US Pure Factor and Style performance and attribution analysis: Quality continues as the leading factor while Value gains ground against Growth

Analytical Insights: Why has factor and style performance diverged?
Quality continues to be the leading factor in 2023

Exposure to Quality has been well rewarded in Q3 continuing the trend of the rest of 2023. Value continues to show signs of rehabilitation.

Low Beta and Size have been punished throughout 2023 (page 3).

Value Style outperforms Growth Style in Q3

Modest performance gains have been made by Value Style over Growth Style in Q3. However Growth still dominates Value over the whole of 2023 (page 5).

Insights: Style Indexes versus Pure Factors

Why do these superficially similar index types perform so differently? We resolve the issue with an exposure and performance attribution analysis (page 7).

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US Pure Single Factors: Performance - Quality continues to lead the way in 2023 while low Beta lags behind

Chart 1: Quality, Momentum and Value continue to outperform the benchmark in Q3 with Quality leading the way. (Low) Beta and Size lag behind.

Chart 2: Quality, Momentum and Value have lead the benchmark YTD, whilst Beta and Size significantly underperformed.

Chart 3: Quality remains the only factor that has outperformed over all longer periods. Value’s one and three year outperformance signals its rehabilitation.

Chart 4: Quality, Beta, Value and Size outpaced the benchmark until an inflection in Jan 23. Since then only Quality and Momentum have made progress.

Source: Wilshire Indexes. Data as of September 29, 2023

<table>
<thead>
<tr>
<th>Returns (USD, TR %)</th>
<th>1Y</th>
<th>3Y</th>
<th>5Y</th>
<th>10Y</th>
<th>Base Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Large Cap</td>
<td>21.8</td>
<td>9.8</td>
<td>10.1</td>
<td>12.0</td>
<td>7.0</td>
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<tr>
<td>Pure Beta</td>
<td>12.0</td>
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<td>8.0</td>
<td>11.3</td>
<td>8.1</td>
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<tr>
<td>Pure Momentum</td>
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<td>6.9</td>
<td>9.5</td>
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<td>8.6</td>
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<tr>
<td>Pure Quality</td>
<td>32.3</td>
<td>13.3</td>
<td>10.7</td>
<td>12.2</td>
<td>8.4</td>
</tr>
<tr>
<td>Pure Size</td>
<td>16.0</td>
<td>8.1</td>
<td>8.4</td>
<td>11.2</td>
<td>8.2</td>
</tr>
<tr>
<td>Pure Value</td>
<td>25.1</td>
<td>12.2</td>
<td>8.4</td>
<td>10.4</td>
<td>7.1</td>
</tr>
</tbody>
</table>

*Annualized performance
US Pure Single Factors: Performance Attribution & Correlation - Stock Specific (Residual) return important in Q3

Chart 1: Factor Attribution Q3
On target contributions explain most of the excess return for Value and Size, but the residuals are significant for Quality, Momentum and Beta.

Chart 2: Factor Attribution YTD
On target exposures for Size and Beta caused severe underperformance. Only Momentum and Value display positive on target contributions.

Chart 3: Factor Attribution - 3 Year
Quality and Value have positive on target contributions, albeit with significant residual components. On target Size and Beta drive their underperformance.

Chart 4: Correlation of Excess Return - 3 Year
Significant correlations exist between Value and Momentum (negative) and Value and Quality (positive). Other off diagonal correlations are small.

Source: Wilshire Indexes. Data as of September 29, 2023
US Style Performance: Despite Value outperforming Growth in Q3, Growth leadership remains dominant YTD

**Chart 1:** Value has outperformed Growth Style in Q3 for both large and small cap universes, reversing the trend observed over the previous months of 2023.

**Q3 2023 Style Performance (TR USD %)**

<table>
<thead>
<tr>
<th></th>
<th>US Large</th>
<th>US Small</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>-3.5%</td>
<td>-4.1%</td>
</tr>
<tr>
<td>Growth</td>
<td>-3.1%</td>
<td>-3.2%</td>
</tr>
<tr>
<td>Market Cap</td>
<td>-2.7%</td>
<td>-5.1%</td>
</tr>
</tbody>
</table>

**Chart 2:** YTD Growth continues to dominate Value by a wide margin in both large and small cap universes. Large caps have outperformed small caps.

**YTD 2023 Style Performance (TR USD %)**

<table>
<thead>
<tr>
<th></th>
<th>US Large</th>
<th>US Small</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>27.3%</td>
<td>13.8%</td>
</tr>
<tr>
<td>Growth</td>
<td>13.8%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Market Cap</td>
<td>1.8%</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

**Chart 3:** Value has outpaced Growth over a 3-year period but over the last year this was reversed. The 10-year trend still favours Growth for large caps.

