ANNUAL REPORT
2018

Bauhard Student Managed Investment Fund
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Policy Statement</td>
<td>3</td>
</tr>
<tr>
<td>Bauhard Fund History</td>
<td>3</td>
</tr>
<tr>
<td>Investment Methodology</td>
<td>4</td>
</tr>
<tr>
<td>Sector Allocation</td>
<td>5</td>
</tr>
<tr>
<td>Sector Overviews</td>
<td>11</td>
</tr>
<tr>
<td>Basic Materials</td>
<td>11</td>
</tr>
<tr>
<td>Consumer Discretionary</td>
<td>12</td>
</tr>
<tr>
<td>Consumer Staples</td>
<td>13</td>
</tr>
<tr>
<td>Energy</td>
<td>14</td>
</tr>
<tr>
<td>Financials</td>
<td>15</td>
</tr>
<tr>
<td>Healthcare</td>
<td>16</td>
</tr>
<tr>
<td>Industrials</td>
<td>17</td>
</tr>
<tr>
<td>Real Estate</td>
<td>18</td>
</tr>
<tr>
<td>Information Technology</td>
<td>19</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>20</td>
</tr>
<tr>
<td>Utilities</td>
<td>21</td>
</tr>
<tr>
<td>Current Sector Holdings</td>
<td>22</td>
</tr>
<tr>
<td>Basic Materials</td>
<td>22</td>
</tr>
<tr>
<td>Consumer Discretionary</td>
<td>24</td>
</tr>
<tr>
<td>Consumer Staples</td>
<td>32</td>
</tr>
<tr>
<td>Energy</td>
<td>35</td>
</tr>
<tr>
<td>Financials</td>
<td>36</td>
</tr>
<tr>
<td>Healthcare</td>
<td>39</td>
</tr>
<tr>
<td>Industrials</td>
<td>43</td>
</tr>
<tr>
<td>Real Estate</td>
<td>46</td>
</tr>
<tr>
<td>Information Technology</td>
<td>48</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>56</td>
</tr>
<tr>
<td>Utilities</td>
<td>58</td>
</tr>
<tr>
<td>Portfolio Performance</td>
<td>59</td>
</tr>
<tr>
<td>Investment Equity Performance</td>
<td>63</td>
</tr>
<tr>
<td>Total Portfolio Value</td>
<td>64</td>
</tr>
<tr>
<td>Lessons Learned</td>
<td>65</td>
</tr>
<tr>
<td>Student Analysts</td>
<td>68</td>
</tr>
</tbody>
</table>
INVESTMENT POLICY STATEMENT

Objective
The primary objective of the Bauhard Student Managed Investment Fund is to provide an experiential learning process for students. The secondary objective of the fund is to match the return of the S&P 500 Index Fund.

Constraints
Several constraints are in place to regulate the management of the Bauhard Fund. Holdings within the portfolio are limited to U.S. equities. The management team does not engage in either the trading of derivatives or the short selling of securities. Further portfolio constraints include a minimum per share price of $5.00 and stock positions limited to a maximum of five percent of the portfolio’s value at the time of acquisition.

Procedures
Student analysts prepare and present equity analysis reports to the investments and portfolio management classes. Students consider portfolio diversification and a long-term investment horizon while analyzing each potential equity. All trading decisions require a two-thirds anonymous vote in order for an equity to be added or removed from the fund.

“The Bauhard Student Managed Investment Fund supports the UNK College of Business and Technology’s commitment to provide our students with rich, hands-on, experiential learning opportunities.” – Dean Tim Burkink

Bauhard Fund History
The William L. Bauhard Student Managed Investment Fund provides students at the University of Nebraska at Kearney a hands-on learning experience by allowing them to invest in the stock market. Mr. Bauhard, a former financial service and telecommunications executive, provided a generous leadership gift to start the fund. Additional funds were provided by Jack Connealy of JFC Financial Services in Lincoln, NE; Ron Eckloff, a certified financial planner serving the Kearney community; Financial Leaders Student Association; Jay Landell of the Wells Fargo Foundation; and Securities America of Kearney.
The student investment portfolio is managed by senior-level undergraduate students specializing in finance and accounting. The program exposes students to real-world training in securities analysis and portfolio management. Student analysts are responsible for researching industry sectors and periodically presenting potential investment opportunities to the class. Throughout the learning process, students also have the opportunity to learn about career-enhancing opportunities by competing in investment competitions to showcase the skills they have acquired. In addition to the experiential learning opportunities, income generated from the fund’s investments may be utilized for future student scholarships.

**Investment Methodology**

**Top Down Allocation**

The student managed fund follows a top-down investment strategy. This method entails an allocation process whereby a certain percentage of the Bauhard Fund’s performance is attributable to the selection of equity securities. The S&P 500 Index is used as a comparable benchmark portfolio to the Bauhard Fund, and as such, its investment sector allocations are considered in the equity selection process.

**Equity Selection**

The decisions to add or reject securities are based on the student analysts’ opinions regarding the valuation of the securities compared to the current market prices. Student fund managers compile extensive reports that detail a company’s vital characteristics, including the stock’s underlying financial strengths and possible opportunities. These reports are reviewed and critiqued by all of the student analysts in the class. Furthermore, the smaller student groups present their findings to the class upon the completion of their reports. These presentations allow student managers not associated with the presenting group the opportunity to ask questions and make comments regarding the presenting analysts’ assumptions and conclusions. After a brief period to formally respond to student questions and inquiries, the entire class of student analysts vote on whether to purchase, sell, or hold the proposed securities. The motion to purchase, sell, or hold a proposed security passes if two-thirds of the student analysts vote positively in an anonymous vote.

**Portfolio Monitoring**

As a means of tracking the Bauhard Fund’s performance throughout the course, student analysts are asked to present market updates to the class. These presentations include the weekly performance of each of the individual securities held within the Bauhard Fund and their corresponding public news stories. In addition, student analysts report the performance of the sector allocations within the fund and the returns of the appropriate comparable exchange traded funds. Furthermore,
the performance of the Nasdaq and S&P 500 Index are highlighted and compared to the Bauhard Fund’s weekly returns.

## Sector Allocation

<table>
<thead>
<tr>
<th>Description</th>
<th>Shares</th>
<th>Market Value</th>
<th>Percentage of holdings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consumer Discretionary</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Booking Holding</td>
<td>4</td>
<td>$6,950.96</td>
<td>6.11%</td>
</tr>
<tr>
<td>Disney Walt Co</td>
<td>30</td>
<td>$3,225.30</td>
<td>3.16%</td>
</tr>
<tr>
<td>General Motors</td>
<td>70</td>
<td>$2,869.30</td>
<td>2.81%</td>
</tr>
<tr>
<td>Starbucks</td>
<td>40</td>
<td>$2,297.20</td>
<td>2.25%</td>
</tr>
<tr>
<td><strong>Consumer Staples</strong></td>
<td>164</td>
<td>$10,490.80</td>
<td>10.29%</td>
</tr>
<tr>
<td>Archer Daniels Midland</td>
<td>99</td>
<td>$3,984.35</td>
<td>3.91%</td>
</tr>
<tr>
<td>PepsiCo Inc</td>
<td>20</td>
<td>$2,398.40</td>
<td>2.35%</td>
</tr>
<tr>
<td>Proctor &amp; Gamble Co</td>
<td>45</td>
<td>$4,108.06</td>
<td>4.03%</td>
</tr>
<tr>
<td><strong>Energy</strong></td>
<td>40</td>
<td>$3,355.80</td>
<td>3.29%</td>
</tr>
<tr>
<td>Exxon Mobil Corporation</td>
<td>40</td>
<td>$3,355.80</td>
<td>3.29%</td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td>323</td>
<td>$15,586.99</td>
<td>16.26%</td>
</tr>
<tr>
<td>Bank of America</td>
<td>150</td>
<td>$4,426.00</td>
<td>4.34%</td>
</tr>
<tr>
<td>BB&amp;T Corp</td>
<td>118</td>
<td>$5,867.89</td>
<td>5.77%</td>
</tr>
<tr>
<td>Visa Inc.</td>
<td>55</td>
<td>$6,271.10</td>
<td>6.15%</td>
</tr>
<tr>
<td><strong>Healthcare</strong></td>
<td>185</td>
<td>$11,631.06</td>
<td>11.40%</td>
</tr>
<tr>
<td>Abbott Laboratories</td>
<td>46</td>
<td>$2,631.50</td>
<td>2.58%</td>
</tr>
<tr>
<td>CVS Health</td>
<td>40</td>
<td>$2,900.00</td>
<td>2.84%</td>
</tr>
<tr>
<td>Gilead Sciences Inc.</td>
<td>35</td>
<td>$2,507.40</td>
<td>2.46%</td>
</tr>
<tr>
<td>Merck &amp; Co Inc.</td>
<td>64</td>
<td>$3,502.16</td>
<td>3.52%</td>
</tr>
<tr>
<td><strong>Industrials</strong></td>
<td>115</td>
<td>$15,349.54</td>
<td>15.64%</td>
</tr>
<tr>
<td>Honeywell</td>
<td>41</td>
<td>$6,270.74</td>
<td>6.15%</td>
</tr>
<tr>
<td>Union Pacific</td>
<td>40</td>
<td>$5,384.00</td>
<td>5.26%</td>
</tr>
<tr>
<td>United Technologies</td>
<td>34</td>
<td>$4,314.80</td>
<td>4.23%</td>
</tr>
<tr>
<td><strong>Information Technology</strong></td>
<td>109</td>
<td>$19,988.65</td>
<td>19.60%</td>
</tr>
<tr>
<td>Adobe Systems Inc.</td>
<td>20</td>
<td>$3,504.80</td>
<td>3.44%</td>
</tr>
<tr>
<td>Alphabet Inc.</td>
<td>5</td>
<td>$5,267.00</td>
<td>5.16%</td>
</tr>
<tr>
<td>Apple</td>
<td>35</td>
<td>$5,923.06</td>
<td>5.81%</td>
</tr>
<tr>
<td>Facebook Inc. Class A</td>
<td>40</td>
<td>$5,293.80</td>
<td>5.19%</td>
</tr>
<tr>
<td><strong>Materials</strong></td>
<td>56</td>
<td>$3,543.04</td>
<td>3.47%</td>
</tr>
<tr>
<td>AdvanSix Inc.</td>
<td>1</td>
<td>$42.07</td>
<td>0.04%</td>
</tr>
<tr>
<td>Nucor Corporation</td>
<td>55</td>
<td>$3,500.97</td>
<td>3.43%</td>
</tr>
<tr>
<td><strong>Real Estate</strong></td>
<td>114</td>
<td>$2,971.76</td>
<td>2.91%</td>
</tr>
<tr>
<td>HCP Inc.</td>
<td>114</td>
<td>$2,971.76</td>
<td>2.91%</td>
</tr>
<tr>
<td><strong>Telecommunication</strong></td>
<td>0</td>
<td>$-</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td>29</td>
<td>$2,148.76</td>
<td>2.11%</td>
</tr>
<tr>
<td>American Electric Power Company</td>
<td>29</td>
<td>$2,148.76</td>
<td>2.11%</td>
</tr>
</tbody>
</table>

