

US Mutual Fund Performance Update

Active funds caught offsides by beta rally

July's cyclical rally drove 36% hit rate for large cap funds

Just 36% of active large cap funds outperformed their Russell benchmark (a 21st percentile month) and the avg. fund underperformed by 22bp. Latest positioning data (ownership) shows evidence of window dressing on steroids (Exhibit 1), catching PMs offside by July's shift in leadership. Cyclicals (Energy +7.6%, Financials +5.5% vs. Russell 1000 +3.4%), where funds are largely underweight, and factor performance closely tracked a Recovery playbook (Performance Monitor). Funds' defensive bias likely hurt, where after a year of positioning for a US recession (no longer BofA's base case), long-only funds' exposure to cyclicals vs. defensives is near an all-time lows. Equity long/shorts were up 2.2% in July, the best performance since Jan. but behind the S&P.

Small cap benchmark tougher to beat - 18% hit rate

Small caps rallied hard in July: the Russell 2000 led the Russell 1000 by the widest margin since January (+6.1% vs. +3.4%). Just 18% of small cap funds outperformed the strong benchmark, a 5^{th} percentile month by hit rate, the lowest in almost a year. Small Growth funds had the lowest hit rate with 14% of funds ahead. Mid-cap funds fared better but lagged large, with 34% ahead of the Russell Midcap benchmark last month.

Value managers continue to fare better than Growth

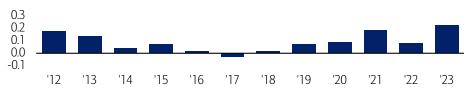
Value funds posted higher hit rates than Growth across all size segments in July, continuing their strong run this year. 45% of large cap Value funds outperformed vs. 36% of Growth funds, even though the benchmarks performed in-line with one another (Growth +3.4% vs. Value +3.5%). Value enjoyed the strongest hit rate this year vs. other styles - 45% of large cap Value funds ahead YTD (vs. 38% for Growth and 28% for Core).

Risk of further underperformance if macro inflects

Breadth improved off low levels (>50% of stocks ahead of the S&P 500 since May) and pair-wise stock correlations are now below average, a supportive environment for active managers. But funds may not be positioned for the inflection that appears imminent, posing a risk to performance in 2H. Our Regime Indicator is on the cusp of shifting from a Downturn to Recovery, the biggest whipsaw across size and style, and a pickup in profits could drive a shift from Growth to Value (we call a 2Q trough, see EPS note).

Exhibit 1: Evidence of a record performance chase in 1H

Correlation between 1H perf. and long-only funds' 6-mth chg in relative weights as of June 2023



Source: BofA US Equity & Quant Strategy, FactSet Ownership

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Table 1: July 2023 performance quartile

Large-cap active fund performance

	Core		Growth		Value	
Best	6.9		6.2		7.5	
Worst	0.7		1.0		1.6	
Quartile	Low	High	Low	High	Low	High
Q 1	3.6	6.9	3.6	6.2	4.3	7.5
Q 2	3.1	3.6	3.1	3.6	3.4	4.3
Q 3	2.6	3.1	2.6	3.1	2.7	3.4
Q 4	0.7	2.6	1.0	2.6	1.6	2.7
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Source: BofA US Equity & Quant Strategy, Lipper Analytical Services. Past performance is not necessarily a guide to future performance.

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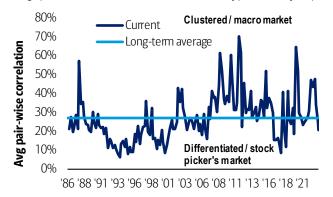
Refer to important disclosures on page 8 to 9.