**Returns (USD, TR %)**

<table>
<thead>
<tr>
<th></th>
<th>1Y</th>
<th>3Y</th>
<th>5Y</th>
<th>10Y</th>
<th>Inception</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Large Cap</td>
<td>21.8</td>
<td>9.8</td>
<td>10.1</td>
<td>12.0</td>
<td>7.0</td>
</tr>
<tr>
<td>US Large Cap Value</td>
<td>15.3</td>
<td>11.5</td>
<td>7.4</td>
<td>9.8</td>
<td>7.2</td>
</tr>
<tr>
<td>US Large Cap Growth</td>
<td>28.3</td>
<td>7.7</td>
<td>12.4</td>
<td>14.1</td>
<td>6.3</td>
</tr>
<tr>
<td>US Small Cap</td>
<td>13.4</td>
<td>9.5</td>
<td>5.0</td>
<td>8.2</td>
<td>9.0</td>
</tr>
<tr>
<td>US Small Cap Value</td>
<td>12.9</td>
<td>15.3</td>
<td>4.9</td>
<td>7.9</td>
<td>10.0</td>
</tr>
<tr>
<td>US Small Cap Growth</td>
<td>14.0</td>
<td>3.7</td>
<td>4.7</td>
<td>8.2</td>
<td>7.4</td>
</tr>
</tbody>
</table>

*Annualized performance

**Chart 4:** Over the last year, LC Growth began to gain on LC Value in January and overtook it in May. Since that point Growth has dominated.

Source: Wilshire Indexes. Data as of September 29, 2023

*Wilshire Indexes – Quarterly Factor/Style Report (October 2023)*
US Style Index: Active Exposures and Attribution - Growth style has benefited from its high beta exposure YTD

Chart 1: Large Value has the expected value exposure but is also tilted to small cap and low beta. Large Growth is positive on quality and momentum.

Style Indexes: Active Factor Exposures

Chart 2: Value and Growth display equal and opposite active industry weightings. As typical, Growth is overweight tech whilst Value is overweight energy.

Active Industry Weights

Chart 3: Value has benefited from value and industry exposures in Q3, but has suffered from its low beta orientation YTD. Growth's high beta is the main source of its outperformance YTD.

Style Indexes: Q3 2023 Factor Attribution

Style Indexes: YTD Factor Attribution

Source: Wilshire Indexes. Data as of September 29, 2023
Insights: Why have Style Indexes and Pure Factors delivered significant differences in performance profiles over the course of 2023?

Divergent factor and style return profiles confront received wisdom

To understand this, it is helpful to examine the widely held belief that Value Style is more or less driven by the value factor and that Growth Style is closely aligned with quality. We demonstrate that these relationships are significantly more nuanced by comparing the factor exposures of Value Style vs Pure Value and Growth Style vs Pure Quality. Performance differences are then explained by factor attribution.

Chart 1: Year to date, Pure Quality has underperformed Growth Style (blue) whilst Pure Value has outperformed Value Style (red). Why?

![Chart 1](chart1.png)

Chart 2: Growth Style has outperformed Value Style by a wide margin (red), whereas Pure Quality has outperformed Pure Value by only a small amount (blue). How can this be explained?

![Chart 2](chart2.png)

Source: Wilshire Indexes. Data as of September 29, 2023

Wilshire Indexes – Quarterly Factor/Style Report (October 2023)
**Value Style vs Pure Value: Exposure and performance attribution comparisons - on and off target exposures are the key**

**Chart 1:** Value Style exhibits moderate positive exposures to all valuation metrics with additional "off target" low beta and size exposures. By design, Pure Value only has significant exposure to the valuation measures.

**Chart 2:** Factor and Industry attribution reveals that YTD, 'on target' valuation variables and active industry weights have been of little benefit to Value Style, whereas 'off target' size and low beta exposures act as significant drags. On the other hand, Pure Value has seen its modest outperformance arising solely from on target valuation exposures. In summary, performance drivers are different.
Growth Style vs Pure Quality: Exposure and performance attribution comparisons — off target exposures and stock specifics

Chart 1: Growth Style has significant "off target" exposures to large cap, high beta and poor value. On the other hand, Pure Quality displays significant exposure only to the ROE and Accruals.

Chart 2: YTD most of the large excess return enjoyed by Growth Style has arisen from its high beta orientation. Pure Quality has derived most of its excess return from a stock specific contribution, with the only significant "on target" contribution being a negative one from ROE. The performance drivers of Growth Style and Pure Quality have been very different thus far in 2023.

Source: Wilshire, FactSet and Refinitiv. Data as of September 29, 2023

Wilshire Indexes – Quarterly Factor/Style Report (October 2023)
Why have Style Indexes and Pure Factors delivered significant differences in performance profiles over the course of 2023?

Our performance attribution analysis shows that the YTD 2023 performance of Value Style and Growth Styles are driven by a variety of factor and industry exposures.

- Value Style’s underperformance has been dominated by it’s low beta and small cap orientation. Its positive exposure to valuation measures has yielded very little contribution to excess return.

- Growth Style outperformance is mostly attributable to its high beta orientation.

On the other hand Pure Value and Pure Quality YTD 2023 performance is driven by their ‘on target’ value and quality exposures respectively, or else by stock specific components.

- Pure Value’s moderate outperformance is driven by a net contribution from its valuation exposures.

- Pure Quality appears to derive most of its outperformance from stock specific return.

The divergence in performance of Style Indexes and Pure Factors in 2023 is therefore explained by their differing factor and industry exposures.

The nature of the respective alignment of Value Style and Growth Style with value and quality risk premia is therefore a far more nuanced affair than commonly appreciated.
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