*Sector percentage of holdings are a percent of total fund value

*Individual equity percentage of holdings are a percent of total fund value*
As of January 1, 2018, the Bauhard Fund was invested in 26 equity positions allocated across 10 sectors. At this time, five sectors were overweighted when compared to the S&P 500: industrials (+5.44%), consumer discretionary (+3.24%), consumer staples (+2.28%), financials (+1.46%), and materials (+0.27%). Underweighted sectors included information technology (-4.25%), healthcare (-2.90%), energy (-2.51%), telecommunications (-1.90%), and utilities (-1.09%). Real estate holdings in the portfolio matched the S&P 500 in terms of percent of total portfolio value at 2.91%.
<table>
<thead>
<tr>
<th>Description</th>
<th>Shares</th>
<th>Market Value</th>
<th>Percentage of holdings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Discretionary</td>
<td>184</td>
<td>$22,270.60</td>
<td>18.77%</td>
</tr>
<tr>
<td>Amazon.com Inc</td>
<td>3</td>
<td>$4,505.91</td>
<td>3.80%</td>
</tr>
<tr>
<td><strong>Booking Holding</strong></td>
<td>4</td>
<td>$6,889.68</td>
<td>5.81%</td>
</tr>
<tr>
<td>Disney Walt Co</td>
<td>30</td>
<td>$3,289.50</td>
<td>2.77%</td>
</tr>
<tr>
<td>&quot;Garrett Motion Inc.&quot;</td>
<td>4</td>
<td>$42.36</td>
<td>0.04%</td>
</tr>
<tr>
<td>General Motors</td>
<td>70</td>
<td>$2,341.50</td>
<td>1.97%</td>
</tr>
<tr>
<td>Home Depot</td>
<td>10</td>
<td>$1,718.20</td>
<td>1.49%</td>
</tr>
<tr>
<td>Lenovo Corporation</td>
<td>23</td>
<td>$900.45</td>
<td>0.79%</td>
</tr>
<tr>
<td>Starbucks</td>
<td>40</td>
<td>$2,576.00</td>
<td>2.17%</td>
</tr>
<tr>
<td>Industrial</td>
<td>122.315</td>
<td>$14,849.69</td>
<td>12.51%</td>
</tr>
<tr>
<td>Honeywell</td>
<td>41.734</td>
<td>$5,513.90</td>
<td>4.66%</td>
</tr>
<tr>
<td>Union Pacific</td>
<td>40</td>
<td>$5,520.20</td>
<td>4.66%</td>
</tr>
<tr>
<td>United Technologies</td>
<td>34.582</td>
<td>$3,682.29</td>
<td>3.10%</td>
</tr>
<tr>
<td>&quot;Pendrin Technologies&quot;</td>
<td>6</td>
<td>$123.30</td>
<td>0.10%</td>
</tr>
<tr>
<td>Consumer Staples</td>
<td>186.047</td>
<td>$10,658.93</td>
<td>8.99%</td>
</tr>
<tr>
<td>Archer Daniels Midland</td>
<td>102.36</td>
<td>$4,193.73</td>
<td>3.53%</td>
</tr>
<tr>
<td>PepsiCo Inc</td>
<td>20</td>
<td>$2,200.80</td>
<td>1.86%</td>
</tr>
<tr>
<td>Proctor &amp; Gamble Co</td>
<td>46.267</td>
<td>$4,254.70</td>
<td>3.59%</td>
</tr>
<tr>
<td>Information Technology</td>
<td>144</td>
<td>$23,042.88</td>
<td>19.41%</td>
</tr>
<tr>
<td>Adobe Systems Inc.</td>
<td>20</td>
<td>$4,521.80</td>
<td>3.81%</td>
</tr>
<tr>
<td>Alphabet Inc.</td>
<td>5</td>
<td>$5,224.80</td>
<td>4.40%</td>
</tr>
<tr>
<td>Apple</td>
<td>35</td>
<td>$5,220.90</td>
<td>4.65%</td>
</tr>
<tr>
<td>Applied Materials</td>
<td>30</td>
<td>$982.20</td>
<td>0.83%</td>
</tr>
<tr>
<td>Intel Business Machines</td>
<td>25</td>
<td>$2,829.25</td>
<td>2.38%</td>
</tr>
<tr>
<td>Lam Research Corp</td>
<td>14</td>
<td>$1,900.38</td>
<td>1.61%</td>
</tr>
<tr>
<td>Salesforce.com Inc.</td>
<td>15</td>
<td>$2,054.55</td>
<td>1.73%</td>
</tr>
<tr>
<td>Energy</td>
<td>41.792</td>
<td>$2,849.89</td>
<td>2.40%</td>
</tr>
<tr>
<td>Exxon Mobil Corporation</td>
<td>41.782</td>
<td>$2,849.89</td>
<td>2.40%</td>
</tr>
<tr>
<td>Advances Inc.</td>
<td>1</td>
<td>$24.34</td>
<td>0.02%</td>
</tr>
<tr>
<td>Nucor Corporation</td>
<td>56.396</td>
<td>$2,945.01</td>
<td>2.48%</td>
</tr>
<tr>
<td>Financial</td>
<td>326.974</td>
<td>$16,236.61</td>
<td>13.69%</td>
</tr>
<tr>
<td>Bank of America</td>
<td>150</td>
<td>$3,696.00</td>
<td>3.12%</td>
</tr>
<tr>
<td>BB&amp;T Corp</td>
<td>121.974</td>
<td>$5,283.91</td>
<td>4.49%</td>
</tr>
<tr>
<td>Visa Inc.</td>
<td>65</td>
<td>$7,256.70</td>
<td>6.12%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>120.89</td>
<td>$3,379.46</td>
<td>2.85%</td>
</tr>
<tr>
<td>HCP Inc.</td>
<td>120.89</td>
<td>$3,379.46</td>
<td>2.85%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>187.002</td>
<td>$13,179.00</td>
<td>11.11%</td>
</tr>
<tr>
<td>Abbott Laboratories</td>
<td>46.11</td>
<td>$3,304.14</td>
<td>2.81%</td>
</tr>
<tr>
<td>CVS Health</td>
<td>40</td>
<td>$2,620.80</td>
<td>2.21%</td>
</tr>
<tr>
<td>Gilad Sciences Inc.</td>
<td>35</td>
<td>$2,182.25</td>
<td>1.89%</td>
</tr>
<tr>
<td>Merck &amp; Co Inc.</td>
<td>66.892</td>
<td>$5,034.81</td>
<td>4.24%</td>
</tr>
<tr>
<td>Telecommunication</td>
<td>52</td>
<td>$2,206.17</td>
<td>1.87%</td>
</tr>
<tr>
<td>Comcast Corporation</td>
<td>31</td>
<td>$1,059.55</td>
<td>0.89%</td>
</tr>
<tr>
<td>Verizon Communications Inc.</td>
<td>21</td>
<td>$1,180.82</td>
<td>0.95%</td>
</tr>
<tr>
<td>Utilities</td>
<td>30.28</td>
<td>$2,263.13</td>
<td>1.91%</td>
</tr>
<tr>
<td>American Electric Power Company</td>
<td>30.28</td>
<td>$2,263.13</td>
<td>1.91%</td>
</tr>
</tbody>
</table>

*Equities added from spin-off of currently held company
**PriceLine Group changed company name to Booking Holdings
Underscored equities indicate a 2018 purchase made
Sector percentage of holdings are a percent of total fund value
Individual equity percentage of holdings are a percent of total fund value
As of December 31, 2018, the Bauhard Fund was invested in 36 equity positions allocated across 11 sectors. The portfolio is overweight in three sectors when compared to the S&P 500: consumer discretionary (+5.90%), industrials (+2.60%), and consumer staples (+2.24%). Underweight sectors include information technology (-6.31%), energy (-3.77%), healthcare (-2.61%), financials (-0.97%), utilities (-0.90%), and materials (-0.38%). Real estate and telecommunication holdings in the portfolio approximately matched the S&P 500 in terms of percentage of total portfolio holdings.
Sector Overview

Basic Materials

Description
The primary functions of firms in the basic materials sector are processing, developing, and discovering raw materials. Raw materials are naturally occurring substances and resources that can be reused but are limited by nature. This sector includes companies that manufacture steel, metal, minerals, chemicals, construction materials, glass, forestry products, and related packaging products.

Value Drivers
The basic materials sector is heavily dependent on a strong and growing economy. The most common raw materials within the sector include mined products such as metals and ores. Developing countries also drive value for this sector as they continue to demand raw materials to support their expanding infrastructures. Beyond building and development, increases in demand for consumer goods positively impacts the value of firms in the basic materials sector as this shift further increases the demand for materials used in the production of goods.

2018 Risk Factors
Companies in the basic materials sector are more sensitive to market changes than companies operating in many other sectors. A number of major companies in the basic materials sector including steel, chemical, and mining companies had a challenging year in 2018. The basic materials sector saw a general decline as concerns about global growth became a more pressing issue. These sentiments were fueled by a decrease in demand in China and heightened trade tensions between China and the United States. China is one of the largest import markets in the world and many companies in the sector rely on China for a major portion of their revenue. In addition, higher costs associated with raw materials due to rising interest rates and declining supply have also hurt companies across the sector.

Forward Looking Risk Factors
Trade tensions between the United States and China as well as surplus inventories in China have left many analysts concerned about future levels of demand. An escalation of the current trade dispute into a more severe trade war would cause companies in this sector to be adversely affected by the fall in demand. Additionally, since many companies produce raw materials that are used in construction, the sector can be adversely affected by decreased demand in the housing market. Another factor is the continued rise in costs associated with companies in the sector. Many companies are see shrinking margins, which increases the probability of financial distress in the future. Lastly, the Federal Reserve plays a major role in the sector as it can hinder a company’s profitability if it continues
to raise interest rates. Analysts predict that if the United States and China can agree on a trade deal, and if the Federal Reserve pauses its campaign to raise interest rates, stocks in this sector will rebound in the coming year.

**Consumer Discretionary**

*Description*

The consumer discretionary sector specializes in producing non-essential goods and services and is heavily influenced by economic conditions. The sector includes industries such as automotive, housing, entertainment, and retail. The category can be further divided into durable and non-durable segments. Companies operating in the durable segment of the consumer discretionary sector produce and sell physical goods which are used over long periods of time such as jewelry or vehicles. Those firms operating in the non-durable segment produce and sell items which are consumed in a relatively short time frame such as clothing or leisure travel.

*Value Drivers*

The consumer discretionary sector derives much of its value from the performance and trend of the world economy. The health of the major consuming economies such as the United States and Europe are particularly crucial to the value of firms operating within this sector. As economic conditions improve, consumers have more disposable income to purchase non-essential goods. These periods of growth are often self-sustaining for prolonged periods of time, leading to favorable conditions for the sector that can last for years.

*2018 Risk Factors*

There were many indications of a slowing world economy in 2018. These included lower than expected consumer spending and jobs reports in multiple countries. Just as how the consumer discretionary sector performs spectacularly when market conditions improve, the opposite is true for when market conditions worsen. The reports released in 2018 lowered expectations for short-term profitability as fewer people are employed than was previously expected, thus decreasing the amount of disposable income available to consumers.

*Forward Looking Risk Factors*

The consumer discretionary sector will be adversely affected should the world economy slow in regard to production. Should companies need to reduce production due to decreased demand, workers may be laid off as their services are no longer needed. This would further diminish the amount of disposable income in the economy, leading to further reductions in production and increases in workforce layoffs. This cycle is often indicative of a contracting. If the economy contracts in the future,
the consumer discretionary sector would see a significant decrease in value due to the non-essential nature of the products produced by the firms in the sector.

