

US Performance Monitor

What recession? Everything rallied in 1Q

Quantitative Analysis

All major assets gained...

1Q marked a stark reversal of 2022, with all major asset classes rising. The S&P 500 gained 7.5% in total return, posting strong back-to-back quarterly gains (+7.6% in 4Q). Int'l equities lagged, but rose 6.3% in local currency and 7.0% in USD. LT Treasuries also rallied, +6.0%, with the 10-yr yield falling 40bp, the biggest quarterly drop since COVID. And despite recession risk, the IG credit spread only widened by 7bp and investment-grade corp. bonds gained 3.4%. Gold rose 8.7%, while cash returned 1.1%.

...and the Nasdaq is now in a bull market

Mega-cap Growth stocks were the biggest leaders in 1Q boosted by lower rates. The 50 biggest stocks in the S&P 500 ("Nifty 50") jumped 11.6% vs. just 2.3% for the other 450 stocks – the equal-weighted S&P 500 (+1.1%) underperformed the cap-weighted index as a result. Similarly, the Nasdaq 100 soared 20.8% in 1Q, entering a bull market. But we don't think a lower risk-free rate alone is a strong reason to get bullish on equities, if it's driven by a deteriorating growth outlook leading to a wider risk premium (see [Snippet](#)). Historically, a Fed easing cycle (i.e. lower 2-yr yield) combined with a credit tightening cycle (i.e. wider IG credit spread) has been the worst phase for equities. But broad pessimism on equities could be a big tailwind for stocks (see [SSI](#)).

Bifurcated banks, cyclical & defensives lagged

Financials (-6.0%) was the worst-performing sector as a regional bank issues unfolded. But the spread between large and small financials was among the widest we have seen (+4.4ppt, 91st percentile since 1996) and within the sector, the regulated companies which make up 25% outperformed regional banks (10% of the sector) by a remarkable 12.5ppt in 1Q. Energy was 2nd worst (-5.6%) on lower oil (WTI -5.7%) (but has bounced ~5% today). Interestingly, defensives also lagged despite impressions of rising recession risk, with Health Care (-4.7%) and Utilities (-4.0%) posting losses, while Staples was effectively flat (+0.2%). The three long-duration sectors posted strong gains: Tech +21.5%, Comm. Svcs. +20.2% and Cons. Disc. +15.8% as 10yr real rates dropped 39bp.

Profitability and Risk factors led; Value lagged

Profitability-based Quality factors (ROE, ROC, ROA) were the best performing factor group, as profitable mega caps rallied. But overall, it was a risk-on rally, with Low Quality stocks (B or worse in S&P quality rating, based on earnings and dividend stability) and Risk factors outperforming. Value was the worst performing factor group in 1Q.

Worst month for small vs. large since March 2020

Small caps were the worst-performing size segment in March (Russell 2000 -4.8% vs. Russell MidCap -1.5% and Russell 1000 +3.2%), underperforming large by the widest margin since March 2020. The size segment lagged in both halves of the month; we turned [tactically cautious on small caps in mid-March \(note\)](#).

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Refer to important disclosures on page 31 to 33.

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Asset Performance

Table 1: Monthly asset class based total returns
Asset Mix Performance (Total Return) as of 3/31/2023

	1 M	3 M	6 M	12 M	YTD	2 Yr	3 Yr	5 Yr	10 Yr
S&P 500	3.67	7.50	15.62	-7.73	7.50	6.71	66.84	69.94	217.36
BofA S&P 500 (Eq. Wgt.)	-0.84	3.09	14.90	-6.32	3.09	5.56	81.70	58.67	191.24
3-Month T-Bill	0.43	1.07	1.93	2.50	1.07	2.57	2.69	7.23	9.05
Long-Term Treas. Bonds	4.78	6.04	5.62	-15.37	6.04	-16.37	-29.85	-0.94	17.20
Investment Grade Corp. Bonds	2.56	3.45	7.10	-5.19	3.45	-9.28	-0.84	8.62	26.12
Gold	7.95	8.68	17.82	1.85	8.68	16.97	21.71	48.79	23.24
CBOE VIX	-9.66	-13.71	-40.86	-9.05	-13.71	-3.61	-65.07	-6.36	47.24
CPI (Feb)	0.56	1.05	1.58	6.04	0.71	14.38	16.30	20.82	29.58

Source: BofA US Equity & Quant Strategy

Source: BofA US Equity & Quant Strategy

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Major Market Indices

Table 2: Monthly Index based price returns
Market Index Performance (Absolute Price Return) - 3/31/2023

		Price Performance % Change				
	Index	1 M	3 M	6 M	12 M	YTD
Dow Jones Industrials	33,274.15	1.89	0.38	15.83	-4.05	0.38
S&P 500	4,109.31	3.51	7.03	14.61	-9.29	7.03
S&P Financials	535.28	-9.74	-6.05	6.12	-16.05	-6.05
S&P Utilities	344.01	4.62	-4.04	3.45	-9.02	-4.04
S&P Midcap	2,512.16	-3.41	3.36	14.01	-6.74	3.36
S&P Smallcap	1,182.07	-5.38	2.12	11.00	-10.35	2.12
Value Line	558.68	-2.44	4.16	13.65	-12.18	4.16
NASDAQ Comp	12,221.91	6.69	16.77	15.57	-14.05	16.77
NASDAQ Ind	8,357.49	3.03	13.74	3.20	-20.46	13.74
NASDAQ 100	13,181.35	9.46	20.49	20.14	-11.17	20.49
Russell 1000	2,253.36	3.00	7.00	14.25	-9.91	7.00
Russell 2000	1,802.48	-4.98	2.34	8.28	-12.93	2.34
Russell 3000	2,366.27	2.51	6.73	13.89	-10.09	6.73
Wilshire 5000	40,708.41	2.53	6.92	13.59	-10.74	6.92
MSCI EAFE ® (in USD)	2,092.60	1.89	7.65	25.95	-4.08	7.65

Source: BofA US Equity & Quant Strategy

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Table 3: Monthly index based total returns for Dow Jones, S&P500 and Nasdaq
Total Return - Price Change Plus Dividend as of 3/31/2023

	1 M	3 M	6 M	12 M	YTD
DJIA	2.08	0.93	17.08	-2.03	0.93
S&P 500	3.66	7.47	15.55	-7.81	7.47
Nasdaq Composite Index	6.78	17.13	16.19	-13.16	17.13

Source: BofA US Equity & Quant Strategy

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Table 4: Monthly total index returns for Dow Jones, S&P500, S&P Utilities and Nasdaq
Total Return - Dividends Reinvested as of 3/31/2023

	1 M	3 M	6 M	12 M	YTD
DJIA	2.08	0.93	17.09	-1.98	0.93
S&P 500	3.67	7.50	15.62	-7.73	7.50
S&P Util	4.92	-3.24	5.11	-6.21	-3.24
Nasdaq Comp.	6.78	17.05	16.14	-13.25	17.05

Source: BofA US Equity & Quant Strategy

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Table 5: Yearly total index returns for Dow Jones, S&P500, S&P Utilities and Nasdaq

Total Return - Dividends Reinvested as of 3/31/2023

	2 Yr		3 Yr		5 Yr		10 Yr	
	Gross	Anlzd	Gross	Anlzd	Gross	Anlzd	Gross	Anlzd
Dow Jones Industrials	4.99	2.47	61.45	17.31	53.94	9.01	187.46	11.14
S&P 500	6.71	3.30	66.84	18.60	69.94	11.19	217.36	12.24
S&P Utilities	12.49	6.06	34.33	10.34	58.06	9.59	144.95	9.37
Nasdaq Composite Index	-7.74	-3.95	58.72	16.65	73.03	11.59	274.04	14.10

Source: BofA US Equity & Quant Strategy, FactSet

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Sectors, Quality Indices, and Strategies

Table 6: Monthly absolute price returns based on GICS sectors, BofA Quality parameter and select strategies

Sectors, Quality Indices, and Selected Strategies' Performance (Absolute Price Return) – 3/31/2023