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Mutual fund landscape

Exhibit 2: Pair-wise correlation in the S&P 500 fell below average

Average pair-wise stock correlations based on 90-day periods, daily frequency

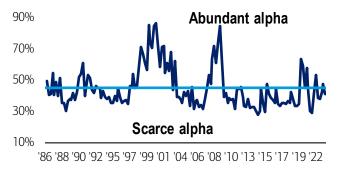


Source: BofA US Equity & Quantitative Strategy, FactSet

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Exhibit 4: Alpha opportunities in the S&P 500 are slightly below the historical average

Large cap dispersion in returns by top/bottom quintile



 $\textbf{Source:} \ \ \mathsf{BofA} \ \ \mathsf{US} \ \mathsf{Equity} \ \ \& \ \mathsf{Quantitative} \ \mathsf{Strategy}, \mathsf{FactSet}$

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Exhibit 3: Pair-wise correlation in the Russell 2000 is also declining

Average pair-wise stock correlations based on 90-day periods, daily frequency



Source: BofA US Equity & Quant Strategy, FactSet

Based on the Russell 2000 Universe.

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Exhibit 5: Alpha opportunities in SMID caps are roughly in line with the historical average

Small/midcaps dispersion in returns by top/bottom quintile



Source: BofA US Equity & Quantitative Strategy, FactSet

Small caps based on the Russell 2000. Midcaps based on the Russell Midcap.

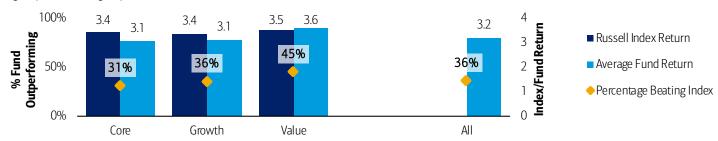
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Large-cap active manager vs. Russell 1000

Exhibit 6: July 2023 Performance - 36% of funds outperformed

Large-cap active managers' performance vs. Russell 1000 benchmarks

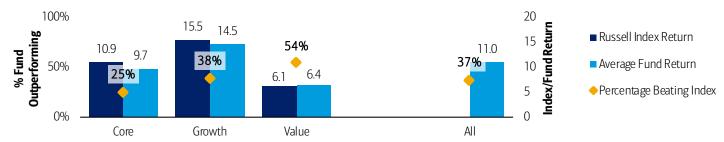


Note: Manager data and index returns are through July 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy. Past performance is not necessarily a guide to future performance.

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Exhibit 7: Last 3 Months Performance - 37% of funds outperformed

Large-cap active managers' performance vs. Russell 1000 benchmarks

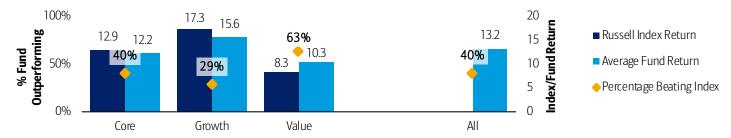


Note: Manager data and index returns are through July 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy. Past performance is not necessarily a guide to future performance.

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Exhibit 8: Last 12 months performance - 40% of funds outperformed

Large-cap active managers' performance vs. Russell 1000 benchmarks

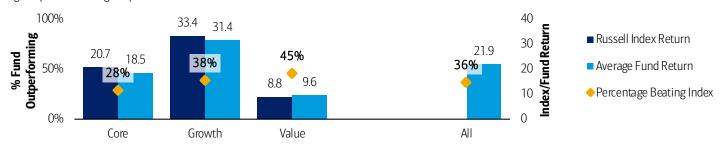


Note: Manager data and index returns are through July 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy. Past performance is not necessarily a guide to future performance.

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Exhibit 9: Year-to-date Performance - 36% of funds outperformed

Large-cap active managers' performance vs. Russell 1000 benchmarks

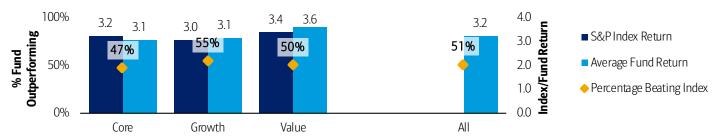




Large-cap active manager vs. S&P 500

Exhibit 10: July 2023 performance - 51% of funds outperformed

Large-cap active managers' performance vs. S&P 500 benchmarks

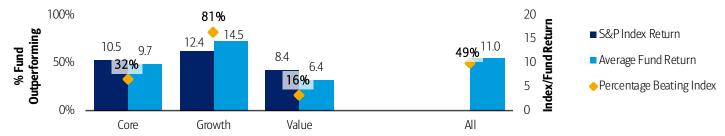


Note: Manager data and index returns are through July 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy. Past performance is not necessarily a guide to future performance.