**Consumer Staples**

*Description*

Consumer staples are products that consumers designate as essential. Examples of these products are food, beverages, tobacco and household items. Consumer staples are goods that people are unable or unwilling to cut out of their budgets regardless of their financial situation. This trait is why stocks in this sector are classified as defensive stocks and are often popular among investors during times of economic uncertainty.

*Value Drivers*

Consumers’ inability to go without the products is the primary value driver for the sector. This is especially crucial during times of slow economic growth or contraction in the market. During these times, firms in the consumer staples sector rarely see sharp declines in profitability. Even as disposable income decreases, consumers continue to purchase consumer staple products. This is because the consumer, either literally or psychologically, will struggle to operate in society without the products provided.

*2018 Risk Factors*

Rising cost of goods sold adversely affected the consumer staples sector in 2018. Many groceries and super markets also saw a shift in consumer preferences. The shift saw consumers purchasing more private label products, which are alternatives to the national brands, which are typically sold at a lower price. The tobacco industry also faced pressure from local and national governments who continued to push for more regulation surrounding the awareness of the health hazards involved with the use of their products. Governmental pressure such as this decreases the market for the companies’ products, reducing their profitability in both the short and long term.

*Forward Looking Risk Factors*

Maintaining adequate margins is crucial for the continued success of the sector. As competition amongst companies continues to put pressure on prices paid by consumers, many companies are experiencing shrinking margins. Trade tensions have not helped to relieve the pricing struggle, leading to increased costs to companies and placing further strain on profitability. Should trade tensions escalate, many firms in the sector may need to reevaluate their pricing strategies to adjust to the new environment. Lastly, regulation from local and national governments may adversely affect the future outlook of certain companies in the sector should they deem the companies’ products as unhealthy or dangerous.
**Energy**

**Description**

The energy sector consists of companies that generate revenue from the exploration, extraction, refining, drilling, storing, and marketing of natural gas, coal, oil, and other minerals. Companies vary from specialized, narrow moat companies to large, vertically integrated companies that control multiple aspects of the energy supply chain. The student managed portfolio held a position in one energy equity, Exxon Mobil, in 2018.

**Value Drivers**

A major value driver for the energy sector is technological advancement. These advancements allow companies to develop new drilling practices, improve refining efficiencies, and reduce adverse environmental impacts. Advancements such as these, increase both profitability and general consumer goodwill toward the companies in the sector. Another value driver for the energy sector is the supply and demand of oil, natural gas, and coal. Demand for these products increases as people, businesses, and governments require access to them to conduct their business. This demand puts upward pressure on prices, increasing the profitability of the companies in the sector.

**2018 Risk Factors**

Trade tensions between the United States and China created uncertainty in the marketplace and rising interest rates towards the end of the year put downward pressure on prices, especially crude oil. The trade tensions highlighted the risk factors for the sector in 2018. The impairment to economic growth caused by the trade war fears led to worries from investors regarding future demand levels for oil. This outlook was coupled with record high supplies of crude oil, as reported by OPEC. This put further downward pressure on oil prices, decreasing company margins. Finally, increases in interest rates by the Federal Reserve further fueled investor concerns on lower levels of future economic investment, driving down the expected demand of oil and natural gas products. This led to a decline in share price for companies across the energy sector.

**Forward Looking Risk Factors**

Risk factors heading into 2019 and beyond are consistent with the current risk factors faced by the sector. More emphasis on the environment, global warming, and climate change exists today than in prior generations, and companies will have to continue to adapt to regulations and consumer values. As a younger, more progressive population, focused on green energy, grows into the primary consumer base in the world, companies will need to be positioned to align with their values to stay relevant. Complying with these consumer expectations may pose a significant financial commitment by the companies in the sector. Further trade tensions and general economic downturns also pose threats to the sector as decreases in demand tend to accompany such events.
Financial

Description

The financial sector consists of institutions which provide financial services. These include services to private, public, and governmental customers. The financial sector is the backbone of the economy, providing financing to customers and opportunities for them to grow both their personal and business wealth. The sector is one of the most regulated in the S&P 500 since there sometimes exist conflicts of interest between investor returns and the risk aversion of depositors.

Value Drivers

The spread between lending rates and interest rates on loans and mortgages is the primary driver of revenue for the financial sector. Rates provided by financial companies are based on the monetary policy decisions of the Federal Reserve. Expanding economies also drive value for the sector. As economies expand, people look for financing options to capitalize on the increased spending in the economy, thereby providing larger revenue generation for companies within the sector.

2018 Risk Factors

More attention was raised regarding the levels of corporate debt in 2018. As corporations continued to try and capitalize on low levels of unemployment and high levels of consumer spending, many firms heavily increased their financial leverage. This created unrest among many in the financial community, as a sudden downturn in the economy could lead to companies not being able to pay back their loans. Multiple scandals also arose surrounding major companies in the industry. Ethical and operational questions were raised regarding the effectiveness of company safeguards and the conflict of interests between investors and depositors. These led to fears of further regulation from the national government, driving down stock prices and returns across the sector.

Forward Looking Risk Factors

Should the world economy contract, as some analysts are predicting, the financial sector would see diminished returns. Economic downturns are accompanied by higher levels of unemployment and reduced consumer spending. This occurrence would be especially detrimental given the current high amounts of leverage present in many corporations. If these companies are unable to maintain adequate levels of revenue, many firms in the financial sector may have to write off large losses due to bankruptcies by their customers. Trade tensions throughout the world could also lead to an adverse environment for the sector. Trade restrictions limit growth potential for firms and thereby decrease the demand for external financing from financial institutions. Lastly, cybersecurity issues are quickly becoming a major concern for financial firms. As customer information and transactions become increasingly electronic, the easier it becomes for criminals to access vast
quantities of information in a relatively short period of time. Firms commit large quantities of capital to ensure that customer data is protected. This capital could be used for more profitable activities and is therefore could hinder future returns experienced by investors.

**Healthcare**

**Description**

The healthcare sector consists of companies that provide healthcare supplies and services and companies that research or produce healthcare products. The sector is further subdivided into a multitude of categories. Firms operating in the sector can be classified as hospitals, managed healthcare organizations, healthcare technology consulting firms, pharmaceutical companies, and life science corporations. These firms must ensure that they are both providing proper patient care and offering an adequate return to their investors.

**Value Drivers**

A shift toward value-based care has been an important value driver for companies in the healthcare sector. Recent increases in mergers and collaborations between health plans and care delivery organizations have allowed firms to capitalize on their strengths while mitigating exposure to firm-based weaknesses that may exist. Recent developments in the fields of artificial intelligence and telemedicine have also allowed companies to increase their operating efficiency by streamlining their operations. These improvements have led to reductions in costs to consumers, improved quality of care, and an overall more positive consumer experience.

**2018 Risk Factors**

The midterm elections resulted in the Democratic political party taking control of the House of Representatives. This change in power could lead to increased regulation surrounding the healthcare sector, particularly the pharmaceutical industry. This is because many of the representatives campaigned for election on platforms of healthcare reform. This uncertainty could lead to diminished returns for the sector.

**Forward Looking Risk Factors**

The healthcare sector is subject to high levels of regulation from the federal government. Changes to the laws surrounding the sector could hurt future revenue generation and lead to costly overhauls of current practices and procedures. The sector also exposes itself to higher security risks as it further integrates technology into its operations. Convenience based changes such as the transitioning of client records to electronic filing and storage systems increases the risk of cyber-attacks against companies and their clients. Such attacks could lead to shutdowns and delays. These would
lead to both reduced revenues and increased costs in the form of both fines and infrastructure costs to repair the damage done.

**Industrials**

**Description**

The industrial sector includes companies involved in aerospace and defense, industrial machinery, tools, lumber production, construction, waste management, manufactured housing and cement, and metal fabrication. These companies sell to both personal and corporate clients, with many firms also having contracts with local, state, or federal governments.

**Value Drivers**

Technological innovation continues to revolutionize the industrial sector. The capabilities harnessed from technological advances provide manufacturers with more control over their products throughout the product life cycle. This control is leading to rapid improvements in cost reduction, production times, and customer service and support. A significant portion of new sales growth for industrial equipment manufacturers in the immediate future will come from connected equipment with sensors, actuators, and analytical insights that can exchange critical data with other machines.

**2018 Risk Factors**

Trade tensions between many world powers, specifically the United States and China, reduced the profitability of firms in the industrial sector for 2018. Many manufacturers rely on foreign steel and aluminum, necessitating open and free trade agreements between countries. Steel prices rose over 50% in 2018, causing a sharp reduction to the operating margins of many firms. Aluminum was also rather volatile, putting even more pressure on margins.

**Forward Looking Risk Factors**

Trade tensions will continue to impose risk on the industrial sector into the foreseeable future. Negotiations and deals will need to continue as many emerging economies transition into more major roles on the world stage. This dynamic environment presents opportunities for disagreements and further tensions between countries. This would adversely affect the industrial sector since many of the companies operating in it are multi-national, with supply chains intertwined between many different countries. The pool of available skilled professionals who can operate and produce goods has also begun to shrink. This could lead to increased labor costs for firms if technological advances do not cover the skill gap which will be created. Lastly, economic contraction would be a detriment to many firms in the sector. Corporations tend to delay initiating new building projects and expansions during times of economic contraction. This would greatly reduce the primary source of revenue for the many firms which service the corporate sector of the economy.
Real Estate

Description

The real estate sector consists of companies focused on residential, commercial, and industrial real estate. These companies are frequently operated as real estate investment trusts (REIT). The sector generates income from owning, operating, or financing real estate.

Value Drivers

Land generally appreciates in value over time as more people and companies compete for the finite resource. This appreciation provides companies increased revenues in the form of both gains on the sale of properties and increased rent revenue on their properties. The majority of this income is paid out in dividends, especially in the case of REITs. Companies can increase the rate at which their properties increase in value depending on the developments that occur on the properties. Innovative developments which raise demand for the property and its surrounding area can greatly leverage the returns seen by investors. This rapid increase in value is why development of real estate properties is the primary value driver for the sector.

2018 Risk Factors

The Federal Reserve’s interest rate increases adversely affected the real estate sector in 2018. These increases raised the interest rates paid on home loans. This led to a decline in housing numbers as larger numbers of people opted to rent rather than purchase homes. Another factor resulting in the increasing popularity of renting has been the rising amount of student debt faced by young consumers. This debt has caused consumers to delay purchasing homes as they focus on repaying their student loans.

Forward Looking Risk Factors

The risk factors of 2018 are the same as those moving forward. The Federal Reserve could continue to decrease consumers’ accessibility to loans by raising interest rates higher. Likewise, the rising student debt faced by young American consumers will further delay the age at which consumers purchase homes. This decrease in demand could lead to reduced property values and adversely affect the bottom line of many firms in the sector. Economic contraction is also an important risk factor for the sector. Should unemployment rates rise, many homeowners may transition to renting, further exacerbating the decrease in demand and resulting in further deterioration of sector profits.
**Information Technology**

**Description**

The information technology sector includes companies that produce software, hardware, and semiconductor equipment. Many firms also specialize in providing technological services and solutions. Products include phones, computer systems, and technological equipment. Services range from IT consulting to application and systems software.