	1 M	3 M	6 M	12 M	YTD	2 Year Performance		3 Year Performance	
						Gross	Anlzd	Gross	Anlzd
S&P 500 Sectors									
Energy	-0.5	-5.57	14.90	9.10	-5.57	71.65	31.01	184.20	41.65
Materials	-1.3	3.75	18.74	-8.23	3.75	2.67	1.33	79.33	21.49
Industrials	0.6	3.03	22.27	-1.59	3.03	2.96	1.47	71.62	19.73
Consumer Discretionary	3.0	15.76	3.71	-20.42	15.76	-13.20	-6.83	46.76	13.64
Consumer Staples	3.8	0.16	12.16	-1.40	0.16	11.57	5.63	39.27	11.67
Health Care	2.1	-4.72	7.04	-5.27	-4.72	11.06	5.38	46.26	13.51
Financials	-9.7	-6.05	6.12	-16.05	-6.05	-5.38	-2.73	54.69	15.65
Real Estate	-2.1	1.04	3.91	-22.37	1.04	-4.95	-2.51	22.25	6.93
Information Technology	10.9	21.49	26.88	-5.55	21.49	13.21	6.40	86.58	23.11
Communication Services	10.4	20.18	18.22	-18.53	20.18	-19.96	-10.53	27.39	8.40
Utilities	4.6	-4.04	3.45	-9.02	-4.04	5.77	2.84	22.09	6.88
BofA Investment Strategy Selected Proprietary Indices (Price Performance as of March 2023)									
	1 M	3 M	6 M	12 M	YTD	2 Year Performance		3 Year Performance	
						Gross	Anlzd	Gross	Anlzd
Quality Indices (1)									
A+	1.17%	1.18%	11.62%	-3.85%	1.18%	4.40%	2.17%	61.92%	17.43%
A	-1.07%	-0.84%	9.55%	-9.08%	-0.84%	-0.59%	-0.30%	55.50%	15.85%
A-	-0.98%	0.85%	13.41%	-3.35%	0.85%	7.07%	3.47%	77.87%	21.16%
B+	-3.12%	-0.67%	9.70%	-10.23%	-0.67%	-2.99%	-1.51%	76.92%	20.95%
B	-3.06%	-0.12%	10.06%	-14.71%	-0.12%	-8.62%	-4.41%	71.50%	19.70%
B-	-3.35%	0.76%	12.23%	-11.59%	0.76%	3.92%	1.94%	170.56%	39.34%
C&D	-5.21%	3.91%	8.60%	-15.55%	3.91%	-8.48%	-4.33%	93.61%	24.64%
Not Ranked	-4.83%	5.36%	2.74%	-21.19%	5.36%	-39.17%	-22.01%	28.57%	8.74%
B+ or Better	-1.96%	-0.21%	10.66%	-8.06%	-0.21%	0.21%	0.10%	72.08%	19.83%
B or Worse	-4.36%	3.63%	6.10%	-17.80%	3.63%	-25.78%	-13.85%	58.13%	16.50%
"Nifty 50"† & "Not-So-Nifty 450"‡ Indices									
Nifty 50 (Market Wgt.)	6.88%	11.56%	14.52%	-11.80%	11.56%	3.70%	1.83%	55.61%	15.88%
Not-So-Nifty 450 (Market Wgt.)	-0.09%	2.28%	14.64%	-6.32%	2.28%	3.08%	1.53%	62.88%	17.66%
Nifty 50 (Equal Wgt.)	4.34%	6.68%	16.28%	-7.98%	6.68%	3.05%	1.51%	49.59%	14.37%
Not-So-Nifty 450 (Equal Wgt.)	-1.57%	2.20%	13.66%	-7.87%	2.20%	2.34%	1.16%	75.98%	20.73%
S&P 500 Equal Weighted (Price)	-0.98	2.66	13.94	-7.85	2.66	2.45	1.22	73.31	20.12
S&P 500 Index (Price)	3.51	7.03	14.61	-9.29	7.03	3.43	1.70	58.99	16.71

Source: BofA US Equity & Quant Strategy, Standard & Poor's. Note: † S&P 500 Top 50 by Market Cap, rebalanced monthly; ‡ S&P 500 Bottom 450 by Market Cap, rebalanced monthly

For the BofA Quality indices, each month we group all of the stocks in the BofA US research coverage universe based on their Standard and Poor's quality ranking. The returns shown are calculated based on the subsequent months' average price return of each group assuming monthly rebalancing