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Exhibit 11: Last 3-month performance - 49% of funds outperformed

Large-cap active managers' performance vs. S&P 500 benchmarks

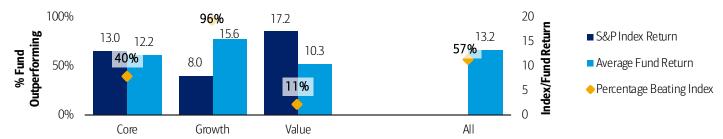


Source: Note: Manager data and index returns are through July 31, 2023. **Source:** Lipper Analytical Services; BofA US Equity & Quant Strategy. Past performance is not necessarily a guide to future performance.

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Exhibit 12: Last 12-month performance – 57% of funds outperformed

Large-cap active managers' performance vs. S&P 500 benchmarks

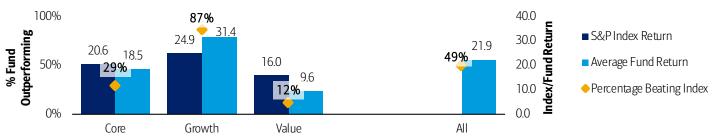


Note: Manager data and index returns are through July 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy. Past performance is not necessarily a guide to future performance.

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Exhibit 13: Year-to-date Performance - 49% of funds outperformed

Large-cap active managers' performance vs. S&P 500 benchmarks

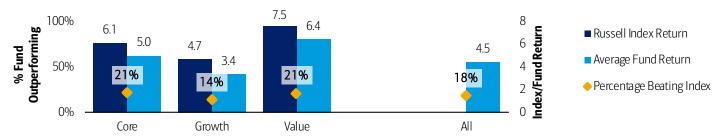




Small cap active manager vs. Russell 2000

Exhibit 14: July 2023 performance – 18% of funds outperformed

Small-cap active managers' performance vs. Russell 2000 benchmarks

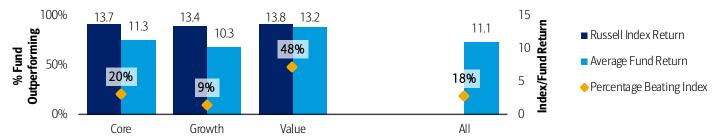


Note: Manager data and index returns are through July 31, 2023. **Source:** Lipper Analytical Services; BofA US Equity & Quant Strategy. Past performance is not necessarily a guide to future performance.

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Exhibit 15: Last 3-month performance – 18% of funds outperformed

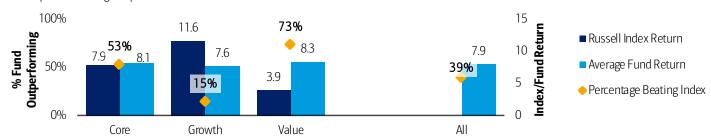
Small-cap active managers' performance vs. Russell 2000 benchmarks



Note: Manager data and index returns are through July 31, 2023. **Source:** Lipper Analytical Services; BofA US Equity & Quant Strategy. Past performance is not necessarily a guide to future performance.

Exhibit 16: Last 12-month performance – 39% of funds outperformed

Small-cap active managers' performance vs. Russell 2000 benchmarks

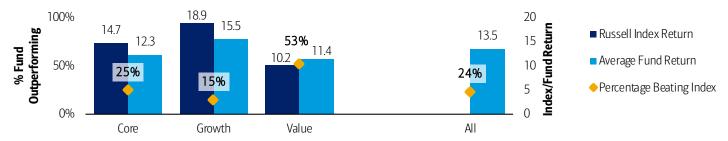


Note: Manager data and index returns are through July 31, 2023. **Source:** Lipper Analytical Services; BofA US Equity & Quant Strategy. Past performance is not necessarily a guide to future performance.

