

US Mutual Fund Performance Update

Positive alpha despite narrow market

Over half of large cap funds outperformed in May

Large cap active funds posted solid performance in May, with 54% of funds beating their Russell 1000 benchmark (a 71st percentile month in history since 1991). Funds outperformed despite increasingly narrow market breadth – only 23% of stocks outperformed the S&P 500, the lowest of any month in our data history since 1986 (see Performance Monitor). Bad breadth is seen as a negative for stock pickers as it decreases the probability of selecting a winner, but may have been offset by falling pairwise correlations (see Exhibit 1) and near record high valuation dispersion (see Exhibit 5). YTD, 46% of large cap active funds are outperforming their Russell benchmark, just below 2022's hit rate of 47% (best annual hit rate since 2017).

Small<Mid<Large for active hit rates

Less than 20% of small cap funds beat their Russell 2000 benchmark (worst hit rate since August 2022) in a month when risky/low quality stocks led within small caps. This month's weak performance follows a relatively strong start to the year, where over 50% of small cap managers beat their benchmark in 1Q. Small cap managers have fared better than large, with better hit rates in seven of the last nine years. They have also historically enjoyed more stock selection opportunities (see small cap primer). Meanwhile, mid cap managers also lagged large cap managers in May, with only 37% of funds outperforming their benchmark.

Value led across all size segments

The Russell Growth index outperformed Value in May (+4.6% vs. Russell 1000 Value -3.9%), giving Value managers an easier benchmark to beat: 73% of large cap value managers beat their benchmark (a 90th percentile month), with higher hit rates than growth and core managers across all size segments. Value managers posted strong performance despite their tilt away from low quality stocks, which outperformed in May. Relative to the Russell 1000 Value index, large cap value managers were significantly overweight GOOGL/GOOG (+14% last month).

Hedge funds lag YTD amid tight trading range

The nine hedge fund strategies we track were down 0.3% last month on average as volatility remained low. Hedge funds have lagged YTD (-0.6% on average vs. Russell 1000 +9.3%) after outperforming in 2022 (+0.6% on average vs. Russell 1000 -19.1%). Macro systematic and macro/CTA funds were the best performing hedge fund groups we track for the second consecutive month, up 2.5% and 0.9%, respectively. Event driven funds and merger arbitrage funds were the worst performers in May (-2.6% and -3.1%) and are also the worst performers YTD (-3.4% and -3.9%). Quant LOs have also struggled with just one in three funds ahead for the month and year.

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Table 1: May 2023 performance

Large-cap active fund performance

	Co	re	Gro	wth	Va	lue
Best	3	.9	12	2.8	2	.7
Worst	-4	4.2	-2	2.5	-6	i.2
Quartile	Low	High	Low	High	Low	High
Q 1	1.1	3.9	5.5	12.8	-2.5	2.7
Q 2	0.4	1.1	4.6	5.5	-3.4	-2.5
Q 3	-0.4	0.4	3.3	4.6	-3.9	-3.4
Q 4	-4.2	-0.4	-2.5	3.3	-6.2	-3.9

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

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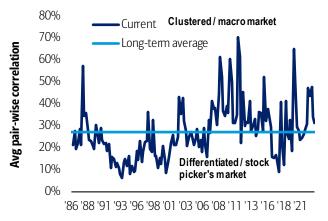
CTA: Commodity Trading Advisor

LO: Long-only fund

Mutual fund landscape

Exhibit 1: Pair-wise correlation in the S&P 500 has declined significantly this year, but still slightly above 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 3: Alpha opportunities in the S&P 500 are near the historical average

Large cap dispersion in returns by top/bottom quintile

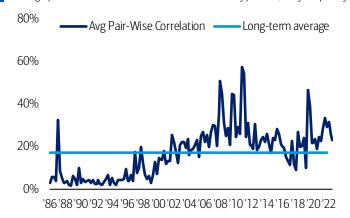


Source: BofA US Equity & Quantitative Strategy, FactSet

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Exhibit 2: Pair-wise correlation in the Russell 2000 is also declining

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

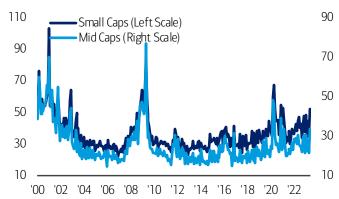


Source: BofA US Equity & Quant Strategy, FactSet Based on the Russell 2000 Universe.