**Value Drivers**

The primary value driver for the information technology sector is its ability to produce innovative products and services. Because of how integrated all of a firm’s products and services are, technology companies can implement sweeping updates to their business model much faster than any other type of company. This advantage leads consumers to pay high premiums for access to the most innovative companies and their products and services.

**2018 Risk Factors**

The many data breaches which occurred in different areas in 2018 were detrimental to the information technology sector. Consumer sentiments toward companies deteriorated as news broke of data breaches resulting in stolen personal and private information. This has led to higher expectations of technology companies to improve their systems. The breaches have also led to many inquiries into the business practices of many sector leaders by the federal government. These expectations by both consumers and the government led to increased costs to companies as they scrambled to respond to criticism of their systems by making security improvements.

**Forward Looking Risk Factors**

One major risk factor within the sector is the current physical limitations of semi-conductors. Many experts believe that current semi-conductor technology has nearly reached its limitation, and further technological advances could be slowed or halted entirely should the semi-conductors not be improved. The rate at which innovation has occurred is also an issue faced by the sector. Consumers have become used to incredible advancements in technological capabilities occurring in a short period of time. However, as technology continues to improve, those types of sweeping advances are less common and more expensive. Even small advances have become incredibly expensive to produce, and the sentiment is that this trend will continue into the future. These higher costs for marginal gains could decrease the profitability of many firms and lead to devaluations based on reduced future growth prospects.
Telecommunications

Description

The telecommunications sector is composed of companies that enable global communications. This includes telephones, internet, television, satellites, and more. This sector has seen rapid expansion over the past few decades. It originally included only television and radio providers, but now includes massive communication companies such as satellite companies and internet service providers.

Value Drivers

Growth is a major driver for the sector. As technology advances, becoming more powerful, so too must the services which provide access to the technology. Without advancements in the telecommunications sector, many of the technological innovations seen today would not be practical as there would be no service for the technology to operate on. The growth in consumption of technology is also a major driver for the sector. The majority of consumers in the developed world have a cell phone, and the percentage of cell phone users continues to increase over time. This usage further increases demand for the services provided by the companies in the telecommunications sector.

2018 Risk Factors

The federal government continued to pressure firms in the sector when mergers took place. Regulations are in place to prevent monopolies from forming, but these same regulations can stifle the growth of the leading companies in the sector.

Forward Looking Risk Factors

Governmental regulation may pose a threat to future growth in the sector. This can come in many forms, the most common of which is the prevention of mergers and acquisitions. Blocking these actions slows the rate at which companies can acquire new technology and would make the acquisition of such technology more expensive. Cyber warfare also presents an issue moving forward as more responsibility may be placed on the telecommunication firms to monitor and prevent such activity. This action would lead to increased costs incurred by the firm, reducing margins and incomes throughout the sector.
Utilities

Description

The utilities sector provides basic services including natural gas, electricity, water, and power. Companies within this sector are public services and therefore are strictly regulated by the government. This affects both the strategy of the firm and the return seen by investors. Many of these regulations are extremely limiting to the growth potential of firms, causing their stocks to be primarily owned by value investors seeking consistent dividend revenue.

Value Drivers

In the utilities sector, long-term power purchase agreements between companies and consumers heavily impacts profits. These agreements allow utility companies to lock-in income for the long-term, greatly reducing the variability and risk which is seen in the revenue associated with companies in other sectors. These companies also see relatively low levels of competition in their operating territory which mitigates their risk of being crowded out.

2018 Risk Factors

Further advances in the fields of renewable energies such as solar and nuclear power continued to put pressure on the utilities sector. As more alternative forms of energy become feasible, the amount of competition in the sector increases. This increased competition may begin to lead to tighter margins and less cash flow overall.

Forward Looking Risk Factors

The decentralization of power generation is a concerning trend for the utilities sector. New technologies have emerged that produce alternative options for generating and storing energy. These technologies have created higher levels of competition, which is something that the sector has not had to deal with in the past. The sector is also seeing a decrease in the experience level of its employees. This has occurred as many young bright innovators have transitioned to the more lucrative jobs in the information technology industry. This lack of young talent could adversely affect many utility companies as their current generation of employees reaches retirement.
Current Sector Holdings

Basic Materials

Advansix Inc.
Ticker: ASIX
Beta: 2.04

Description
Advansix was incorporated in 2016 and is headquartered in Parsippany, New Jersey. Advansix is a fully integrated manufacturer of Nylon 6, a polymer resin, which is a synthetic material used to produce plastics, fibers, filaments, and films. Advansix also manufacturers ammonium sulfate fertilizers, nylon, and chemical intermediates used in the production of adhesives, paints, coatings, solvents, herbicides, and other chemicals. The company offers products under its Aegis, Capra, Sulf-N, Nadone, Naxol, and EZ-Blox brands. Advansix operates primarily in the United States but is working to expand its international operations. Advansix currently operates with a market capitalization of $829.29 million.

Performance
Advansix ended the year with a 42.86% loss, while the basic materials sector ETF resulted in a loss of 19.8 percent. The loss was primarily due to uncertain macroeconomic conditions and a downturn in the acetone industry in North America. In 2018, Advansix experienced outages and input price inflation which narrowed the company’s margins. Despite these issues, sales revenue increased by approximately 3% from 2017. In 2019, Advansix hopes to improve its financial and operational performance by optimizing its product mix and production output. Advansix was added to the student managed portfolio as a spin-off from Honeywell International. The portfolio holds one share of the equity. This led the portfolio managers to determine that it was not a cost-effective decision to sell the stock, despite its recent performance.
Nucor Corporation

Ticker: NUE
Beta: 1.69

Description
Nucor Corporation is one of the largest producers of steel and steel-related products. It is the largest steelmaker in the United States by production volume. The company was founded in 1940 and is based in Charlotte, North Carolina. Nucor operates in three segments: steel mills; steel products; and raw materials. Agreements with a variety of international companies allows Nucor to buy and sell steel products in many different markets around the world. In addition, Nucor capitalizes on its strong internal distribution channels and trading companies to deliver its products effectively and efficiently. Currently, Nucor currently operates with a market capitalization of $17.78 billion.

Performance
Nucor’s share price fell 22.1% for the year. This is slightly worse than the sector ETF, which fell 19.8% over the same time period. In general, the returns of Nucor closely mirrored those of the basic materials ETF. Tariffs imposed by China and the United States increased the materials prices for Nucor, leading to lower volumes of imported steel and decreased margins. However, Nucor experienced record profits in 2018 in spite of the rising costs associated with materials. These profits indicate potential for higher future growth should trade tensions between China and the United States lessen or disappear entirely.
**Consumer Discretionary**

**Amazon.com Inc.**
- Ticker: AMZN
- Beta: 1.71

**Description**
Amazon is a multi-national technology company founded in 1994 and is headquartered in Seattle, Washington. While the company was originally founded to be an online bookstore, Amazon has grown to incorporate various other business segments. These segments include cloud computing, marketing, and various life improvement devices such as the Amazon Alexa. Amazon has grown into the largest retailer in the United States almost exclusively with online sales. Moving forward the firm hopes to integrate its technological expertise into a more standard brick and mortar design to further increase its market share. Amazon currently operates with a market capitalization of $893.43 billion.

**Performance**
Amazon was one of the best performing consumer discretionary stocks in 2018. Amazon returned 26.32% to investors, while the sector ETF experienced a 4.07% loss. Increased advertising revenue was a leading driver of Amazon’s success. The firm also had a record number of subscriptions to its Amazon Prime service. Amazon has successfully diversified its sources of revenue and continues to stay ahead of the competition in terms of technological advances. These advantages show no signs of dissolving in the near future, giving Amazon a positive outlook for 2019 and beyond.
Booking Holdings
Ticker: BKNG
Beta: 0.57

Description
Booking Holdings is a travel promotion firm founded in 1997 and is headquartered in Norwalk, Connecticut. Booking Holdings operates several websites, including Booking.com and Priceline.com. The company was the pioneer of the “name your own price” bidding model and continues to be an industry leader today. On February 21, 2018 the company name was officially changed from The Priceline Group Inc. to Booking Holdings. The ticker was changed from PCLN to BKNG on February 27, 2018. Booking Holdings currently operates with a market capitalization of $80.15 billion.

Performance
Booking Holdings saw shares fall 3.42% in 2018. However, the firm still outperformed the sector, which incurred a 4.07% loss. Americans decreased usage of travel agencies and increased competition in the industry accounted for the decline in share price. The firm was still able to grow its total revenue in 2018 despite these pitfalls. However, the 2019 outlook for Booking Holdings is not particularly strong due to the pressure that increases in competition, and reduced consumer demand for travel agencies, is putting on future revenue growth.
Garrett Motion Inc.  
Ticker: GTX  
Beta: 0.67  

Description  
Garrett Motion Inc. officially spun-off from Honeywell International Inc. on October 1, 2018, and established its corporate headquarters in Rolle, Switzerland. The spin-off was a pro rata distribution. Garrett Motion Inc. designs, manufactures, and sells turbocharger and electric boosting technologies for light and commercial vehicles, original equipment manufacturers, and the aftermarket worldwide. The company offers light vehicle gasoline, diesel, and commercial vehicle turbochargers. Garrett Motion Inc. currently operates with a market capitalization of $1.16 billion.

Performance  
Garrett Motion Inc. underperformed the consumer discretionary sector, losing 35.66% of its value. The company’s current goal is to capitalize on the increased adoption of turbochargers. To fully accomplish this objective, the firm must distinguish itself from its competitors. Multiple information technology companies currently lead the industry, and these companies represent the competition from which Garrett Motion will need to capture market share in order to stay competitive in the industry.
General Motors

Ticker: GM
Beta: 1.01

Description

General Motors is the largest American automobile manufacturer and is headquartered in Detroit, Michigan. The company was founded in 1908 and has grown to be one of the largest manufacturers of automobiles in the modern day. General Motors continues to innovate to remain relevant in a rapidly changing car manufacturing business. The firm has done this by further integrating technology into their products and processes. In mid-2018, General Motors released its detailed plan for the implementation of self-driving vehicles. General Motors currently operates with a market capitalization of $54.67 billion.

Performance

General Motors greatly underperformed the rest of the consumer discretionary sector in 2018, experiencing a loss of 19.98%. Political and economic pressure led to the company closing several major factories, resulting in the layoff of thousands of workers. An additional challenge included increased materials costs due to tariffs imposed from the trade tensions between the United States and China. The firm also saw relatively poor sales revenue as foreign car manufacturers continued to gain market share. 2019 does not provide a positive outlook for General Motors as management takes time to rethink their strategy moving forward.
Home Depot Inc.
Ticker: HD
Beta: 1.22

Description
Home Depot is the largest home-improvement retailer in the United States, with a total of 2,286 stores open worldwide as of October 28, 2018. The company was founded in 1979 and is headquartered in Atlanta, Georgia. The firm is currently working to expand its business across North and South America. Home Depot currently operates with a market capitalization of $221.28 billion.