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Factor Performance

Exhibit 1: Monthly S&P 500 universe-based strategies performance

Strategies Performance (Absolute Price Return) – 3/31/2023

							2 Yr Perf.		3 Yr Perf.		5 Yr Perf.		Inception	
Strategies (Universe based on the S&P 500)		1 M	3 M	6 M	12 M	YTD	Gross	Anlzd	Gross	Anlzd	Gross	Anlzd	Date	Backtest Period
ROE (5-Yr Avg. Adj. by Debt)	Quality	6.6	16.8	25.1	-3.9	16.8	6.9	3.4	79.2	21.5	77.6	12.2	4/30/1997	2/86 - 4/97
High EPS Estimate Dispersion	Risk	0.0	12.0	28.2	0.3	12.0	16.6	8.0	183.9	41.6	37.0	6.5	12/31/1988	-
High Foreign Exposure	Miscellaneous	2.3	10.8	28.7	0.0	10.8	9.8	4.8	104.0	26.8	76.1	12.0	12/31/1988	2/86 - 12/88
ROE (1-Yr Avg. Adj. by Debt)	Quality	3.2	9.7	18.2	-6.9	9.7	0.4	0.2	60.8	17.2	53.5	9.0	4/30/1997	2/86 - 4/97
Most Active	Technical	0.2	9.3	19.1	-8.2	9.3	2.6	1.3	101.9	26.4	66.5	10.7	8/31/2003	4/86 - 8/03
Institutional Neglect	Miscellaneous	1.9	9.1	21.5	-4.9	9.1	3.7	1.8	73.3	20.1	58.5	9.7	12/31/1988	2/86 - 12/88
High Duration	Growth	4.3	8.3	19.1	-9.2	8.3	0.0	0.0	56.2	16.0	58.5	9.6	12/31/1988	2/86 - 12/88
ROA	Quality	3.0	8.2	19.6	-5.6	8.2	4.0	2.0	63.8	17.9	68.2	11.0	4/30/1997	2/86 - 4/97
ROC	Quality	2.5	8.0	21.5	-4.2	8.0	5.7	2.8	58.2	16.5	65.3	10.6	4/30/1997	2/86 - 4/97
S&P 500 Index (Price Return)	Benchmark	3.5	7.0	14.6	-9.3	7.0	3.4	1.7	59.0	16.7	55.6	9.3		-
ROE (5-Yr Average)	Quality	2.2	6.3	18.9	1.3	6.3	10.4	5.1	72.2	19.9	56.9	9.4	4/30/1997	2/86 - 4/97
ROE (1-Yr Average)	Quality	1.8	6.2	19.5	-1.0	6.2	12.5	6.1	78.7	21.3	67.1	10.8	4/30/1997	2/86 - 4/97
Share Repurchase	Corp Cash Deployment	-2.8	4.2	17.8	-4.0	4.2	9.6	4.7	90.0	23.9	40.4	7.0	12/31/2004	4/86 - 12/04
High Beta	Risk	-6.5	4.2	17.0	-10.3	4.2	5.4	2.7	147.9	35.3	49.7	8.4	12/31/1988	2/86 - 12/88
Upward Estimate Revisions	Growth	0.1	4.1	19.6	3.1	4.1	28.9	13.6	139.2	33.7	84.2	13.0	12/31/1988	-
Relative Strength (Price/200-Day Moving Avg)	Technical	1.9	4.0	13.7	-2.4	4.0	7.2	3.5	89.3	23.7	64.0	10.4	1/31/2010	1/87 - 1/10
Low EPS Torpedo	Growth (Negative)	-3.8	3.7	15.9	-7.2	3.7	-0.5	-0.3	141.6	34.2	66.4	10.7	12/31/1988	4/86 - 12/88
High Projected 5-Yr Growth	Growth	-0.5	3.5	17.1	-2.5	3.5	10.9	5.3	92.4	24.4	59.6	9.8	12/31/1988	2/86 - 12/88
High Variability of EPS	Risk	-0.6	3.4	15.8	-5.1	3.4	4.3	2.1	71.4	19.7	45.4	7.8	12/31/1988	2/86 - 12/88
S&P 500 Equal Weighted (Total Return)	Benchmark	-0.8	3.2	15.1	-5.9	3.2	6.4	3.2	83.6	22.5	61.5	10.1		-
Price Returns (3-Month)	Technical	-0.8	3.1	13.6	-9.1	3.1	-2.1	-1.1	82.6	22.2	49.8	8.4	1/31/2010	1/87 - 1/10
DDM Valuation	Value	-2.0	3.1	16.6	-6.5	3.1	2.9	1.4	48.5	14.1	7.5	1.5	12/31/1988	2/86 - 12/88
Price Returns (12-Month plus 1-Month Reversal)	Technical	0.3	2.9	15.0	-1.6	2.9	7.4	3.6	60.4	17.1	48.1	8.2	1/31/2010	1/87 - 1/10
Relative Strength (5wk/30wk)	Technical	0.8	2.9	11.6	-2.6	2.9	6.8	3.3	88.6	23.5	64.8	10.5	1/31/2010	1/87 - 1/10
Analyst Coverage Neglect	Miscellaneous	-2.2	2.8	11.2	-7.4	2.8	4.8	2.4	71.6	19.7	52.7	8.8	6/30/1989	-
S&P 500 Equal Weighted (Price Return)	Benchmark	-1.0	2.7	13.9	-7.8	2.7	2.4	1.2	73.2	20.1	45.9	7.9		-
Low Price to Cash Flow	Value	-1.7	2.6	15.0	-12.0	2.6	0.2	0.1	90.3	23.9	-3.1	-0.6	12/31/1988	2/86 - 12/88
Short Interest	Miscellaneous	-0.9	1.8	13.3	-9.7	1.8	-2.1	-1.1	55.1	15.7	33.0	5.9	10/31/2013	3/94 - 10/13
Low EV/EBITDA	Value	-0.7	1.7	15.8	-9.0	1.7	3.0	1.5	103.0	26.6	8.5	1.6	9/30/2001	4/86 - 9/01
Relative Strength (10wk/40wk)	Technical	1.1	1.0	8.5	-1.0	1.0	-3.2	-1.6	67.8	18.8	52.8	8.8	1/31/2010	1/87 - 1/10
Forecast Positive Earnings Surprise	Growth	-0.7	0.7	9.8	-9.2	0.7	1.5	0.8	73.4	20.2	48.8	8.3	12/31/1988	2/86 - 12/88
Price Returns (12-Month plus 1-Month)	Technical	1.0	0.6	10.8	-12.2	0.6	-0.5	-0.2	63.8	17.9	37.8	6.6	1/31/2010	1/87 - 1/10
High Dividend Growth (Total Return)	Corp Cash Deployment	-2.3	0.0	16.5	-0.9	0.0	20.8	9.9	104.4	26.9	64.2	10.4	12/31/2004	4/86 - 12/04
Low Price to Sales	Value	-4.3	-0.3	9.3	-10.8	-0.3	-1.6	-0.8	110.1	28.1	56.2	9.3	12/31/1988	2/86 - 12/88
EPS Momentum	Growth	-2.0	-0.5	10.2	-9.8	-0.5	4.4	2.2	66.6	18.5	30.5	5.5	12/31/1988	2/86 - 12/88
Low Price to Free Cash Flow	Value	-3.3	-0.5	13.0	-12.4	-0.5	-3.4	-1.7	64.6	18.1	11.7	2.2	7/30/2003	4/86 - 7/03
High Dividend Growth (Price Return)	Corp Cash Deployment	-2.8	-0.8	14.7	-3.8	-0.8	14.8	7.2	90.1	23.9	45.1	7.7	12/31/2004	4/86 - 12/04
Low Price	Risk	-4.3	-0.9	11.9	-14.1	-0.9	1.3	0.6	134.7	32.9	44.6	7.7	12/31/1988	2/86 - 12/88
Small Size	Miscellaneous	-7.6	-0.9	11.6	-13.6	-0.9	-7.5	-3.8	110.6	28.2	26.2	4.8	12/31/1988	2/86 - 12/88
Dividend Yield (Total Return)	Corp Cash Deployment	-2.9	-1.3	11.6	-6.3	-1.3	17.5	8.4	130.5	32.1	69.4	11.1	12/31/1988	2/86 - 12/88
Price Returns (9-Month)	Technical	0.4	-1.4	9.4	-5.7	-1.4	2.7	1.3	69.9	19.3	58.8	9.7	1/31/2010	1/87 - 1/10
Price Returns (11-Month since 1 year ago)	Technical	-0.5	-1.7	11.2	-6.1	-1.7	2.9	1.4	58.9	16.7	38.2	6.7	1/31/2010	1/87 - 1/10
High Free Cash Flow to EV	Value	-2.6	-1.9	9.4	-12.1	-1.9	-7.4	-3.8	59.8	16.9	13.6	2.6	7/31/2010	2/86 - 7/10
Low PE to GROWTH	GARP	-6.9	-2.0	11.0	-9.1	-2.0	5.5	2.7	92.1	24.3	22.3	4.1	12/30/1988	2/86 - 12/88
Price Returns (12-Month)	Technical	0.0	-2.1	9.7	-7.5	-2.1	8.1	4.0	64.7	18.1	40.9	7.1	1/31/2010	1/87 - 1/10
Relative Strength (30wk/75wk)	Technical	-0.6	-2.2	10.3	-9.3	-2.2	2.6	1.3	58.6	16.6	34.2	6.1	8/31/1995	2/86 - 8/95
Forecast Negative Earnings Surprise	Growth (Negative)	-4.8	-2.4	11.3	-6.9	-2.4	3.3	1.6	75.4	20.6	38.5	6.7	12/31/1988	2/86 - 12/88
Dividend Yield (Price Return)	Corp Cash Deployment	-3.6	-2.7	8.7	-11.1	-2.7	6.4	3.1	96.3	25.2	31.5	5.6	12/31/1988	2/86 - 12/88
Low Price to Book Value	Value	-9.4	-3.8	7.3	-17.4	-3.8	-3.2	-1.6	116.5	29.4	19.1	3.6	12/31/1988	2/86 - 12/88
Earnings Yield	Value	-8.4	-5.6	5.0	-20.3	-5.6	-12.2	-6.3	75.0	20.5	2.2	0.4	12/31/1988	2/86 - 12/88
Forward Earnings Yield	Value	-10.5	-5.8	4.2	-13.4	-5.8	1.0	0.5	107.0	27.4	16.5	3.1	12/31/1988	4/86 - 12/88

Source: BoFA US Equity & Quant Strategy; Please see our [Quantitative Profiles 16 January 2023](#) report for a description of our strategies and the performance calculation methodology. The performance does not reflect transaction costs or tax withholdings or any applicable advisory fees. Had these costs been reflected, the performance would have been lower. Performance is calculated on the basis of price return unless noted. Total return performance calculations assume that dividends paid on securities in a portfolio are deposited in a cash account on the ex-dividend date, and are not reinvested. Past performance should not and cannot be viewed as an indicator of future performance. A complete performance record is available upon request.

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Exhibit 2: Monthly advances and decliners

