Undergraduate Student Managed Fund
2015 Spring Presentation

March 12, 2015
Portfolio Managers

Lead Manager: Alexander Thalassinos
Portfolio Manager: Kelly McCourt
Treasurer/Secretary: Mitesh Mistry
Bloomberg Specialist: Stephen Vento
Web Manager: Akanksha Singh

Cinzia Alfano  Michelle Filippi  Andrew Novitski
Louis Beck  Samuel Gudeon  Akanksha Singh
Ryan Conforti  Kelly McCourt  Alexander Thalassinos
Nicolas Chapman  Mitesh Mistry  Stephen Vento

Undergraduate Supervisor: Patrick Terrion
Fund Director: Chinmoy Ghosh
Portfolio Overview

Objective
• Outperform the S&P 500
• Learn to analyze as value investors

Philosophy
• Search for undervalued securities based on estimation of intrinsic value compared to current market price

Approach
• Focus on the business – Bottom Up Approach
Portfolio Overview

Risk Management
• Business Model Risk
• Balance Sheet Risk
• Management Risk
• Aggregation Risk

Stop Loss Orders – 20% on each investment
Diversification
Focus on long-term growth
Economic Outlook

- U.S. economy has seen a drop in unemployment
- Drop in Oil Prices over last several months
- End of QE in U.S. and start of QE in Europe
- Slow European Growth
- Lower growth in Asia and Emerging markets
Investment Process

Step 1
• Manager Researches Chosen Company

Step 2
• Presents Research to Other Managers

Step 3
• Thorough Discussion on Company Research

Step 4
• Majority of Managers Vote for Approval

Step 5
• If Yes → Vote on Allocation of Capital
• If No → Conduct Further Research
Investment Process Highlights

- Strong Business Model
- Shareholder Return Policy
- Competitive Position
- Sustainable Growth
- Return on Invested Capital
- Sustainable Barriers to Competition
Investment Tools
## Sector Allocation

<table>
<thead>
<tr>
<th>Sector</th>
<th>% of Invested Portfolio</th>
<th>S&amp;P 500 Sector Breakdown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Goods</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>Consumer Services</td>
<td>0%</td>
<td>12%</td>
</tr>
<tr>
<td>Energy</td>
<td>11%</td>
<td>14%</td>
</tr>
<tr>
<td>Financials</td>
<td>21%</td>
<td>16%</td>
</tr>
<tr>
<td>Basic Materials</td>
<td>0%</td>
<td>3%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>Industrials</td>
<td>13%</td>
<td>11%</td>
</tr>
<tr>
<td>Technology</td>
<td>29%</td>
<td>21%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Portfolio vs. S&P 500

*As of February 20th

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Portfolio</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividend Yield</td>
<td>1.66</td>
<td>1.95</td>
</tr>
<tr>
<td>Price to Earnings Ratio (P/E)</td>
<td>17.18</td>
<td>18.48</td>
</tr>
<tr>
<td>Price to Cash Flow Ratio (P/CF)</td>
<td>12.12</td>
<td>11.66</td>
</tr>
<tr>
<td>Price to Book Ratio (P/B)</td>
<td>2.90</td>
<td>2.87</td>
</tr>
<tr>
<td>Total Debt to Common Equity</td>
<td>67.09</td>
<td>113.63</td>
</tr>
<tr>
<td>Current Ratio</td>
<td>1.30</td>
<td>1.41</td>
</tr>
</tbody>
</table>

- Total Portfolio Performance: -1.49%
- Equity Performance: -0.76%
- S&P 500 Performance: 2.5%
Equity Allocation

General Allocation
• 100% - Equities

Average Position Size – 7.69%

<table>
<thead>
<tr>
<th>Top 10 Securities in Portfolio by:</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mastercard Inc.</td>
<td>13.22%</td>
</tr>
<tr>
<td>American Express Co.</td>
<td>11.77%</td>
</tr>
<tr>
<td>Markel Corp.</td>
<td>10.71%</td>
</tr>
<tr>
<td>United Technologies Corp.</td>
<td>7.83%</td>
</tr>
<tr>
<td>AT&amp;T Inc.</td>
<td>7.79%</td>
</tr>
<tr>
<td>Express Scripts Holding Co.</td>
<td>7.48%</td>
</tr>
<tr>
<td>National Oilwell Varco Inc.</td>
<td>7.78%</td>
</tr>
<tr>
<td>Gilead Sciences inc.</td>
<td>6.33%</td>
</tr>
<tr>
<td>International Business Machines</td>
<td>5.79%</td>
</tr>
<tr>
<td>Diageo Plc.</td>
<td>5.31%</td>
</tr>
</tbody>
</table>
## Total Portfolio Overview