Performance
Home Depot experienced approximately twice the loss that the consumer discretionary sector did in 2018. The company’s returns trended extremely consistently with the sector ETF, but remained worse for a majority of the year, ending down 8.62%. The company experienced disappointing sales results at the end of 2018. This was especially worrisome for Home Depot as that time of the year has historically been its most profitable. The company was also affected by the trade tensions between the United States and China. These resulted in higher material costs, which negatively affected the firm’s bottom line. Home Depot will continue to see pressure on its margins and overall profitability should the trade tensions last throughout 2019.
Lennar Corporation

Ticker: LEN
Beta: 1.37

Description
Lennar Corporation was founded in 1954 and is headquartered in Miami, Florida. With its subsidiaries, Lennar Corporation operates as a homebuilder, primarily under the Lennar brand in the United States. The company’s homebuilding operations include the construction and sale of single-family attached and detached homes, as well as the purchasing, development, and sale of residential land. The firm primarily targets first time, move-up, active adult, and luxury homebuyers. The company also offers mortgage financing, title insurance, and closing services for its homebuyers. Lennar Corporation currently operates with a market capitalization of $16.03 billion.

Performance
Lennar Corporation experienced a significant loss (39.62%) in 2018. This drastically underperformed the consumer discretionary ETF. However, Lennar Corporation was not added to the student managed portfolio until December 2018. Since its addition to the fund, the share price of Lennar Corporation has only decreased 2.6%. The overall poor performance in 2018 is largely attributable to the Federal Reserve’s decision to raise interest rates. These increases led to a decrease
in home purchases as financing home loans became more costly to consumers. Moving forward, Lennar Corporation is focused on improving its cash flow generation. This capital will be used to reduce debt levels and opportunistically repurchase its shares.

**Starbucks**

Ticker: SBUX  
Beta: 0.41  

**Description**

Starbucks Corporation was founded in 1971 and is headquartered in Seattle, Washington. It operates as a roaster, marketer, and retailer of specialty coffee worldwide. The company operates in four segments: North and South America; China/Asia Pacific; Europe, Middle East, and Africa; and Channel Development. Its stores offer coffee and tea beverages, roasted whole bean and ground coffees, single-serve and ready-to-drink beverages, iced tea, and food and snacks. The company also licenses its trademarks through licensed stores and grocery/foodservice accounts. Currently, the company owns and operates approximately 25,000 stores. Starbucks currently operates with a market capitalization of $90.84 billion.

**Performance**

In 2018, Starbucks Corporation’s total return was 11.75 percent. The positive return for the company was the result of a significant increase in the net revenues. This increase was driven by the investment the company has made in expanding its business in China. The stock also gained relative
to the competition as investors and analysts praised the company for partnering with Nestle to form the Global Coffee Alliance.

![Graph](attachment:image.png)

**Walt Disney Company**

Ticker: DIS  
Beta: 0.51

**Description**

The Walt Disney Company was founded by the Disney Brothers in 1923 and has become a multimedia giant. The company is currently headquartered in Burbank, California. Disney has diversified its product and service line as it has grown. This diversification is in respect to both its various business segments and its area of operation, now operating in countries all over the world. Disney currently operates with a market capitalization of $206.28 billion.

**Performance**

The primary focus for Disney in 2018 was the negotiation surrounding its deal to acquire Fox. The firm had to both deal with governmental inquiry and competing bids from Comcast. An official deal regarding the merger was still not completed as of the end 2018, but both parties are confident that a deal can be completed sometime in the first quarter of 2019. Disney finished 2018 down 1.92%. This resulted in it slightly outperforming the sector ETF despite lagging behind for a majority of the year. The late price support that allowed Disney to outperform the sector was largely fueled by renewed
investor faith in the completion of the merger with Fox. As the completion of the merger appears imminent, all signs point to 2019 being a great year for Disney both in terms of revenue generation and growth.

Archer Daniels Midland

Ticker: ADM  
Beta: 0.84  

Description  
Archer Daniels Midland is a global food processing and commodities trading corporation. The firm was founded in 1902 and is headquartered in Chicago, Illinois. Archer Daniels also provides agricultural storage and transportation services. Primarily operating in the United States, Switzerland, and Germany, Archer Daniels Midland also has a presence in multiple other countries all around the world. Fortune magazine listed Archer Daniels Midland 48 on its list of largest United States corporations by total revenue. Archer Daniels Midland currently operates with a market capitalization of $23.93 billion.

Performance  
Archer Daniels Midland saw superior performance compared to the rest of the sector in 2018. Archer Daniels returned 2.20% for the year, while the ETF lost 10.07%. At one point in early October Archer Daniels had produced a return of nearly 30%. However, investor concerns surrounding the Federal Reserve rate increases and the trade tensions between the United States and China quickly
depleted those gains. 2019 has the potential to see more gains from Archer Daniels, but some form of trade agreement will likely need to be reached to realize substantial gains from the equity.

PepsiCo Inc.
Ticker: PEP
Beta: 0.58

Description
PepsiCo is a leading company in the food and beverage industry headquartered in Purchase, New York. Founded in 1898, as Pepsi-Cola Company, the company has grown with acquisitions such as Frito-Lay Inc., Tropicana, and a merger with Quaker Oats in 2001, to become the well-known brand it is today. Currently operating in 200 countries, PepsiCo has firmly established itself as a leading brand across the globe. PepsiCo currently operates with a market capitalization of $170.58 billion.

Performance
PepsiCo was heavily impacted by the nutrition movement in 2018. Consumers have begun to pay closer attention to the levels of sugar that they are putting into their bodies. This transition to more health-conscious eating habits is largely led by younger consumers. Although PepsiCo has made adjustments to its product base to address the health-conscious movement, the transition from drinks and snacks that are high in sugar weighed on investors enough to drop the stock 6.42%. The stock was fairly consistent in trending with the movements of the sector ETF. PepsiCo remains in a strong position
heading into 2019. The firm is a major player in the comfort food and drink segment of the food and beverage industry. It has also diversified its product line to better address the demands of younger consumers. The company still provides investors with a strong dividend payout and should be positioned for a strong 2019 and beyond.

Procter & Gamble Company

Ticker: PG
Beta: 0.22

Description
The Procter & Gamble Company was founded in 1837 and is headquartered in Cincinnati, Ohio. The company specializes in the production of personal care and hygiene products. Rather than creating one giant brand, Procter & Gamble products are sold under a wide variety of brand names. Some of the most popular brands owned by the company are Crest, Dawn, Febreze, and Gillette. The company has made major advances in its participation in the global market, selling products in 180 countries worldwide. Procter & Gamble currently operates with a market capitalization of $258.74 billion.

Performance
2018 started off poorly for Procter & Gamble. The company decreased its dividend growth rate, which had increased at a rate of 2.4% annually over the past three years. This decision was made due to reduced levels of net income at the end of 2017 and during the early parts of 2018. However, Procter & Gamble proceeded to increase its revenue in every quarter of 2018. This performance
regained investor confidence in the firm and propelled the shares to end 2018 up by 1.4%. This late rally led Procter & Gamble to outperform the consumer staples sector ETF by over 11%. Procter & Gamble is poised for a strong 2019 as it carries the momentum from the prior year into the future.

---

**Energy**

**Exxon Mobil Corporation**

Ticker: XOM  
Beta: 1.04

**Description**

Exxon Mobil is the world’s largest publicly traded oil and gas company. It is headquartered in Irving, Texas and became the Exxon Mobil Corporation on November 30, 1999 when Exxon and Mobil merged. The company drills, produces, and refines oil at 136 cross-functional sites located in 39 countries around the world. The company is the world’s largest refiner and one of the world’s largest manufacturers of commodity and specialty chemicals. Exxon Mobil currently operates with a market capitalization of $347.47 billion.

**Performance**

Exxon Mobil posted a loss of 18.74% in 2018. However, this return exceeded that of the sector ETF, which declined 22.07%. The rapid decline in oil prices in November 2018 was the primary driver behind the large losses seen by Exxon Mobil and the sector as a whole. This price decline was largely a result of the Trump administration reinstating sanctions on Iran’s energy industries. The company has
also announced that it is going away from the long-held industry practice of reducing capital spending and returning cash to shareholders in the form of dividends. Instead, Exxon Mobil plans to increase capital spending over the next seven years. The goal is to increase earnings and cash flow, as well as double the return of capital employed by 2025. These forward-looking decisions appear to be positioning Exxon Mobil to further capture market share in the sector and make the stock an appealing option for the portfolio heading into 2019 and beyond.

Financial

**Bank of America Corporation**

Ticker: BAC  
Beta: 1.49  

**Description**  
Bank of America is one of the leading financial institutions in the world. It was formed in 1998 and is headquartered in Charlotte, North Carolina. The company provides financial services to both individual and corporate clients in 35 countries. These services include banking, investing, asset management, and many other services depending on client needs. Bank of America Corporation currently operates with a market capitalization of $280.98 billion.

**Performance**  
For 2018, Bank of America’s stock price decreased by 17.59%. The firm slightly underperformed the rest of the financial sector, which ended 2018 down 14.54%. The primary driver of the large losses seen in 2018 was the Federal Reserve’s decision to raise interest rates. This decision increased the cost of borrowing for consumers, decreasing the amount of money expected to be loaned out to consumers. The trade tensions between the United States and China also pushed the share price lower.
as investors worried that the growth seen in both economies would be stifled. In December, the Federal Reserve announced a less aggressive position on interest rate increases heading into 2019. This, coupled with possible breaks in the trade negotiations between the United States and China, could lead to restored investor confidence and a resurgence of gains from Bank of America and the financial sector moving forward.

**BB&T Corporation**

Ticker: BBT  
Beta: 1.19

**Description**  
BB&T is a financial company that was formed in 1872 and is headquartered in Winston-Salem, North Carolina. The company operates in community banking, mortgage banking, financial services, lending, and insurance services. Most of the operations are conducted through Branch Bank, a bank subsidiary, and other nonbank subsidiaries. BB&T Corporation currently operates with a market capitalization of $37.01 billion.  

**Performance**  
BB&T’s returns closely tracked the sector ETF. In 2018, BB&T experienced a loss of 13.22%. This slightly outperformed the sector ETF over the same time period. The events attributable to BB&T’s performance in 2018 were similar to those for Bank of America as earlier discussed. Likewise, BB&T is in a good financial position, given the recent developments regarding interest rates and trade negotiations, positioning the company for a strong 2019.
Visa Inc.

Ticker: V
Beta: 1.00

Description
Visa Inc. was founded in 2007 and is headquartered in San Francisco, California. It operates as a worldwide payment technology company. The company facilitates commerce through the transfer of value and information between consumers, merchants, financial institutions, businesses, strategic partners, and government entities. Visa Inc. uses VisaNet, a processing network that enables the authorization, clearing, and settlement of payment transactions. VisaNet also offers fraud protection for account holders, and assured payment for merchants. In addition, Visa Inc. provides its services under the Visa, Visa Electron, Interlink, V-Pay, and PLUS brands. Visa Inc. currently operates with a market capitalization of $344.87 billion.

Performance
Visa experienced a 15.22% gain in 2018, significantly outperforming the financial ETF. The high return was primarily due to strong growth in their revenues. This growth was led by an increase in online...
transactions made by cardholders during the year. Visa’s main goal moving forward is to expand its products’ usage internationally by offering appropriate incentives to the corresponding consumers and merchants.