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Exhibit 4: Alpha opportunities are back above average in the Russell 2000

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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Exhibit 5: Valuation dispersion just off record highs

Dispersion of forward P/E in the S&P 500 (std. dev. / mean); 1990-5/23



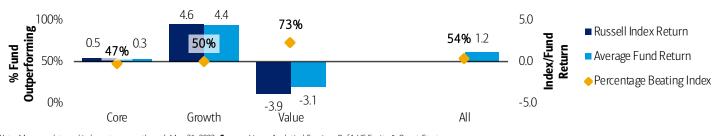
Source: FactSet, BofA US Equity & Quant Strategy



Large-cap active manager vs. Russell 1000

Exhibit 8: May 2023 Performance - 54% of funds outperformed

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

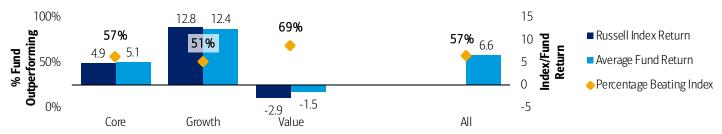


Note: Manager data and index returns are through May 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy

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Exhibit 9: Last 3 Months Performance - 57% of funds outperformed

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



Note: Manager data and index returns are through May 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy

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Exhibit 8: Last 12 months performance - 48% of funds outperformed

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

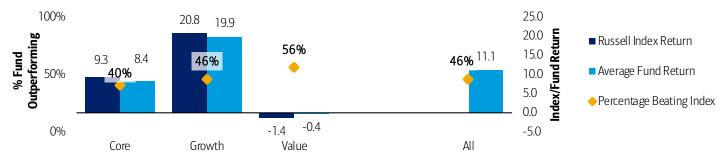


Note: Manager data and index returns are through May 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy

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Exhibit 9: Year-to-date Performance - 46% of funds outperformed

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

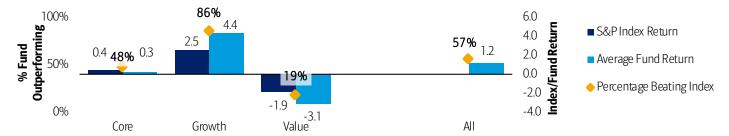


Note: Manager data and index returns are through May 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy

Large-cap active manager vs. S&P 500

Exhibit 12: May 2023 performance - 57% of funds outperformed

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

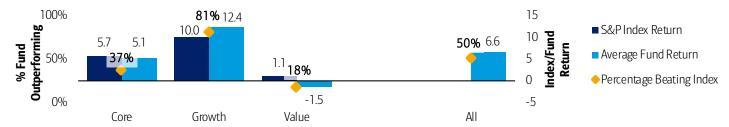


Note: Manager data and index returns are through May 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy. Past performance is not necessarily a guide to future performance.

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Exhibit 11: Last 3-month performance - 50% of funds outperformed

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

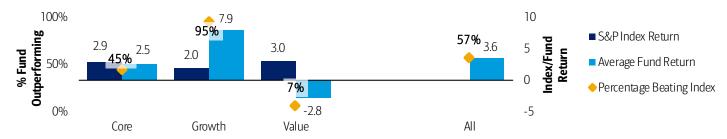


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Exhibit 14: Last 12-month performance - 57% of funds outperformed

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

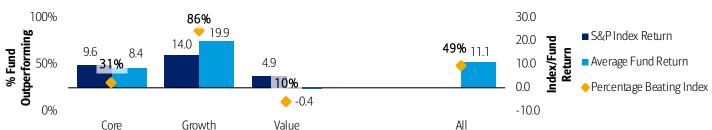


Note: Manager data and index returns are through May 31, 2023. **Source:** Lipper Analytical Services; BofA US Equity & Quant Strategy. Past performance is not necessarily a guide to future performance.

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

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



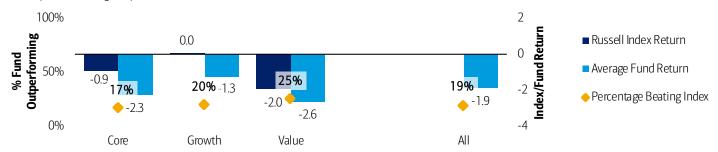
Note: Manager data and index returns are through May 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy



Small cap active manager vs. Russell 2000

Exhibit 16: May 2023 performance - 19% of funds outperformed

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

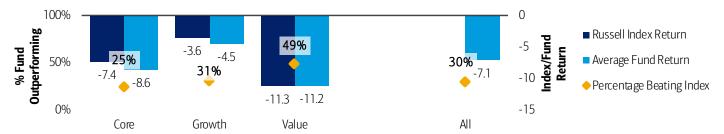


Note: Manager data and index returns are through May 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy. Past performance is not necessarily a guide to future performance.

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Exhibit 17: Last 3-month performance - 30% of funds outperformed

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

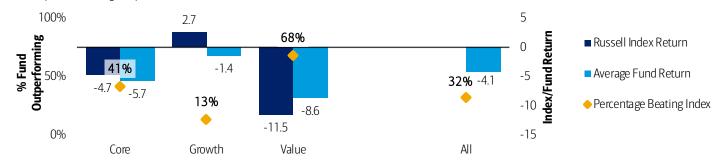


Note: Manager data and index returns are through May 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy. Past performance is not necessarily a guide to future performance.

