Weighting Strategies for Information Technology Stocks

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Study Purpose:
- Develop Capture Ratio Weighting Strategies for XLK Sector

Weighting Model:

\[ Wi = \frac{U_i/D_i}{\sum U_i/D_i} \quad WUi = \frac{U_i}{\sum U_i} \quad WDi = \frac{D_i}{2a\sum D_i} \]

Where:
- \( Wi = \% \text{ invested in with stock} \)
- \( U_i = \text{Upside Capture Ratio} \)
- \( D_i = \text{Downside Capture Ratio} \)


Sector Analyzed:
- XLK = Information Technology Sector

Table 1: XLK Cumulative Returns

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<tbody>
<tr>
<td>Up/Down Capture Ratio</td>
<td>146%</td>
<td>162%</td>
</tr>
<tr>
<td>Upside</td>
<td>145%</td>
<td>166%</td>
</tr>
<tr>
<td>Downside</td>
<td>129%</td>
<td>145%</td>
</tr>
<tr>
<td>XLK US Equity</td>
<td>77%</td>
<td>82%</td>
</tr>
<tr>
<td>SPY US Equity</td>
<td>81%</td>
<td>77%</td>
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Conclusions:
- XLK Up Down Capture Ratio outperforms both the XLK Sector and SPY for both time periods
- Upside Capture Ratio outperforms both XLK and SPY
- Downside Capture Ratio outperforms both XLK and SPY
- All Capture Ratio weighted portfolios have increasing returns from 2014 – 2015 as the market declines