Strategies Performance (advancers and decliners) – 3/31/2023

Quantitative Strategies	1M		3M		6M		12M		YTD		2Yr		3Yr		5Yr	
	Adv.	Dec.	Adv.	Dec.	Adv.	Dec.	Adv.	Dec.	Adv.	Dec.	Adv.	Dec.	Adv.	Dec.	Adv.	Dec.
ROE (5-Yr Avg. Adj. by Debt)	45	5	110	40	199	101	284	316	110	40	623	577	1029	771	1674	1326
High EPS Estimate Dispersion	19	22	72	62	152	116	238	262	72	62	409	401	687	590	1050	966
High Foreign Exposure	28	22	88	62	190	109	294	305	88	62	612	586	1030	766	1652	1342
ROE (1-Yr Avg. Adj. by Debt)	36	14	97	53	186	114	277	323	97	53	619	581	1018	782	1651	1349
Most Active	29	21	86	64	173	125	275	323	86	64	591	607	958	839	1584	1412
Institutional Neglect	31	19	78	72	175	124	280	318	78	72	603	594	993	805	1644	1355
High Duration	38	12	88	62	183	117	264	336	88	62	590	610	980	820	1648	1351
ROA	36	14	96	54	187	113	286	314	96	54	619	581	1024	776	1704	1296
ROC	33	17	91	59	185	115	286	314	91	59	612	588	1008	792	1697	1302
ROE (5-Yr Average)	32	18	81	69	176	123	287	312	81	69	608	591	994	804	1650	1347
ROE (1-Yr Average)	33	17	85	65	179	120	286	313	85	65	616	583	1015	784	1679	1319
Share Repurchase	14	36	67	83	165	135	278	322	67	83	624	576	1030	768	1638	1359
High Beta	17	33	81	72	174	135	283	336	81	72	628	604	1039	813	1641	1461
Upward Estimate Revisions	25	25	80	70	178	121	304	295	80	70	644	555	1087	711	1699	1297
Relative Strength (Price/200-Day Moving Avg)	28	22	75	75	162	138	277	323	75	75	610	590	1025	775	1659	1336
Low EPS Torpedo	23	27	76	74	179	121	289	311	76	74	614	586	997	802	1609	1388
High Projected 5-Yr Growth	21	29	72	78	158	142	272	328	72	78	594	606	986	817	1598	1403
High Variability of EPS	31	34	93	98	212	167	353	406	93	98	759	749	1281	1051	2182	1862
Price Returns (3-Month)	27	23	77	73	169	131	267	333	77	73	586	614	1015	785	1630	1365
DDM Valuation	14	25	46	55	115	99	200	249	46	55	532	533	954	814	1707	1522
Price Returns (12-Month plus 1-Month Reversal)	27	23	79	71	174	125	289	310	79	71	603	595	987	811	1636	1361
Relative Strength (5wk/30wk)	24	26	71	79	159	141	275	325	71	79	607	593	1029	771	1652	1342
Analyst Coverage Neglect	22	28	86	72	154	129	236	291	86	72	556	529	976	729	1597	1248
Low Price to Cash Flow	20	30	70	80	168	132	274	326	70	80	589	611	954	845	1526	1472
Short Interest	25	23	76	68	172	118	264	318	76	68	572	598	963	795	1607	1318
Low EV/EBITDA	21	29	73	77	173	127	286	314	73	77	607	593	998	801	1563	1436
Relative Strength (10wk/40wk)	27	23	71	79	155	145	290	310	71	79	588	612	1001	799	1637	1357
Forecast Positive Earnings Surprise	32	39	96	122	224	217	390	505	96	122	840	868	1426	1148	2366	1912
Price Returns (12-Month plus 1-Month)	29	21	71	79	163	137	256	344	71	79	598	602	1009	790	1635	1361
Low Price to Sales	14	36	63	87	157	143	278	322	63	87	601	599	989	811	1600	1399
EPS Momentum	20	30	72	78	162	138	275	325	72	78	610	590	991	808	1589	1409
Low Price to Free Cash Flow	14	36	62	88	159	141	269	331	62	88	581	619	958	841	1542	1457
High Dividend Growth (Price Return)	19	31	73	77	168	132	280	320	73	77	635	565	1026	774	1620	1379
Low Price	16	34	68	82	165	135	269	330	68	82	589	609	991	803	1591	1401
Small Size	12	38	68	82	161	139	264	336	68	82	590	610	1001	797	1578	1416
Price Returns (9-Month)	27	23	70	80	155	145	276	324	70	80	601	599	999	801	1635	1361
Price Returns (11-Month since 1 year ago)	22	28	70	80	163	137	278	321	70	80	594	604	970	828	1587	1410
High Free Cash Flow to EV	14	25	49	68	120	117	212	271	49	68	468	507	781	678	1258	1174
Low PE to GROWTH	10	40	63	87	155	145	267	333	63	87	605	595	1022	777	1571	1427
Price Returns (12-Month)	23	27	67	83	163	137	279	320	67	83	615	583	991	807	1607	1389
Relative Strength (30wk/75wk)	22	28	66	84	159	141	272	328	66	84	596	604	971	830	1596	1409
Forecast Negative Earnings Surprise	35	47	121	139	280	212	462	514	121	139	923	909	1494	1241	2453	2073
Dividend Yield (Price Return)	20	30	66	84	162	138	279	320	66	84	629	569	1028	768	1644	1351
Low Price to Book Value	15	35	67	83	168	132	272	328	67	83	630	577	1051	765	1640	1391
Earnings Yield	15	35	64	86	159	141	265	335	64	86	608	592	1017	782	1600	1399
Forward Earnings Yield	12	38	67	83	162	138	285	315	67	83	609	591	1010	788	1593	1405

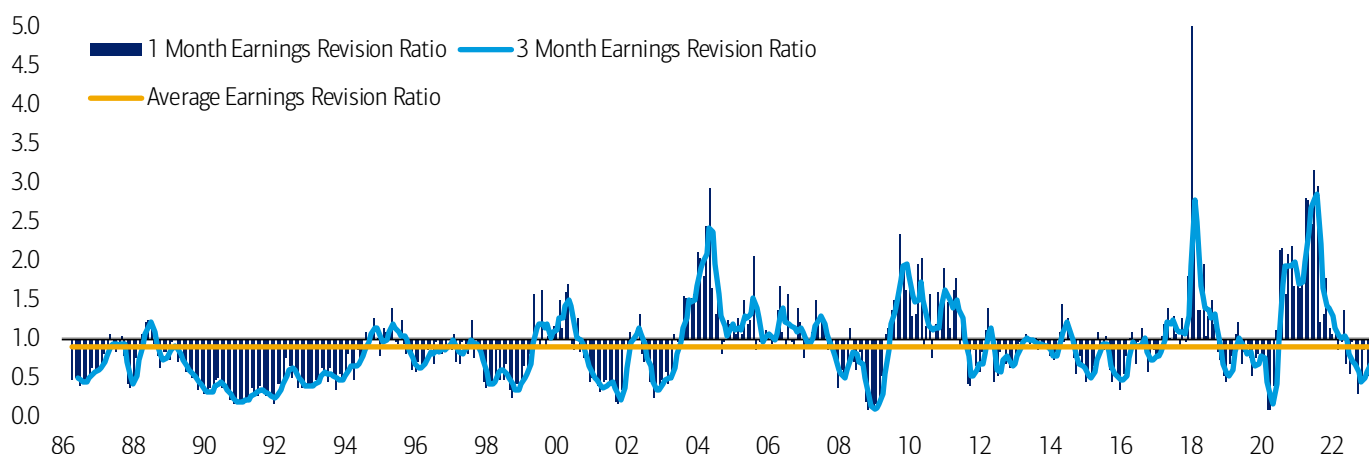
Source: BofA US Equity and Quantitative Strategy

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Regional, Style and Size Benchmarks

Exhibit 3: 3-Month and 1-Month Earnings Estimate Revisions fell from record levels for S&P 500

S&P 500 Earnings Estimate Revision Ratio as of 3/23



Source: BofA US Equity and Quant Strategy, I/B/E/S

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Table 7: Monthly total index returns for select indexes

Total Return - Dividends Reinvested as of 3/31/2023

	1 M	3 M	6 M	12 M	YTD
DJIA	2.08	0.93	17.09	-1.98	0.93
S&P 500	3.67	7.50	15.62	-7.73	7.50
S&P Util	4.92	-3.24	5.11	-6.21	-3.24
Nasdaq Comp.	6.78	17.05	16.14	-13.25	17.05
Russell 1000	3.16	7.46	15.24	-8.39	7.46
Russell 2000	-4.78	2.74	9.14	-11.61	2.74
Valueline (geometric)	-2.44	4.16	13.65	-12.18	4.16
S&P 600	-5.16	2.57	12.00	-8.82	2.57

Source: BofA US Equity & Quant Strategy

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Table 8: Monthly total index returns for select Global Indexes

Total Return - Global Markets (Local Currency)

	1 M	3 M	6 M	12 M	YTD
S&P 500	3.67	7.50	15.62	-7.73	7.50
MSCI AC World Index	2.52	7.15	15.16	-5.12	7.15
MSCI AC World ex-US	0.97	6.31	14.71	0.39	6.31
MSCI EAFE ®	0.63	7.65	17.10	4.39	7.65
MSCI Emerging Markets	2.20	3.84	10.76	-6.23	3.84

Source: BofA US Equity & Quant Strategy, MSCI

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Table 9: Monthly US Dollar denominated total index return for select Global Indexes

Total Return - Global Markets (US Dollars)

	1 M	3 M	6 M	12 M	YTD
S&P 500	3.67	7.50	15.62	-7.73	7.50
MSCI AC World Index	3.15	7.44	18.06	-6.96	7.44
MSCI AC World ex-US	2.55	7.00	22.38	-4.57	7.00
MSCI EAFE ®	2.61	8.62	27.52	-0.86	8.62
MSCI Emerging Markets	3.07	4.02	14.20	-10.30	4.02

Source: BofA US Equity & Quant Strategy, MSCI

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Table 10: Monthly style based total index returns

Total Return by Style: Large Cap Growth vs. Value (%)

	1 M	3 M	6 M	12 M	YTD
S&P 500/Citigroup Growth	5.85	9.63	11.22	-15.33	9.63
S&P 500/Citigroup Value	1.31	5.17	19.47	-0.16	5.17
Russell 1000 Growth	6.84	14.37	16.88	-10.90	14.37
Russell 1000 Value	-0.46	1.01	13.55	-5.91	1.01

Source: BofA US Equity & Quant Strategy

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Table 11: Monthly style based total index returns

Total Return by Style: Small Cap Growth vs. Value (%)

