Fundamentally Based Portfolio Weighting Models: A Multi-Factor Approach
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• Study Purpose:
Determine if a fundamentally-weighted multi-factor model outperforms the market

• Weighting Factors:
1. Price to Book (P/B)
2. Price to Sales (P/S)
3. Price to Earnings (P/E)
4. Price to Cash Flow (P/CFL)
5. Earnings Growth (EG)

• Weighting Model:
Example:

\[ \frac{WP}{Bi} = \frac{Avg. \ P/B}{P/B(i)} \]

\[ MFW_i = WP/Bi + WP/Si + WP/Ei + WP/CFLi + WEGi \]

• Weighting Model Adjustments:
Original Multi-Factor weighting model adjusted to give higher weight to the Price to Sales factor

Periods of Analysis: 2014
Sectors Analyzed:
• XLV = Healthcare
• XLP = Consumer Staples
• XLY = Consumer Discretionary

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</thead>
<tbody>
<tr>
<td>XLV</td>
<td>23.34%</td>
<td>11.74%</td>
<td>22.42%</td>
<td>24.28%</td>
<td>36.66%</td>
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<td>XLY</td>
<td>7.96%</td>
<td>11.74%</td>
<td>17.80%</td>
<td>19.18%</td>
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<td>XLP</td>
<td>15.72%</td>
<td>11.74%</td>
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<th>Multi-Factor</th>
<th>1st Stage Adj.</th>
<th>2nd Stage Adj.</th>
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<td>$6.90</td>
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<td>$6.00</td>
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<td>Org. Inv</td>
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• Conclusions
(1) Multi-Factor model for XLV, XLY, XLP outperforms the market
(2) 1\textsuperscript{st} Stage and 2\textsuperscript{nd} Stage Adj. models also outperform the market
(3) Best model is the 2\textsuperscript{nd} Stage Adj. model
(4) Original investment of $5,000,000 in 2\textsuperscript{nd} Stage Adj. model generates $1.9M in dollar return