Abbott Laboratories
Ticker: ABT
Beta: 0.90

Description
Abbott Laboratories was founded in 1888 and is headquartered in Lake Bluff, Illinois. The company manufactures and markets medical devices, blood glucose monitoring kits, nutritional healthcare products, diagnostic products and equipment, and branded generic drugs. Abbott operates its business in more than 160 countries. Its products include pacemakers, implantable cardioverter defibrillators, coronary stents, catheters, infant formula, nutritional liquids for adults, vessel closure devices, and LASIK equipment. Approximately 60% of Abbott’s sales revenue is earned outside of the United States. Abbott Laboratories currently operates with a market capitalization of $138.71 billion.

Performance
Abbott produced significantly higher returns than the healthcare sector ETF for 2018. Abbott’s share price rose 23.00% compared to the 1.54% return realized by the ETF. The higher performance of Abbott is largely attributable to increased revenues. 2018 was the firm’s first year having St. Jude Medical completely integrated into its systems and plan. The increased revenue allowed Abbott to generate high levels of cash flow. Much of this additional cash flow was used to pay down over $8 billion in debt. The firm also announced a 14.3% increase to its quarterly dividend, instilling investors with even more confidence in the company’s outlook. The momentum of strong revenue growth and free cash flow is likely to carry over into 2019. These circumstances position Abbott to have another successful year in terms of stock market returns.

CVS Health

Ticker: CVS  
Beta: 1.21

Description

CVS Health was founded on May 8, 1963 and is headquartered in Woonsocket, Rhode Island. The company has four major branches: CVS Pharmacy; CVS Caremark; CVS Specialty; and MinuteClinic. CVS Health is a world leader in revenue generation, ranking seventh on the 2018 Forbes 500 list with a listed revenue of $184 billion, and has recently vertically integrated one of the largest retail pharmacy chains in the United States with one of the largest pharmacy benefit managers. CVS has spent the majority of the last decade positioning itself as a leader within the healthcare sector. The company processes approximately 1.3 billion prescriptions per year and operates more than 10,000 retail pharmacies across the United States. CVS Health currently operates with a market capitalization of $70.12 billion.

Performance
CVS experienced below average returns for a majority of the year compared to the healthcare sector ETF. The company ended the year down 10.88%. High levels of debt and reduced liquidity were key areas of investor concern and put downward pressure on the stock price. Many analysts believe that the firm overpaid for Aetna at the end of 2017, and the returns seen in the first year of having the company fully integrated did not meet expectations. However, the firm has upside potential should it be able to better generate cash flow and returns from Aetna as it continues to integrate the company.

![Graph comparing CVS and VHT stock prices]

**Gilead Sciences Inc.**

Ticker: GILD  
Beta: 1.22  

**Description**

Gilead was founded in 1987 and is headquartered in Foster California. Gilead Sciences is an American biopharmaceutical company that develops and commercializes drugs. Gilead develops and markets therapies to treat life-threatening infectious diseases, with the core of its portfolio focused on HIV and hepatitis B and C. The acquisitions of several companies have broadened Gilead’s focus to include pulmonary and cardiovascular diseases and cancer. Gilead Sciences currently operates with a market capitalization of $86.11 billion.

**Performance**

Gilead’s stock decreased by 15.59% in 2018, which represents a significant underperformance compared to the healthcare sector. This trend was due to a consistent drop in its hepatitis C drug sales, concerns about the long-term durability of its core HIV franchise, and Yescarta’s slower-than-
expected commercialization. In addition to these problems, Gilead has been slow to name a successor to outgoing CEO UP John Milligan, who is set to step down by the year’s end.

Merck & Co. Inc.

Ticker: MRK

Beta: 0.41

Description
Merck & Co. Inc. was founded in 1891 and is headquartered in Kenilworth, New Jersey. The firm produces pharmaceutical products to treat several conditions in a number of therapeutic areas. These areas include cardiovascular disease, asthma, cancer, and infections. The company also has a substantial vaccine business, with treatments to prevent hepatitis B and pediatric diseases as well as HPV and shingles. The United States is the primary market for Merck & Co., with approximately 50 percent of the company’s sales generated in the U.S.

Performance
Merck & Co. saw strong returns in 2018, with its higher returns particularly diverging from the rest of the sector towards the end of the year. The company ended the year returning 35.91%. The primary
The driver of this performance was the continued success of the firm’s lead drug, Keytruda. Sales forecasts appear positive heading into 2019 and the firm is positioned for another successful year.

**Industrials**

**Honeywell International Inc.**

Ticker: HON  
Beta: 1.27

**Description**

Honeywell was founded in 1906 and is headquartered in Charlotte, North Carolina. As a diversified technology and manufacturing company, Honeywell blends physical products with software to serve customers worldwide with aerospace, energy efficient products and security technologies for buildings and industries. On October 1, 2018, the company completed the spin-off of its Transportation Systems segment, formerly part of Aerospace. On October 29, 2018, the company completed the spin-off of its Homes and Global Distribution segment, formerly part of Home and Building Technologies. Therefore, as of the end of 2018, those segments were no longer part of the company. Honeywell International Inc. currently operates with a market capitalization of $117.32 billion.
Performance

Honeywell shares fell 10.32% in 2018. Despite the fall in value, the firm still outperformed the industrials sector ETF, which fell 15.67% during the same time frame. In 2018, Honeywell completed a tax-free spin-off of its Homes and Global Distribution segment, part of Home and Building Technologies. The spin-off established a new publicly traded company, Resideo Technologies, Incorporated. into a standalone publicly-traded company, Resideo Technologies, Inc. The assets and liabilities associated with Resideo were removed from the company’s consolidated balance sheet as of the effective date of the spin-off.

Union Pacific

Ticker: UNP
Beta: 1.14

Description

Union Pacific was founded in 1862 and is headquartered in Omaha, Nebraska. It links 23 states in the western two-thirds of the United States by railway, providing a critical link in the global supply chain. The firm provides value to its roughly 10,000 customers by delivering products in a safe, reliable, fuel-efficient, and environmentally responsible manner. Union Pacific operates with a market capitalization of $122.01 billion.

Performance

Union Pacific was one of the few bright spots for in industrials sector in 2018. The firm returned 1.80%, slightly growing shareholders’ investments in a year that saw many stocks decline. Returns could have seen significantly better results were it not for the trade tensions between the United States and
China. Union Pacific stock was up 21.51% in mid-September. However, the trade tensions resulted in higher raw materials prices and lower demand for transportation as both imports and exports declined. Union Pacific has a great opportunity to continue being a sector leader in 2019. Should the trade tensions dissipate between the United States and China, Union Pacific will be positioned to capitalize on the increased demand for transportation and once again realize great returns for investors.

United Technologies Corporation

Ticker: UTX
Beta: 1.24

Description
United Technologies Corporation was founded in 1934 and is headquartered in Farmington, Connecticut. United Technologies provides technology products and services to the building systems and aerospace industries worldwide. Growth is attributable primarily to the internal development of existing businesses and to acquisitions. On November 26, 2018, the company announced its intention to separate into three independent companies: United Technologies (an aerospace company comprised of the Collins Aerospace Systems) and Pratt & Whitney businesses Otis and Carrier. The proposed separations are expected to be completed through spin-offs by United Technologies of Otis and Carrier. These spin-offs will be tax free for shareholders of the firm. United Technologies Corporation currently operates with a market capitalization of $114.43 billion.
Performance

United Technologies saw shares drop 16.92% in 2018. The firm slightly underperformed the sector ETF, and the poor performance was largely attributable to the large sell-off that the market experienced in December. Overall, returns of United Technology stock tracked the trends of the sector fairly consistently. The most notable decision in 2018 was the decision to return United Technologies to its roots as a preeminent aerospace systems supplier while establishing Carrier and Otis as standalone independent companies.

Real Estate

HCP Inc.
Ticker: HCP
Beta: 0.61

Description
HCP was founded in 1985 and is headquartered in Irvine, California. The company operates as a real estate investment trust (REIT). The business invests primarily in real estate properties that cater to the United States healthcare industry. HCP’s portfolio is comprised of investments in the Senior Housing, Life Science, and Medical Office segments. HCP Inc. currently operates with a market capitalization of $14.84 billion.

Performance
HCP provided the student managed portfolio a return of 7.80% in 2018. This was significantly superior to the real estate sector, with the ETF returning a loss of 11.76%. HCP has positioned itself for
success through various restructuring programs over the past three years. Most notably was a $12 billion sale and spin-off of assets equivalent to about one-third of the company value.

Resideo Technologies Inc.

Ticker: REZI
Beta: 1.01

Description:
Resideo Technologies Inc. was founded in 2018 after it spun-off from Honeywell International. Recently, the company announced its headquarters would be located in Austin, Texas. Resideo Technologies provides critical comfort, thermal, and security solutions, primarily in residential environments, internationally. The company operates in two segments, Products and Solutions and Global Distribution. It offers home products, services, and technologies, including temperature, humidity control, water, and air remote patient monitoring software. Resideo Technologies Inc. currently operates with a market capitalization of $2.4 billion.

Performance
Resideo Technologies Inc. lost 22.58% of its value since it was spun-off from Honeywell. This represented a significant underperformance compared to the rest of the real estate sector over the same time period. There is still little news or analyst reports on Resideo Technologies due to how recently it has come into existence. The company’s main goal is focused on the connected home, which means various devices can be controlled through the internet. Currently, the company has approximately 3,000 products for the home and will use these, and its product innovation department, to realize higher returns in 2019 and beyond.

Information Technology

Adobe Inc.

Ticker: ADBE
Beta: 1.05

Description
Adobe Systems is a multinational computer software company historically focused on creativity software and multimedia products. The firm was founded in 1982 and is headquartered in San Jose, California. Adobe is most known for its image editing software, Photoshop, but is also renowned for creating the Portable Document Format (PDF), Acrobat Reader, and Adobe Creative Cloud. In recent years, Adobe has focused its efforts on digital marketing software to provide online marketing and web analytics products contained within the Adobe Marketing Cloud. The company also provides
several other services including printing products and document publishing. Adobe currently operates with a market capitalization of $130.72 billion.

**Performance**

Adobe greatly outperformed the information technology sector in 2018, returning 27.32% compared with a sector loss of 0.03%. The consistently high levels of return that Adobe has provided is the result of strong financial fundamentals. The firm has a 24% year-over-year revenue growth and reported a record annual revenue of $9.03 billion in 2018. As Adobe has grown larger, it has continued to expand its profitability. During the last quarter of 2018, Adobe repurchased $700 million of its shares and completed a $1.68 billion acquisition of Magento Commerce.

**Alphabet Inc.**

Ticker: GOOGL  
Beta 1.17

**Description**

Alphabet Inc. is a corporate restructuring and holding company of Google, together with many of its subsidiaries, and was created on October 2, 2015. The company is headquartered in Mountain View, California. Google’s success started with its popular web browser, but the firm has since expanded to provide a vast number of products and services. These include Android, YouTube, Google Chrome, Google Cloud, Google Maps, and many more. Alphabet Inc. also holds investments in data management, infrastructure and artificial intelligence. Alphabet Inc. currently operates with a market capitalization of $846.31 billion.
**Performance**

Alphabet slightly underperformed the rest of the technology sector, ending 2018 down 2.66%. The company experienced substantial growth within the second and third quarters of 2018 but has suffered overall due to market weakness within the technology sector. However, Alphabet’s revenue and operating income have remained steady, and the firm has very strong financials overall. Alphabet Inc. does not have any financing concerns over growth projects and the development of new technologies as they have been able to generate ample amounts of cash flow from current operations.