<table>
<thead>
<tr>
<th>Name</th>
<th>Symbol</th>
<th>Last Price ($)</th>
<th>Shares</th>
<th>Cost basis ($)</th>
<th>Market Value ($)</th>
<th>Gain</th>
<th>Gain %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Express Scripts Holding Company</td>
<td>ESRX</td>
<td>81.39</td>
<td>1716</td>
<td>123721.88</td>
<td>139665.24</td>
<td>15943.36</td>
<td>12.89</td>
</tr>
<tr>
<td>International Business Machines Corp.</td>
<td>IBM</td>
<td>157.81</td>
<td>685</td>
<td>127084.45</td>
<td>108099.85</td>
<td>-18984.6</td>
<td>-14.94</td>
</tr>
<tr>
<td>Procter &amp; Gamble Co</td>
<td>PG</td>
<td>81.54</td>
<td>1200</td>
<td>99720</td>
<td>97848</td>
<td>-1872</td>
<td>-1.88</td>
</tr>
<tr>
<td>Markel Corporation</td>
<td>MKL</td>
<td>738.1</td>
<td>271</td>
<td>174386.6</td>
<td>200025.1</td>
<td>25638.5</td>
<td>14.7</td>
</tr>
<tr>
<td>United Technologies Corporation</td>
<td>UTX</td>
<td>117.4</td>
<td>1245</td>
<td>125306.76</td>
<td>146163</td>
<td>20856.24</td>
<td>16.64</td>
</tr>
<tr>
<td>AT&amp;T Inc.</td>
<td>T</td>
<td>32.78</td>
<td>4440</td>
<td>152425.2</td>
<td>145543.2</td>
<td>-6882</td>
<td>-4.52</td>
</tr>
<tr>
<td>Mastercard Inc</td>
<td>MA</td>
<td>88.84</td>
<td>2778</td>
<td>199716.94</td>
<td>246797.52</td>
<td>47080.58</td>
<td>23.57</td>
</tr>
<tr>
<td>Diageo plc (ADR)</td>
<td>DEO</td>
<td>112.01</td>
<td>885</td>
<td>100082.66</td>
<td>99128.85</td>
<td>-953.82</td>
<td>-0.95</td>
</tr>
<tr>
<td>Gilead Sciences, Inc.</td>
<td>GILD</td>
<td>-</td>
<td>1334.00</td>
<td>147585.63</td>
<td>115924.70</td>
<td>(31660.93)</td>
<td>-21.45</td>
</tr>
<tr>
<td>Gilead Sciences, Inc.</td>
<td>GILD</td>
<td>98.83</td>
<td>1197</td>
<td>116463.15</td>
<td>118299.51</td>
<td>1836.36</td>
<td>1.58</td>
</tr>
<tr>
<td>Chevron Corporation</td>
<td>CVX</td>
<td>102.91</td>
<td>850</td>
<td>99666.65</td>
<td>87473.5</td>
<td>-12193.15</td>
<td>-12.23</td>
</tr>
<tr>
<td>Precision Castparts Corp.</td>
<td>PCP</td>
<td>210</td>
<td>442</td>
<td>100393.67</td>
<td>92820</td>
<td>-7573.67</td>
<td>-7.54</td>
</tr>
<tr>
<td>National-Oilwell Varco, Inc.</td>
<td>NOV</td>
<td>50.68</td>
<td>2205</td>
<td>145216.38</td>
<td>111749.4</td>
<td>-33466.98</td>
<td>-23.05</td>
</tr>
<tr>
<td>American Express Company</td>
<td>AXP</td>
<td>79.11</td>
<td>2621</td>
<td>219772.84</td>
<td>207347.31</td>
<td>-12425.53</td>
<td>-5.65</td>
</tr>
<tr>
<td><strong>Portfolio Value</strong></td>
<td></td>
<td></td>
<td></td>
<td>1,783,957.18</td>
<td>1,800,960.48</td>
<td>(14,657.64)</td>
<td>-0.76%</td>
</tr>
</tbody>
</table>
Allocation Effect
Selection Effect

- Utilities
- Telecommunication Services
- Materials
- Information Technology
- Industrials
- Health Care
- Funds
- Financials
- Energy
- Consumer Staples
- Consumer Discretionary

*Graph showing sector performance with Industrials being the highest positive performance.*
Interesting Holding:  

- Healthcare Sector
- Unrealized loss of 11.30%
- Volatility:
  - Express Scripts
  - CVS Caremark

Future Outlook

- CVS Caremark – exclusive coverage
- Continued Pricing Pressures
Underperforming Stocks: IBM

- Technology Sector
- Unrealized loss of 14.94%
- Disappointed on Q3 earnings
  - Stagnant/Decreasing revenues
- Issues implementing the new cloud system

Future Outlook

- Established relationships with large corporations
  - Companies are already integrated with IBM, tough to switch away
- Ability to manage incredible amounts of data has IBM set up for future opportunities
Underperforming Stocks:

- Energy Sector
- Unrealized loss of 23.05%
  - Less exploratory drilling
  - Strong 2014 financials

Future Outlook
- Market share is unaffected
- $12.5 billion backlog
- Volatility not risk
Best Performing Stocks: MasterCard

- Technology Sector
- Unrealized gain of 23.57%
- Strong Q4 earnings, up 17% YoY from the 4th quarter and revenues rose 14%
- New opportunities in China to couple increased global presence
Best Performing Stocks: United Technologies

- Industrials Sector
- Unrealized gain of 16.64%
- 2014 EPS of $6.82, a 10% growth in EPS YoY
- Increased demand in China and India for infrastructure
Lessons Learned

• Investment Philosophy
• Allocation of Capital
• Thinking Process
• Teamwork and Diversity of Ideas