Hanrahan, [djh328@drexel.edu](mailto:djh328@drexel.edu)
- Amandes Luther, [al964@drexel.edu](mailto:al964@drexel.edu)
- Alexandra Repina, [ar3253@drexel.edu](mailto:ar3253@drexel.edu)

Faculty advisor: Daniel Dorn, [dd79@drexel.edu](mailto:dd79@drexel.edu)