**Apple Inc.**

Ticker: AAPL

Beta: 0.99

**Description**

Apple Inc. has been a leading innovator in computer hardware, software, and technology since its founding in 1976. The firm is currently headquartered in Cupertino, California. It has grown rapidly throughout its history, with its products including Mac, iPod, iPhone, Apple Watch, Apple TV, and many more. These products also utilize software unique to Apple, such as MacOS and iOS, meaning its products and services are compatible with one another. Apple Inc. continues its innovation today with ambitious projects such as Apple Energy, which will provide solar energy, and also plans to introduce electric vehicles. Apple Inc. currently operates with a market capitalization of $922.73 billion.
Performance

Apple struggled over the last half of 2018, resulting in a loss of 8.43%, well below the sector average. The firm was hurt by general weaknesses throughout the technology sector. International sales revenue has recently increased to account for 61% of total revenues, causing Apple to be more adversely affected by the recent trade tensions than other technology firms. Despite the struggles of 2018, Apple continues to be an industry leader in both performance and innovation. Should trade tensions ease, Apple is poised to have a successful 2019.

Applied Materials Inc.
Ticker: AMAT
Beta: 1.52

Description
Applied Materials, Inc. provides the equipment, services and software necessary to produce semiconductors for electronics. The firm is headquartered in Santa Clara, California and was founded in 1967. Applied Materials operates in many global locations including Europe, Japan, China, Israel, India, and more. It is one of the main suppliers of new chips and advanced displays in the world and has a constant demand for new and improved products.
Applied Materials posted large losses in 2018, decreasing in value by 38.27%. Markets reacted negatively to semiconductor production companies due to concerns of growth stagnation. Despite the growth that Applied Materials saw in revenues for 2018, many analysts are concerned about the outlook of the semiconductor industry. There have also been concerns raised that the current semiconductor environment is nearing its limit regarding capabilities. These concerns over future growth put great amounts of downward pressure on the share price of Applied Materials. The firm will need to continue to innovate in 2019 in order to quell investor concerns if it is to have a successful year.

Facebook
Ticker: FB
Beta: 1.18
Description
Facebook was founded in 2004 and is headquartered in Menlo Park, California. Facebook is the most popular social networking site currently on the market. Consumers can share ideas and connect with friends and family using its various platforms. Facebook’s strong data services allow businesses to market to targeted customers with customization features in Facebook platforms. From social sharing to business marketing, Facebook has become a powerhouse in the social media atmosphere. Facebook currently operates with a market capitalization of $502.46 billion.
Performance

Facebook was in the student managed portfolio from January 2018 to April 2018. The managing class for spring 2018 found substantial evidence to sell the 30 shares held in the fund due to recent events surrounding Facebook’s environment. In the beginning of 2018, Facebook found itself in the middle of the Robert Mueller investigation. The investigation found connections between Facebook and Russian operatives in an attempt to pit Americans against each other. This, among other news, led to a decrease in stock price of 16.01%. When comparing to the sectors ETF 1.55% and Facebook’s negative newsfeed, the class believed Facebook should no longer be part of the student managed portfolio.

International Business Machines

Ticker: IBM
Beta: 1.76

Description

International Business Machines (IBM) was founded in 1911 and is headquartered in Armonk, NY. The company provides services involved in many technological areas such as mainframe computers and nanotechnology. IBM also offers a vast amount of computer hardware and software, most notably in its cloud computing, commerce, data, and analytics categories. It also sells microprocessors and encryption hardware. IBM currently operates with a market capitalization of $127.06 billion.
IBM stock fell 26.31% in 2018, well below the sector average. The company reported 2 consecutive quarters of revenue decline to end 2018. IBM also announced a $34 billion acquisition of Red Hat Software, a multinational open-source software company. The goal for the firm is to better compete with Amazon, Microsoft, and Google. However, many analysts believe that Red Hat still has many issues, most notably its employee retention. Investors also generally believe that IBM overpaid for the acquisition. These results were the primary drivers of the loss seen in 2018. IBM will need to address its falling revenues and its plan for integrating Red Hat into its current business model in order for analysts and investors to become optimistic about the stock’s future prospects.

Lam Research Corporation

Ticker: LRCX
Beta: 1.54

Description
Lam Research Corporation was founded in 1980 and it is based in Fremont, California. It designs, manufactures, markets, refurbishes, and services semiconductor processing equipment used in the fabrication of integrated circuits worldwide. Lam Research’s product line includes semiconductor memory, foundry, and integrated device manufacturers that make products such as non-volatile memory, DRAM memory, and logic devices. Lam Research currently operates with a market capitalization of $27.76 billion.
Performance

Lam Research experienced a loss of 28.06% during 2018. This loss was much larger than the rest of the sector, which only lost 0.03% of its value. However, Lam Research was not added to the student managed portfolio until December 2018 and has actually gained 0.6% since this time. The primary driver of the loss experience by Lam Research in 2018 was the trade tension between the United States and China. This greatly affected Lam Research because a majority of the company’s revenues originate in Asia. The firm plans to maintain sufficient liquidity reserves to support sustaining levels of investment in research and development and capital infrastructure. These investments should help deliver better returns for the company in 2019 and beyond.

Salesforce.com

Ticker: CRM
Beta: 1.06

Description

Salesforce.com was founded in 1999 and is headquartered in San Francisco, California. Salesforce.com provides enterprise cloud computing solutions. The company focuses on cloud, mobile, social, Internet of Things (IoT), and artificial intelligence technologies. Salesforce delivers its services through internet browsers and mobile devices. Its Customer Success Platform is a mix of service offerings providing Salesforce automation, customer services and support, marketing automation, digital commerce, analytics, application development, and other professional cloud services. Salesforce.com currently operates with a market capitalization of $122.22 billion.
**Performance**

Salesforce was added to the student managed portfolio in early November 2018. Since then, the company has generated a return of 5.90%. The company easily outperformed the sector ETF, as it lost 6.50% of its value. The strong performance of Salesforce in 2018 was largely due to its revenue growth. Revenue was $10.48 billion in 2018, which represented an approximately 25% increase from 2017. Analysts expect continued growth from its cloud services as the company continues to benefit from the cross-selling of solutions, technology enhancements, international growth, and continued acquisitions. These opportunities for growth are what will drive the company forward into 2019 and provide exceptional returns for investors.

![Graph of Salesforce and VGT](image)

**Telecommunications**

**Comcast Corporation**

Ticker: CMCSA  
Beta: 1.04  
**Description**

Comcast Corporation is a media and technology company that was founded in 1963 and is headquartered in Philadelphia, Pennsylvania. Comcast has two primary businesses: Comcast Cable and NBCUniversal. Its Comcast Cable business operates in the cable communications segment and offers cable services including high-speed internet, video, voice, security and automation services to residential and business customers under the Xfinity name. Its NBCUniversal business operates in the cable networks, broadcast television, filmed entertainment, and theme parks segments. This business
helps operate national cable networks such as NBC and Telemundo. Its filmed entertainment segment produces and distributes filmed entertainment under the Universal Pictures, Illumination, DreamWorks Animation, and Focus Feature names. Comcast currently operates with a market capitalization of $180.95 billion.

**Performance**

Since the addition of Comcast to the fund in October, Comcast has fallen 3.3%, while the communications sector ETF fell 12.7% during the same time period. Throughout 2018, Comcast’s cable and media businesses performed exceptionally, despite distractions from the acquisition of Sky, one of the largest television providers in the U.K., earlier in the year. Comcast experienced continued cable customer growth, as well as new Internet access customers. Comcast’s cable and media networks have provided a significant competitive advantage versus its competitors, and Comcast is set to have a favorable year in 2019.

![Graph](image)

**Verizon Communications**

Ticker: VZ  
Beta: 0.51

**Description**

Verizon Communications is a holding company that operates in the communication services sector. The company was founded in 1983 and is headquartered in New York, New York. Through its subsidiaries, Verizon provides communications, information and entertainment products and services to consumers, businesses, and governmental agencies. Verizon has one of the largest consumer bases in the United States. Verizon operates through two segments: Wireless and Wireline. Through its Wireless segment, Verizon offers wireless voice and data services. This segment also provides a full-range of wireless devices such as smartphones and basic phones, wearables, and tablets. Its Wireline segment
offers traditional circuit-based network products and services. These products and services include broadband video and data; private Internet protocol (IP); Ethernet; networking solutions; data center and cloud services; cyber security services; and long distance and toll-free calling services under the Fios brand name. Verizon Communications currently operates with a market capitalization of $244.21 billion.

**Performance**

Since the addition of Verizon in October, Verizon has returned 2.2% which outperformed the sector ETF during the same time period. Verizon is expected to continue to perform well relative to its competitors. For the coming year, Verizon aims to lead the industry into 5G technology, and plans to launch 5G service in 30 markets during 2019. The company is relying heavily on its 5G effort with plans to deliver maximum capacity in some locations and grow its network demand. These technological advantages should help Verizon gain market share and have a successful 2019.

**American Electric Power Company**

**Ticker:** AEP  
**Beta:** 0.26  
**Description**

The American Electric Power Company was founded in 1906 and is headquartered in Columbus, Ohio. American Electric is a major investor-owned electric utility in the United States, delivering electricity to more than five million customers in 11 states. American Electric Power Company currently operates with a market capitalization of $40.76 billion.

**Performance**
American Electric returned 3.20% for 2018. This is above the utilities sector ETF, which remained constant during 2018. Performance in 2018 was driven by a robust economy, focus on investments to enhance service for customers, and very favorable weather during most of the year. The increase was also due to the effect of the Tax Cuts and Jobs Act enacted in December 2017. As a utility, growth prospects are not high moving forward, but all indications are that American Electric will continue to provide consistent income to investors for years to come.

Portfolio Performance

Narrative of Performance

The managers of the Bauhard Fund purchased several equities in 2018. In May, the fund added Amazon, Applied Materials, and Home Depot to its holdings. In October, the fund added equity positions of Comcast and Verizon. In November, the fund added a position in Salesforce, and in December, the fund added LAM Research and Lennar Corporation to its equity holdings. The total amount of purchases amounted to $14,257.88 and the total equity sales were $4,737.30. The fund also added two equities through spin-offs of Honeywell. Resideo Technologies and Garratt Motion Inc. were both spun-off from Honeywell, but the overall effects on the portfolio were not significant. The Bauhard Fund returned 1.43% in 2018, increasing from a total value of $139,280.94 on January 1, 2018 to a total value of $141,276.75 on December 31, 2018.
Throughout the year, the managers of the fund made changes to the portfolio. In April, the management team decided to sell Facebook. When Facebook was sold, the stock price was down 11.13% from January 1, 2018 which negatively impacted the fund’s performance for the year. Facebook was the sole equity sale for the fund in 2018.

The above figure shows the performance of the Bauhard Fund compared to the S&P 500. As the chart shows, the student managed investment fund closely tracked the index and slightly outperformed it. The Bauhard Fund graphed above includes all holdings by the Bauhard Fund, including an S&P 500 index fund, equities, and cash. The actively managed portion of the Bauhard Fund returned -2.16%, while the S&P 500 index returned -4.38%. The S&P 500 index fund had a negative effect on the portfolio, implying that the student managed portion of the fund performed better than the -2.16%.
The above chart shows the month-to-month changes for the equity portion of the Bauhard Fund and the S&P 500 index. The fund closely tracked the index. The fund was able to outperform the index in February, March, May, July, September, October, and November, but the fund was outperformed in January, April, June, August, and December. Note that both the Bauhard Fund and the S&P 500 had a very poor December. The stock market had one of the worst December performances in nearly a century in 2018. This sharp decline can be attributed to rising interest rates, international trade tensions, investor uncertainty, and other factors.

