Weighting Strategies for Materials Stocks

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

Weighting Model:

\[ W_i = \frac{U_i/D_i}{\sum U_i/D_i} \]

UWi = Ui/ΣUi

DWi = Di/ΣDi

Where:
- Wi = % invested in ith stock
- Ui/Di = Up/Down Capture Ratio
- Ui = Upside Capture Ratio
- Di = Downside Capture Ratio


Sector Analyzed:
- XLB = Materials Sector

Conclusions:
- XLB Up Down Capture Ratio outperforms both the XLB Sector and SPY for both time periods
- Upside Capture Ratio outperforms both XLB and SPY
- Downside Capture Ratio outperforms both XLB and SPY
- Downside Capture Ratio provides maximum performance

Table 1: XLB Cumulative Returns

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<tbody>
<tr>
<td>Up/Down Capture Ratio</td>
<td>120%</td>
<td>102%</td>
</tr>
<tr>
<td>Upside</td>
<td>103%</td>
<td>93%</td>
</tr>
<tr>
<td>Downside</td>
<td>125%</td>
<td>106%</td>
</tr>
<tr>
<td>XLB US Equity</td>
<td>43%</td>
<td>26%</td>
</tr>
<tr>
<td>SPY US Equity</td>
<td>81%</td>
<td>77%</td>
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