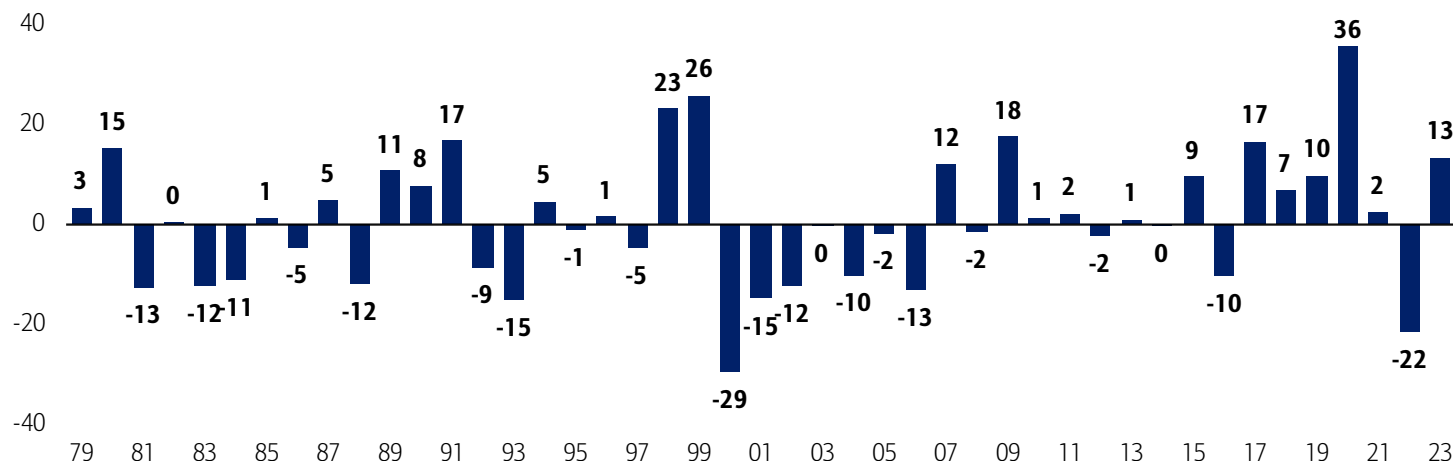
	1 M	3 M	6 M	12 M	YTD
S&P 600/Citigroup Growth	-3.97	2.14	9.27	-10.91	2.14
S&P 600/Citigroup Value	-6.40	3.05	14.57	-6.81	3.05
Russell 2000 Growth	-2.47	6.07	10.46	-10.60	6.07
Russell 2000 Value	-7.17	-0.66	7.70	-12.96	-0.66

Source: BofA US Equity & Quant Strategy

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Exhibit 4: Annual relative (Growth vs. Value) total returns for Russell Large Caps

Relative total return of the Russell 1000 Growth Index vs. the Russell 1000 Value Index (1979-3/2023)



Source: BofA US Equity and Quantitative Strategy, Bloomberg

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S&P 500 Performance and Characteristics**Table 12: Monthly S&P500 index relative price return distribution analysis**

Distribution of S&P 500 as of 3/31/2023 (Quintiles are held and re-balanced monthly)

	# of	Wgt in	Relative Price Performance					BofA	Proj EPS		Forward	Div.
	Comp	S&P 500	1 Mon	3 Mon	6 Mon	12 Mon	YTD	Adj Beta	2023	2024	P/E Ratio	Yield
Economic Sectors												
Energy	23	4.61	-3.99	-12.60	0.30	18.40	-12.60	1.36	-20	-1	10	3.54
Materials	29	2.64	-4.84	-3.28	4.13	1.07	-3.28	1.09	-16	7	17	2.05
Industrials	73	8.66	-2.95	-4.00	7.66	7.70	-4.00	1.10	12	13	19	1.60
Consumer Discretionary	53	10.13	-0.50	8.74	-10.89	-11.13	8.74	1.30	8	21	25	1.21
Consumer Staples	37	7.23	0.31	-6.87	-2.45	7.89	-6.87	0.59	4	9	20	2.55
Health Care	65	14.20	-1.44	-11.75	-7.56	4.02	-11.75	0.69	-9	10	17	1.54
Financials	73	12.91	-13.24	-13.08	-8.48	-6.76	-13.08	1.04	11	11	13	1.94
Real Estate	30	2.56	-5.59	-5.99	-10.69	-13.07	-5.99	0.86	-19	9	36	3.62
Information Technology	66	26.08	7.36	14.46	12.28	3.74	14.46	1.22	0	16	25	0.98
Communication Services	24	8.11	6.87	13.15	3.62	-9.23	13.15	1.03	13	17	16	0.63
Utilities	30	2.86	1.11	-11.06	-11.15	0.27	-11.06	0.54	4	8	18	3.19
Capitalization Sectors (\$ Million)												
2599 To 14323	101	2.87	-6.97	-6.34	-12.27	4.63	-6.34	1.18	3	17	13	2.30
14323 To 22643	100	5.01	-7.09	-6.85	-20.34	-3.64	-6.85	1.01	5	12	15	1.92
22643 To 38695	101	8.65	-4.57	-3.67	-13.06	4.15	-3.67	1.10	7	12	16	1.84
38695 To 75269	100	14.47	-2.52	-4.82	-13.75	4.77	-4.82	1.03	-8	8	17	2.17
75269 To 2609039	101	68.99	2.04	2.99	-14.58	-0.63	2.99	1.02	1	13	20	1.43
Risk Sectors (Beta)												
0.16 To 0.69	100	21.32	-1.10	-10.52	-17.56	3.75	-10.52	0.52	-3	9	17	2.39
0.69 To 0.94	100	20.16	1.31	-1.74	-11.30	4.75	-1.74	0.86	3	13	21	1.50
0.94 To 1.14	100	21.60	-1.37	-2.24	-15.96	-3.61	-2.24	1.06	3	10	16	1.79
1.14 To 1.37	100	23.80	2.59	10.24	-15.89	-0.08	10.24	1.26	-1	15	21	0.92
1.37 To 3.53	100	12.94	-2.56	12.59	-10.64	-2.90	12.59	1.68	-1	13	17	1.59
Uncoded	3	0.18										
Yield Sectors												
0.00 To 0.00	0	23.81	3.75	13.08	-17.58	-7.96	13.08	1.19	10	21	23	0.00
0.00 To 1.23	79	27.36	4.29	9.39	-11.46	2.30	9.39	1.13	2	15	26	0.70
1.23 To 2.25	101	16.72	-3.37	-7.80	-13.06	5.79	-7.80	0.96	0	10	18	1.70
2.25 To 3.44	100	21.06	-3.80	-8.59	-15.57	0.41	-8.59	0.87	-1	7	14	2.85
3.44 To 25.40	101	11.06	-4.28	-9.23	-15.59	5.88	-9.23	0.88	-9	8	12	4.96

Table 12: Monthly S&P500 index relative price return distribution analysis

Distribution of S&P 500 as of 3/31/2023 (Quintiles are held and re-balanced monthly)

	# of	Wgt in	Relative Price Performance					BofA Adj	Proj EPS Growth		Forward	Div.
Relative Forward P/E Sectors												
-3.30 To 0.59	100	12.76	-10.27	-11.17	-16.63	2.43	-11.17	1.13	-8	6	9	3.44
0.59 To 0.86	100	15.93	-3.55	-7.04	-14.36	-0.31	-7.04	0.91	-5	9	13	2.57
0.86 To 1.09	99	17.91	0.53	-1.22	-13.33	5.41	-1.22	0.97	7	13	18	1.42
1.09 To 1.50	100	27.65	4.09	4.74	-11.18	4.16	4.74	0.98	3	13	24	1.14
1.50 To 11.69	100	25.65	3.34	11.47	-20.00	-7.33	11.47	1.16	16	27	37	0.80
Uncoded	4	0.10										
Cash Flow Yield Sectors												
-40.58 To 3.69	92	18.71	2.55	9.58	-15.72	-8.54	9.58	1.22	23	21	29	0.46
3.69 To 5.49	92	32.25	3.84	4.13	-14.04	4.08	4.13	1.00	6	14	26	1.05
5.49 To 7.45	92	22.73	0.85	0.86	-11.06	8.29	0.86	0.89	4	11	17	1.88
7.45 To 11.28	92	9.94	-7.47	-9.42	-19.43	-1.54	-9.42	1.01	2	10	13	2.75
11.28 To 61.12	92	12.00	-3.93	-6.34	-12.27	4.63	-6.34	1.14	-19	7	10	3.17
Uncoded	43	4.38										
S&P 500	503	100.00	3.51	7.03	14.61	-9.29	7.03	1.03	0	12	18.3	1.62
S&P Industrials	386	82.55	5.67	9.63	16.57	-7.73	9.63	1.05	-3	12	19.8	1.51

Source: BofA US Equity & Quant Strategy, I/B/E/S. Note: BofA Fundamental Research data is used for Projected EPS growth and Next Year P/E ratio. I/B/E/S consensus data is filled in if not covered by BofA Fundamental Research

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Table 13: Monthly S&P 500 index relative price return distribution analysis