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Exhibit 17: Year-to-date Performance - 24% of funds outperformed

Small-cap active managers' performance vs. Russell 2000 benchmarks

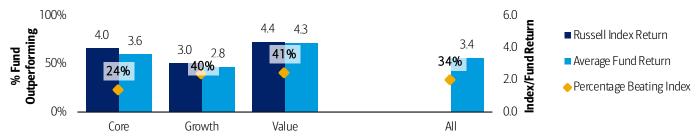




Mid-cap active manager vs. Russell Midcap

Exhibit 18: July 2023 performance - 34% of funds outperformed

Mid-cap active managers' performance vs. Russell Midcap benchmarks

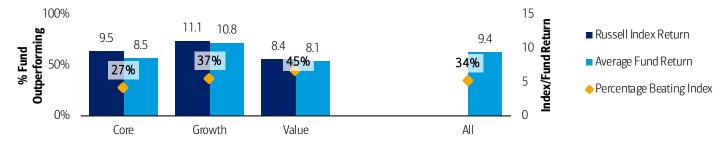


Note: Manager data and index returns are through July 31, 2023. **Source:** Lipper Analytical Services; BofA US Equity & Quant Strategy. Past performance is not necessarily a guide to future performance.

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Exhibit 19: Last 3-month performance – 34% of funds outperformed

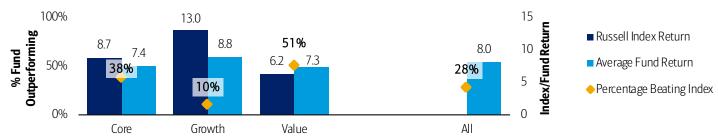
Mid-cap active managers' performance vs. Russell Midcap benchmarks



Note: Manager data and index returns are through July 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy. Past performance is not necessarily a guide to future performance.

Exhibit 20: Last 12 months performance - 28% of funds outperformed

Mid-cap active managers' performance vs. Russell Midcap benchmarks

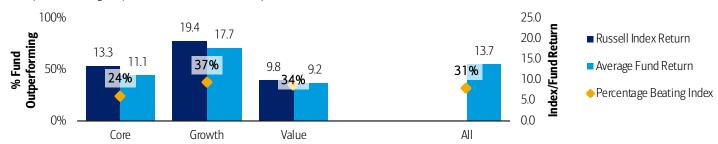


Note: Manager data and index returns are through July 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy. Past performance is not necessarily a guide to future performance.

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Exhibit 21: Year-to-date Performance - 31% of funds outperformed

Mid-cap active managers' performance vs. Russell Midcap benchmarks

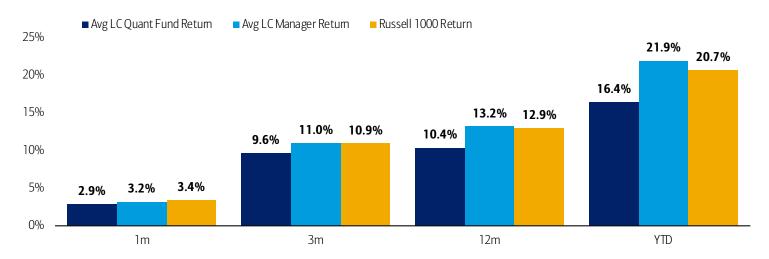


Quant Fund Manager Performance

Large Cap Quant Fund Performance

Exhibit 22: Large-cap quant funds are +16% YTD, trailing the Russell 1000

Large-cap quant funds' performance vs. Russell 1000 benchmarks (as of July 2023)



Source: Lipper, BofA US Equity & US Quant Strategy. Past performance is not necessarily a guide to future performance.

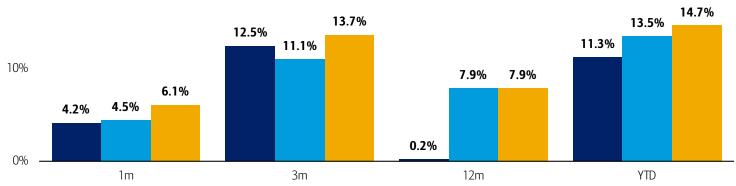
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Small Cap Quant Fund Performance

Exhibit 23: Small-cap quant funds are +11% YTD, trailing the Russell 2000

Large-cap quant funds' performance vs. Russell 2000 benchmarks (as of July 2023)





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