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Exhibit 18: Last 12-month performance - 32% of funds outperformed

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

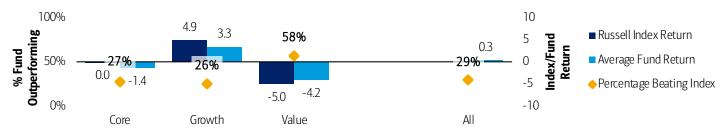


Note: Manager data and index returns are through May 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy. Past performance is not necessarily a guide to future performance.

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Exhibit 17: Year-to-date Performance - 29% of funds outperformed

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

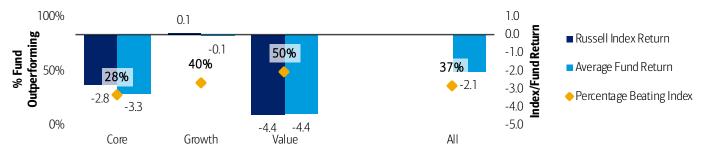


Note: Manager data and index returns are through May 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy

Mid-cap active manager vs. Russell Midcap

Exhibit 20: May 2023 performance - 37% of funds outperformed

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

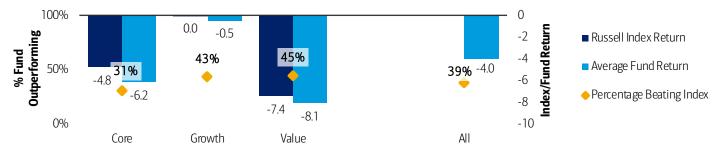


Note: Manager data and index returns are through May 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy. Past performance is not necessarily a guide to future performance.

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Exhibit 21: Last 3-month performance - 39% of funds outperformed

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

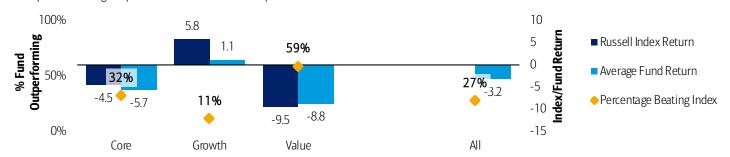


Note: Manager data and index returns are through May 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy. Past performance is not necessarily a guide to future performance.

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Exhibit 20: Last 12 months performance - 27% of funds outperformed

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

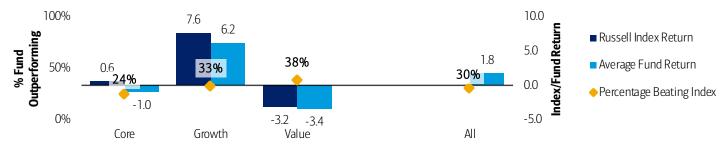


Note: Manager data and index returns are through May 31, 2023. Source: Lipper Analytical Services; BofA US Equity & Quant Strategy

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Exhibit 21: Year-to-date Performance - 30% of funds outperformed

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



Note: Manager data and index returns are through May 31, 2023. **Source:** Lipper Analytical Services; BofA US Equity & Quant Strategy

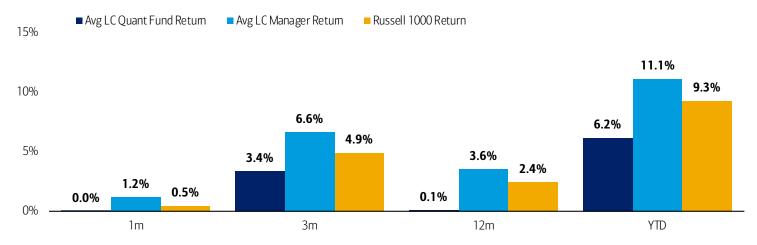


Quant Fund Manager Performance

Large Cap Quant Fund Performance

Exhibit 24: Large-cap quant funds are +6% YTD, trailing the Russell 1000

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



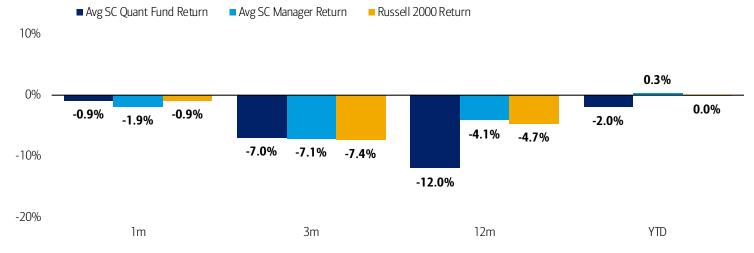
Source: Lipper, BofA US Equity & US Quant Strategy. Avg = average. Past performance is not necessarily a guide to future performance.

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Small Cap Quant Fund Performance

Exhibit 25: Small-cap quant funds are -2% YTD, trailing the Russell 2000

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



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

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	rating)			
D	> 100/	< 700/		

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