Distribution of S&P 500 as of 3/31/2023 (Quintiles are held and re-balanced monthly.) – Continued

	# of	Wgt in	Relative Price Performance					BofA	Proj EPS Growth		Forward	Div.
As of March 2023	Comp	S&P 500	1 Mon	3 Mon	6 Mon	12 Mon	YTD	Adj Beta	2023	2024	P/E Ratio	Yield
Price/Sales Sectors												
0.10 To 1.13	101	8.09	-5.69	-6.79	-14.02	6.44	-6.79	1.05	-2	8	11	2.46
1.13 To 2.05	100	15.73	0.39	-1.13	-8.36	9.27	-1.13	1.02	-1	8	12	2.58
2.05 To 3.26	101	21.46	-6.79	-9.26	-24.77	-10.21	-9.26	1.02	-4	17	18	1.40
3.26 To 5.46	100	19.67	0.32	1.14	-6.68	6.13	1.14	0.89	1	11	18	1.93
5.46 To 25.33	101	35.05	4.92	8.40	-16.38	-2.10	8.40	1.12	5	15	29	0.96
Uncoded	0	0.00										
Long Term Growth												
-65.00 To 2.55	81	12.60	-4.08	-4.25	-11.22	5.30	-4.25	0.99	-21	9	12	3.26
2.55 To 7.30	80	15.52	-2.61	-8.79	-16.34	0.63	-8.79	0.84	6	9	14	2.67
7.30 To 10.22	81	22.42	1.93	3.33	-15.15	8.82	3.33	1.04	4	11	22	1.38
10.22 To 14.69	80	20.05	2.07	-0.52	-15.66	-2.15	-0.52	1.03	7	14	21	1.09
14.69 To 125.80	81	18.65	2.21	13.30	-11.96	-3.29	13.30	1.17	5	16	21	0.76
Uncoded	100	10.76										
P/E-to-Growth Sectors												
0.06 To 1.30	69	8.79	-2.20	1.18	-6.24	9.41	1.18	1.13	0	10	12	1.46
1.30 To 1.94	68	15.45	-1.26	-3.60	-19.05	-2.88	-3.60	0.97	7	15	18	1.33
1.94 To 2.57	68	12.64	3.10	5.99	-13.20	3.00	5.99	0.97	10	11	17	1.93
2.57 To 3.75	68	25.52	3.22	6.85	-15.90	-0.22	6.85	1.02	5	12	24	1.18
3.75 To 115.63	69	17.91	-0.26	-7.72	-19.94	-5.73	-7.72	1.01	0	11	20	1.78
Uncoded	161	19.69										
ROE (1 Yr Avg.)												
0.32 To 8.21	87	11.48	-0.12	-0.20	-13.37	5.32	-0.20	0.98	2	20	18	2.06
8.21 To 13.66	86	10.44	-5.14	-4.67	-23.09	-7.25	-4.67	1.00	6	10	14	2.27
13.66 To 21.93	86	13.06	-1.73	0.24	-9.07	2.45	0.24	1.08	1	14	19	1.17
21.93 To 35.28	86	22.17	-0.38	-0.32	-18.82	-4.89	-0.32	1.01	-7	10	17	1.76
35.28 To 813.88	87	30.29	3.51	3.71	-11.75	3.72	3.71	1.06	-4	8	21	1.37
Uncoded	71	12.55										
S&P 500	503	100.00	3.51	7.03	14.61	-9.29	7.03	1.03	0	12	18	1.62
S&P Industrials	386	82.55	5.67	9.63	16.57	-7.73	9.63	1.05	-3	12	20	1.51

Source: BofA US Equity & Quant Strategy, I/B/E/S. Note: BofA Fundamental Research data is used for Projected EPS growth and Next Year P/E ratio. I/B/E/S consensus data is filled in if not covered by BofA Fundamental Research.

Table 13: Monthly S&P 500 index relative price return distribution analysis

Distribution of S&P 500 as of 3/31/2023 (Quintiles are held and re-balanced monthly.) – Continued

# of	Wgt in	Relative Price Performance	BofA	Proj EPS Growth	Forward	Div.
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Table 14: Latest additions and deletions from S&P 500 Index

S&P 500 Additions and Deletions in March

Additions				Deletions		
Date	Ticker	Name	Sector	Ticker	Name	Sector
	BG	Bunge Limited	Consumer Staples	LUMN	Lumen Technologies, Inc.	Communication Services
	FICO	Fair Isaac Corporation	Information Technology	SBNY	Signature Bank	Financials
	PODD	Insulet Corporation	Health Care	SIVB	SVB Financial Group	SVB Financial Group

Source: BofA US Equity & Quant Strategy

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Table 15: Latest month's end total US and S&P 500 market cap

Market Capitalization as of 3/31/2023

Total U.S. Market Cap = 45.021 trillion (US\$)†

Source: † NYSE, AMEX & NASDAQ Listed Stocks ex ADRs, preferred shares & Non-US

S&P 500 Total Market Cap = 35.812 trillion (US\$)‡

‡ As Reported By S&P, not float adjusted

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S&P 500 Sector & Industry Performance

Table 16: Monthly GICS sector/industry based relative price performance for S&P500 Index