**Bauhard Fund Performance by Sector**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Materials</td>
<td>-17.67%</td>
</tr>
<tr>
<td>Consumer Cyclic</td>
<td>3.14%</td>
</tr>
<tr>
<td>Consumer Defensive</td>
<td>1.97%</td>
</tr>
<tr>
<td>Energy</td>
<td>-15.26%</td>
</tr>
<tr>
<td>Financial Services</td>
<td>-1.91%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>14.02%</td>
</tr>
<tr>
<td>Industrials</td>
<td>-5.54%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>13.62%</td>
</tr>
<tr>
<td>Technology</td>
<td>-5.56%</td>
</tr>
<tr>
<td>Utilities</td>
<td>5.88%</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>-1.47%</td>
</tr>
<tr>
<td>Total Portfolio</td>
<td>-2.16%</td>
</tr>
</tbody>
</table>

The table above displays the total return of the Bauhard Fund by sector for 2018. Although the basic materials sector resulted in the largest percentage loss, the sector only represents 2.48% of the total portfolio. The other major loss is the energy sector, with a loss of 15.26%. However, this sector
represents only 2.40% of total fund holdings. Therefore, the impact of these two sectors on the total portfolio is minimal. Similarly, the 13.62% gain in the real estate sector lacks much significance due to the fund only having 2.85% of assets invested in the sector. However, the 14.02% gain in the healthcare sector was significant for the fund, as 11.11% of total assets are invested in the healthcare sector. This sector was the largest positive contributor to the fund for 2018. Another significant sector was the consumer discretionary, which increased by 3.14% and accounts for 18.77% of total assets in the Bauhard Fund.

**Top 5 and Bottom 5 Performers**

The chart above shows the five best and worst performers of the Bauhard Fund in 2018. In the top five performers, each position is from a different sector, indicating a good level of diversity in high performing positions. The bottom five performers come from four different sectors, where both Advansix and Applied Materials are in the basic materials sector. Although Advansix decreased 42.74%, the student managers decided against selling the position as it was not cost effective due to the portfolio only holding one share in the company.
Dividend Distribution

Not all dividends received throughout the year are elected for reinvestment. The table above represents the dividends paid in cash by equities in the portfolio and directed into the cash balance of the Bauhard Fund rather than reinvestment in shares of the firms. This is done to improve fund liquidity and ensure that the student analysts will have appropriate purchasing power moving forward. This cash distribution allows for the reallocation of funds in the portfolio, increasing the number of learning opportunities for the students in the class.

Performance Measures

<table>
<thead>
<tr>
<th></th>
<th>Bauhard Fund</th>
<th>S&amp;P 500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return</td>
<td>-2.16%</td>
<td>-4.38%</td>
</tr>
<tr>
<td>Required Return</td>
<td>-4.31%</td>
<td>-4.38%</td>
</tr>
<tr>
<td>Beta</td>
<td>0.99</td>
<td>1</td>
</tr>
<tr>
<td>Jensen’s Alpha</td>
<td>2.15%</td>
<td></td>
</tr>
<tr>
<td>Treynor Ratio</td>
<td>-4.65%</td>
<td></td>
</tr>
</tbody>
</table>

The above table shows the performance of the Bauhard Fund managed equity portion. The fund’s portfolio was evaluated using Jensen’s Alpha and the Treynor Ratio. Jensen’s Alpha was calculated by finding the required return for the portfolio. This number was derived using the capital asset pricing model. Inputs for the model consisted of a risk-free rate of 2.44% which was the 30-day Treasury bill rate on December 31, 2018. The return of the S&P 500 was used for the market return. A weighted beta was calculated for the fund, and the resulting beta was 0.99. This indicates that the Bauhard Fund was...
slightly less volatile than the market, thus accepting less risk. The Jensen’s Alpha of 2.15% indicates the Bauhard Fund had a return that was 2.15% greater than the expected return of the portfolio given its risk profile. A positive alpha indicates that the fund over performed in 2018. The Treynor Ratio shows the rate of return for each unit of risk. Due to the portfolio return being less than the risk-free rate, the fund had a negative Treynor Ratio of -4.65%.

**Total Portfolio Value**

<table>
<thead>
<tr>
<th>Bauhard Fund Values</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Equities</td>
<td>$102,009.16</td>
<td>$113,920.88</td>
</tr>
<tr>
<td>Total Mutual Funds</td>
<td>$36,415.33</td>
<td>$26,681.56</td>
</tr>
<tr>
<td>Total Cash</td>
<td>$856.45</td>
<td>$674.31</td>
</tr>
<tr>
<td>Total Portfolio Value</td>
<td>$139,280.94</td>
<td>$141,276.75</td>
</tr>
</tbody>
</table>

The Bauhard Fund grew $1,995.81, or 1.43%, in 2018. The fund liquidated various Vanguard mutual funds and used cash in order to make the equity purchases during the year, as noted in the table above. The managers of the Bauhard Student Managed Investment Fund considered 2018 to be a success for the portfolio. The fund outperformed the target index and produced a positive Jensen’s Alpha. This indicates that the decisions made by past and present student managers regarding sector allocation and individual equity selection resulted in a significantly higher return than that realized by the benchmark portfolio.
Lessons Learned

“The Bauhard Student Managed Investment Fund has given me a valuable opportunity to learn from a real-world experience. It has been amazing because I have acquired practical knowledge and I have been in touch with the market on a weekly basis. Besides, I have enjoyed this experience a lot because I was able to apply all techniques learned throughout college to make real world investments and contribute to our portfolio. Moreover, this class has been very helpful because I have inquired different approaches and views from all students which has motivated me to find better securities to add to our fund. Finally, this course has taught me to speak in front of an audience and defend my position.” - Jose Balado Perez

“In this class I have experienced real world applications in finance. This class taught me first-hand about finance. This was not a class; it was a real-world learning experience. Working with real values gave greater consequences and overall led to better results in research and assumptions for the class. I believe the lessons taught will be beneficial to my future progress in the finance industry.” - Trae Blanco

“Managing the fund has been a great opportunity for me, both to grow professionally and better understand markets. The knowledge of understanding how to value stocks and balance a portfolio will be something I retain for my entire life. This class has taught me that I always have room to improve, and has given me guidance on how I need to continue to develop as I near graduation. This class made me adapt my approach to the class to be more successful, and showed me there is no one single way to be successful. The most important lesson I have learned is that those who can adapt are the ones who can find success anywhere they are. -Ryan Brungardt

“Managing the Bauhard Fund helped prepare me for life after college in a variety of ways. The most notable benefit that I received was the understanding of how important it is to truly understand something when you present about it. The equity valuations that we conducted were based on many assumptions, and you had to be able to provide quantitative evidence to support why you made the assumptions that you did. This is something of extreme value in the world of finance but is also applicable in all other aspects of life.” -Ryan Clark

“Working with the Bauhard Student Managed Investment Fund has been one of the most valuable experiences in my whole college experience. The most important thing that I have learned is the fundamental analysis required to invest in individual equities and the importance of being very diligent in your research.” - Tristan Crook
“Bauhard fund has given me a good opportunity to learn how to manage the portfolio in the real world. We use effective ways to communicate the current status of portfolio. At the beginning of the class to the end of the class, the learning experience helps me on deeper understanding of investment, and it will be helpful skills in my future career.” - Ting Ding

“Being able to help manage the Bauhard Fund has been a significant experience for me as it has provided me with the opportunity to gain real-world experience in portfolio management. Throughout the course, I have learned so much by doing extensive research on companies, analyzing market trends, interpreting financial documents, and conducting relative and intrinsic valuations. Learning about different companies and industries was very fascinating to me. In addition, being able to monitor the portfolio and make buy/sell recommendations have given me a deeper understanding of the financial markets. I am very grateful for the learning experience and will be carrying all the skills I have gained onto my professional career.” - Andy Gonzalez

“Participating as a student manager of the Bauhard Fund has served as a challenging experience for me. The various components and intricacies involved in managing an investment portfolio have provided me the chance to learn about my personal strengths and weaknesses. Additionally, the class reinforced the importance of cooperating with others and accommodating their needs when it relates to the group’s overall success. A significant takeaway from the course has been to recognize and capitalize on opportunities to act as a facilitator of the student group’s goals in order to achieve person growth” – Daniel Hernandez Ochoa

“I would say nobody expected to manage fund through a year before getting in this university. This course gave me an opportunity to link our knowledge with real world and consider my future career. It almost felt like I worked as a fund manager in a financial institution. I have learned it’s necessary to provide deep and sophisticated analysis to convince others when we make a big decision in business. I am sure that this program brought me many meaningful experiences enough to change my way of thinking.” - Ryo Ishikawa

“Learning the importance of thoroughly understanding a company, its business operations, and its industry before ever investing a significant amount of capital into it. Effectively working with a team of peers, and understanding how to promote cooperation and diligence throughout the entirety of our time together.” - Pate Katechis

“Managing the Bauhard Fund has been an educational and enjoyable experience. It was advantageous leaning various valuation techniques and how to analyze a business. The fund also required that you stay up to date with the market and the news surrounding it. The skill set learned
throughout this hands-on experience will not only help in a professional career, but everyday life as the class learned about retirement and financial planning. Overall, the class was something I looked forward to and I enjoyed working with classmates to value companies for various stock pitches." - Calvin Ochs

“Managing the Bauhard Student Managed Investment Fund has granted me real world experience and knowledge with managing an equity portfolio. By managing real money, the classwork had a real feel to it and students worked harder than I have experienced in other classes. The fund allowed me to become comfortable with speaking on my feet, being professional, and backing up my ideas with facts.” - Adam Starr

“Managing the Bauhard Fund has provided me with the experience necessary to have a better understanding about the overall market. The weekly market updates have been beneficial in understanding what drives value in large companies. Pitching stocks for the fund and participating in the voting proceedings has provided a unique view on how a team of analysts may decide to invest. This has given me an appreciation for the vast amount of analysis that is required in understanding what is necessary to confidently invest in a company.” - Christopher Strohmyer

“Working with this fund has given me an experience that I will never forget. It has helped me grow as a student and as a professional. My public speaking skills have improved greatly from these presentations and helped me work better in a group. I have learned how to value stocks and how to make informed decisions using the information I have gathered.” - Madisson Whalen
Student Analysts

From left to right, back row: Jose Balado Perez, Tyler Myers, Benedikt Kramer, Ryo Ishikawa, Adam Starr, Calvin Ochs, Graham Schnoor, Trae Blanco, Tristan Crook, Chris Strohmyer, Daniel Hernandez Ochoa, Lawrence Mack, Pate Katechis. Front row: Madisson Whalen, Megan Dudden, Ting Ding, Allison Beckman, Jiayao Han, Jingyan Zhang.

From left to right, back row: Austin Partridge and Blake Holtmeier. Front row: Jake Filsinger, Yoshiaki Kasugahara, and Matthew Testa.