Distribution of S&P 500 by GICS Sector/Industry Classifications as of 3/31/2023

	# of	Wgt in	Relative Price Performance					BofA Adj Beta	Proj Eps Growth		Forward	Div.
As of March 2023	Comp	S&P500	1 Mon	3 Mon	6 Mon	12 Mon	YTD		2023	2024	P/E Ratio	Yield
Energy	23	4.61	-3.99	-12.60	0.30	18.40	-12.60	1.36	-20	-1	10.1	3.54
Energy Equipment & Services	3	0.37	-11.95	-16.84	20.41	7.96	-16.84	1.78	44	24	14.0	2.17
Oil Gas & Consumable Fuels	20	4.24	-3.23	-12.21	-1.16	19.33	-12.21	1.32	-22	-2	9.8	3.66
Materials	29	2.64	-4.84	-3.28	4.13	1.07	-3.28	1.09	-16	7	16.8	2.05
Chemicals	16	1.80	-4.89	-3.99	2.42	6.21	-3.99	1.04	-10	11	17.4	2.03
Construction Materials	2	0.13	-6.83	-5.70	-5.12	2.11	-5.70	0.81	20	19	24.9	0.88
Containers & Packaging	7	0.26	-4.40	-6.98	-3.99	-11.25	-6.98	0.95	-14	8	14.4	3.09
Metals & Mining	4	0.45	-4.33	2.83	22.68	-11.00	2.83	1.42	-34	-8	14.9	1.88
Industrials	73	8.66	-2.95	-4.00	7.66	7.70	-4.00	1.10	12	13	18.6	1.60
Aerospace & Defense	10	1.75	-3.26	-8.41	8.16	11.77	-8.41	0.99	45	12	22.4	1.54
Air Freight & Logistics	4	0.65	3.75	8.23	11.47	3.10	8.23	1.13	-13	11	15.9	2.72
Passenger Airlines	5	0.21	-12.32	-1.09	4.41	-8.94	-1.09	1.31	124	29	6.7	0.60
Building Products	6	0.44	-4.83	-2.07	10.26	11.19	-2.07	1.15	10	11	17.8	1.32
Commercial Services & Supplies	5	0.49	3.41	-0.12	-3.15	16.56	-0.12	0.95	8	13	28.7	1.16
Professional Services	9	0.77	-1.32	-7.35	-5.54	-4.34	-7.35	0.94	5	13	24.7	1.60
Construction & Engineering	1	0.07	-0.26	9.91	16.21	35.91	9.91	1.08	12	14	22.8	0.19
Electrical Equipment	5	0.56	-2.93	-3.66	7.59	6.09	-3.66	1.26	0	11	21.3	1.73
Industrial Conglomerates	3	0.84	0.13	-3.23	15.44	10.35	-3.23	1.13	-9	25	21.1	2.21
Machinery	17	1.80	-4.52	-4.33	13.87	16.08	-4.33	1.11	11	7	16.3	1.08
Ground Transportation	5	0.81	-6.31	-9.95	-6.39	-11.83	-9.95	1.16	0	9	17.1	2.01
Trading Companies & Distributors	3	0.26	-6.51	9.32	18.53	18.06	9.32	1.38	17	8	16.0	1.70
Consumer Discretionary	53	10.13	-0.50	8.74	-10.89	-11.13	8.74	1.30	8	21	25.1	1.21
Automobile Components	2	0.12	-6.70	13.86	32.20	10.26	13.86	1.85	17	30	16.7	0.38
Automobiles	3	1.92	-2.91	48.22	-32.29	-30.31	48.22	1.94	-13	19	25.0	1.98
Hotels Restaurants & Leisure	17	2.11	-0.15	5.52	13.19	12.74	5.52	1.14	134	22	24.4	1.23
Household Durables	8	0.35	0.75	4.75	18.34	19.53	4.75	1.30	-31	7	11.0	1.68
Leisure Products	1	0.02	-5.90	-19.03	-34.97	-25.17	-19.03	0.72	-1	13	11.8	5.22
Broadline Retail	3	2.79	-4.13	-5.71	-11.37	-5.02	-5.71	1.27	67	67	54.1	0.06
Specialty Retail	12	2.16	-4.35	-10.01	-2.15	13.59	-10.01	0.97	0	9	18.1	1.85
Textiles Apparel & Luxury Goods	4	0.51	-1.16	-2.79	27.29	-3.85	-2.79	1.15	6	19	25.2	1.42
Distributors	3	0.15	-7.33	-3.93	-1.61	21.33	-3.93	1.04	1	8	17.2	1.89
Consumer Staples	37	7.23	0.31	-6.87	-2.45	7.89	-6.87	0.59	4	9	20.2	2.55
Beverages	7	1.81	0.66	-7.49	-4.53	14.24	-7.49	0.61	7	9	23.6	2.44
Consumer Staples Distribution & Retail	8	1.97	-0.22	-1.76	-5.41	0.10	-1.76	0.69	6	11	21.1	1.52
Food Products	14	1.16	0.21	-8.24	-2.58	13.27	-8.24	0.53	-4	5	17.1	2.51
Household Products	5	1.46	3.42	-8.26	2.28	7.95	-8.26	0.41	7	9	24.1	2.53
Personal Care Products	1	0.17	-2.10	-7.69	-0.45	-0.20	-7.69	1.01	1	31	36.7	1.07
Tobacco	2	0.67	-4.92	-10.41	0.15	5.65	-10.41	0.68	5	8	12.0	6.33
Health Care	65	14.20	-1.44	-11.75	-7.56	4.02	-11.75	0.69	-9	10	17.1	1.54
Biotechnology	8	2.29	1.31	-8.43	2.52	16.67	-8.43	0.56	-22	4	16.3	2.38
Health Care Equipment & Supplies	20	2.86	0.47	-3.14	3.96	-3.30	-3.14	0.87	-4	11	24.9	1.08
Health Care Providers & Services	16	3.04	-6.10	-18.30	-18.31	2.78	-18.30	0.75	7	11	13.9	1.42
Pharmaceuticals	9	4.16	-1.42	-15.95	-12.21	6.31	-15.95	0.50	-16	11	14.6	2.04
Life Sciences Tools & Services	12	1.84	0.38	-5.75	-3.84	-1.02	-5.75	0.93	-2	14	25.6	0.26
Financials	73	12.91	-13.24	-13.08	-8.48	-6.76	-13.08	1.04	11	11	12.8	1.94
Banks	16	3.12	-22.50	-20.01	-18.54	-16.43	-20.01	1.18	8	7	8.3	3.74
Financial Services	9	4.29	-2.96	-7.69	0.31	-3.76	-7.69	0.97	12	14	20.1	0.44
Consumer Finance	4	0.51	-12.30	-0.93	-0.17	-6.09	-0.93	1.31	-8	8	9.5	1.95
Capital Markets	21	2.83	-9.97	-10.07	-4.86	-3.40	-10.07	1.13	11	14	14.8	2.32
Insurance	23	2.16	-9.68	-12.64	-5.05	3.47	-12.64	0.80	25	15	12.1	1.82

Source: BofA US Equity & Quant Strategy. Note: BofA Fundamental Research data is used for Projected EPS growth and Next Year P/E ratio. I/B/E/S consensus data is filled in if not covered by BofA Research.

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Table 17: Monthly GICS sector/industry based relative price performance for S&P500 Index

Distribution of S&P 500 by GICS Sector/Industry Classifications as of 3/31/2023 – Continued

	# of	Wgt in	Relative Price Performance					BofA	Proj Eps		Forward	
	Comp	S&P500	1 Mon	3 Mon	6 Mon	12 Mon	YTD	Adj Beta	2023	2024	P/E Ratio	Yield
Real Estate	30	2.56	-5.59	-5.99	-10.69	-13.07	-5.99	0.86	-19	9	35.7	3.62
Industrial REITs	1	0.34	-2.41	3.65	8.19	-9.59	3.65	1.01	-34	2	44.5	2.79
Hotel & Resort REITs	1	0.03	-5.35	-4.29	-9.44	-4.75	-4.29	1.32	-7	5	19.9	2.91
Office REITs	2	0.08	-20.04	-22.57	-31.63	-38.05	-22.57	0.99	-32	7	31.4	4.81
Health Care REITs	3	0.18	-8.58	-10.49	-19.04	-15.45	-10.49	1.06	-20	73	111.7	4.00
Residential REITs	7	0.34	-7.90	-5.92	-22.89	-23.73	-5.92	0.83	-29	11	40.5	3.95
Retail REITs	5	0.31	-8.24	-10.04	-0.52	-4.74	-10.04	1.19	-4	4	27.7	5.27
Specialized REITs	10	1.21	-0.08	-3.40	-10.20	-6.90	-3.40	0.67	-15	9	35.6	3.43
Real Estate Management & Development	1	0.07	-17.99	-12.42	-6.75	-11.15	-12.42	1.36	-12	16	14.0	0.00
Information Technology	66	26.08	7.36	14.46	12.28	3.74	14.46	1.22	0	16	24.7	0.98
Communications Equipment	5	0.94	6.06	5.56	16.68	7.90	5.56	1.01	11	8	15.4	2.20
Technology Hardware Storage & Peripherals	6	7.39	7.93	19.23	4.70	3.21	19.23	1.30	-1	11	25.1	0.64
Electronic Equipment Instruments & Components	8	0.65	-0.83	1.46	3.23	6.79	1.46	1.23	1	12	19.9	1.07
IT Services	8	1.19	2.22	0.09	2.39	4.47	0.09	1.12	5	9	18.1	2.29
Semiconductors & Semiconductor Equipment	21	6.45	9.18	28.78	37.74	5.12	28.78	1.46	-15	28	25.2	1.31
Software	18	9.45	10.62	13.44	11.28	3.46	13.44	1.01	11	15	27.5	0.73
Communication Services	24	8.11	6.87	13.15	3.62	-9.23	13.15	1.03	13	17	16.4	0.63
Diversified Telecommunication Services	2	0.88	-2.83	-6.57	-4.70	-4.87	-6.57	0.47	-7	2	8.1	3.65
Media	10	0.78	-2.33	1.51	11.68	-12.27	1.51	1.04	-2	13	10.7	2.40
Interactive Media & Services	4	4.78	13.14	22.57	4.69	-10.51	22.57	1.13	12	21	19.8	0.00
Entertainment	7	1.43	0.87	8.91	4.14	-9.41	8.91	1.14	146	25	24.4	0.04
Wireless Telecommunication Services	1	0.25	-1.63	-3.57	-6.65	22.14	-3.57	0.56	235	40	19.1	0.00
Utilities	30	2.86	1.11	-11.06	-11.15	0.27	-11.06	0.54	4	8	17.9	3.19
Electric Utilities	17	1.87	2.08	-11.45	-10.32	2.66	-11.45	0.54	5	9	18.0	3.21
Gas Utilities	1	0.05	-3.90	-6.77	-4.29	3.33	-6.77	0.62	7	7	18.1	2.63
Multi-Utilities	10	0.82	-0.32	-9.60	-14.25	-4.70	-9.60	0.53	1	5	17.5	3.51
Water Utilities	1	0.08	1.02	-10.92	-2.06	-2.22	-10.92	0.57	8	8	30.1	0.00
Independent Power and Renewable Electricity Producers	1	0.05	-5.94	-23.30	-8.06	2.88	-23.30	0.93	3	13	13.6	2.76
S&P 500	503	100.00	3.51	7.03	14.61	-9.29	7.03	1.03	0	12	18.3	1.62
S&P Industrials	386	82.55	5.67	9.63	16.57	-7.73	9.63	1.05	-3	12	19.8	1.51

Source: BofA US Equity and Quant Strategy.

Note: BofA Fundamental Research data is used for Projected EPS growth and Next Year P/E ratio. I/B/E/S consensus data is filled in if not covered by BofA Fundamental Research. Note: returns for Communication Services are based on returns of the former Telecommunication Services sector through close on 9/21/18 and of the new Communication Services sector from 9/21/18 close through the latest month-end.

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Table 18: 1 month, 3months and 12 months' top 20/bottom 20 relative price performance by industries in S&P500 index

Industries Sorted By Relative Price Performance as of 3/31/2023

Top 20 By Last Month Perf.	1 Month	12	Bottom 20 By Last Month Perf.	1 Month	12
Interactive Media & Services	13.1	-10.5	Banks	-22.5	-16.4
Software	10.6	3.5	Office REITs	-20.0	-38.0
Semiconductors & Semiconductor Equipment	9.2	5.1	Real Estate Management & Development	-18.0	-11.1
Technology Hardware Storage & Peripherals	7.9	3.2	Passenger Airlines	-12.3	-8.9
Communications Equipment	6.1	7.9	Consumer Finance	-12.3	-6.1
Air Freight & Logistics	3.8	3.1	Energy Equipment & Services	-11.9	8.0
Household Products	3.4	7.9	Capital Markets	-10.0	-3.4
Commercial Services & Supplies	3.4	16.6	Insurance	-9.7	3.5
IT Services	2.2	4.5	Equity Real Estate Investment Trusts (REITs)	-8.9	-16.0
Electric Utilities	2.1	2.7	Health Care REITs	-8.6	-15.4
Biotechnology	1.3	16.7	Retail REITs	-8.2	-4.7
Entertainment	0.9	-9.4	Residential REITs	-7.9	-23.7
Internet & Direct Marketing Retail	0.8	-29.5	Distributors	-7.3	21.3
Household Durables	0.8	19.5	Construction Materials	-6.8	2.1
Beverages	0.7	14.2	Automobile Components	-6.7	10.3
Health Care Equipment & Supplies	0.5	-3.3	Trading Companies & Distributors	-6.5	18.1
Life Sciences Tools & Services	0.4	-1.0	Ground Transportation	-6.3	-11.8
Food Products	0.2	13.3	Health Care Providers & Services	-6.1	2.8
Industrial Conglomerates	0.1	10.3	Independent Power and Renewable Electricity Producers	-5.9	2.9
Specialized REITs	-0.1	-6.9	Leisure Products	-5.9	-25.2
Top 20 By Three-Month Perf.	1 Month	3 Months	Bottom 20 By Three-Month Perf.	1 Month	3 Months
Automobiles	-2.9	48.2	Independent Power and Renewable Electricity Producers	-5.9	-23.3
Semiconductors & Semiconductor Equipment	9.2	28.8	Office REITs	-20.0	-22.6
Interactive Media & Services	13.1	22.6	Banks	-22.5	-20.0
Technology Hardware Storage & Peripherals	7.9	19.2	Leisure Products	-5.9	-19.0
Automobile Components	-6.7	13.9	Health Care Providers & Services	-6.1	-18.3
Software	10.6	13.4	Energy Equipment & Services	-11.9	-16.8
Construction & Engineering	-0.3	9.9	Pharmaceuticals	-1.4	-15.9
Internet & Direct Marketing Retail	0.8	9.7	Insurance	-9.7	-12.6
Trading Companies & Distributors	-6.5	9.3	Real Estate Management & Development	-18.0	-12.4
Entertainment	0.9	8.9	Oil Gas & Consumable Fuels	-3.2	-12.2
Air Freight & Logistics	3.8	8.2	Electric Utilities	2.1	-11.4
Communications Equipment	6.1	5.6	Health Care REITs	-8.6	-10.5
Hotels Restaurants & Leisure	-0.2	5.5	Tobacco	-4.9	-10.4
Household Durables	0.8	4.8	Capital Markets	-10.0	-10.1
Industrial REITs	-2.4	3.7	Retail REITs	-8.2	-10.0
Metals & Mining	-4.3	2.8	Specialty Retail	-4.3	-10.0
Media	-2.3	1.5	Ground Transportation	-6.3	-10.0
Electronic Equipment Instruments & Components	-0.8	1.5	Multi-Utilities	-0.3	-9.6
IT Services	2.2	0.1	Equity Real Estate Investment Trusts (REITs)	-8.9	-9.6
Commercial Services & Supplies	3.4	-0.1	Biotechnology	1.3	-8.4
Top 20 By Year-To-Date Perf.	1 Month	YTD	Bottom 20 By Year-To-Date Perf.	1 Month	YTD
Automobiles	-2.9	48.2	Independent Power and Renewable Electricity Producers	-5.9	-23.3
Semiconductors & Semiconductor Equipment	9.2	28.8	Office REITs	-20.0	-22.6
Interactive Media & Services	13.1	22.6	Banks	-22.5	-20.0
Technology Hardware Storage & Peripherals	7.9	19.2	Leisure Products	-5.9	-19.0
Automobile Components	-6.7	13.9	Health Care Providers & Services	-6.1	-18.3
Software	10.6	13.4	Energy Equipment & Services	-11.9	-16.8
Construction & Engineering	-0.3	9.9	Pharmaceuticals	-1.4	-15.9
Internet & Direct Marketing Retail	0.8	9.7	Insurance	-9.7	-12.6
Trading Companies & Distributors	-6.5	9.3	Real Estate Management & Development	-18.0	-12.4
Entertainment	0.9	8.9	Oil Gas & Consumable Fuels	-3.2	-12.2
Air Freight & Logistics	3.8	8.2	Electric Utilities	2.1	-11.4
Communications Equipment	6.1	5.6	Health Care REITs	-8.6	-10.5
Hotels Restaurants & Leisure	-0.2	5.5	Tobacco	-4.9	-10.4
Household Durables	0.8	4.8	Capital Markets	-10.0	-10.1
Industrial REITs	-2.4	3.7	Retail REITs	-8.2	-10.0
Metals & Mining	-4.3	2.8	Specialty Retail	-4.3	-10.0
Media	-2.3	1.5	Ground Transportation	-6.3	-10.0
Electronic Equipment Instruments & Components	-0.8	1.5	Multi-Utilities	-0.3	-9.6
IT Services	2.2	0.1	Equity Real Estate Investment Trusts (REITs)	-8.9	-9.6
Commercial Services & Supplies	3.4	-0.1	Biotechnology	1.3	-8.4

Source: BofA US Equity & Quant Strategy

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Performance Attribution

S&P 500

Table 19: S&P 500 Performance Attribution Analysis
1m, 3m and YTD performance attribution (as of 3/31/2023)

	March		Last 3 Months		Year to Date		Weight
	Return	Contrib.	Return	Contrib.	Return	Contrib.	
Core Index	3.7		7.5		7.5		
GLCS Sector							
Consumer Discretionary	3.2	0.3	16.2	1.6	16.2	1.6	10.2
Consumer Staples	4.0	0.3	0.6	0.1	0.6	0.1	7.2
Energy	-0.2	0.0	-4.6	-0.2	-4.6	-0.2	4.8
Financials	-7.5	-1.1	-3.4	-0.6	-3.4	-0.6	14.5
Health Care	2.2	0.3	-4.4	-0.7	-4.4	-0.7	14.3
Industrials	0.7	0.1	3.6	0.3	3.6	0.3	8.9
Information Technology	12.1	2.9	23.1	5.5	23.1	5.5	24.1
Materials	-1.0	0.0	4.3	0.1	4.3	0.1	2.8
Real Estate	-1.4	0.0	2.0	0.1	2.0	0.1	2.7
Communication Services	10.4	0.8	20.5	1.5	20.5	1.5	7.7
Utilities	4.9	0.1	-3.2	-0.1	-3.2	-0.1	2.8
Market Cap							
Q1 (Largest)	5.7	3.8	9.9	6.7	9.9	6.7	67.5
Q2	1.2	0.2	1.9	0.3	1.9	0.3	15.3
Q3	-1.0	-0.1	3.7	0.3	3.7	0.3	8.9
Q4	-2.7	-0.1	1.5	0.1	1.5	0.1	5.4
Q5 (Smallest)	-3.1	-0.1	3.6	0.1	3.6	0.1	3.0
P/E							
O1 (Lowest)	-6.3	-0.9	-4.7	-0.7	-4.7	-0.7	14.5
Q2	0.7	0.1	2.2	0.4	2.2	0.4	15.8
Q3	4.0	0.7	6.8	1.4	6.8	1.4	17.1
Q4	7.6	2.5	8.8	2.8	8.8	2.8	33.2
O5 (Highest)	6.9	1.3	18.1	2.9	18.1	2.9	18.8
NA	-7.0	0.0	13.5	0.7	13.5	0.7	0.6
ROE							
Q1 (Highest)	7.4	2.2	11.3	3.4	11.3	3.4	29.9
Q2	3.8	0.9	7.3	1.7	7.3	1.7	23.4
Q3	2.4	0.4	9.0	1.2	9.0	1.2	15.0
Q4	-2.1	-0.3	1.9	0.3	1.9	0.3	12.5
Q5 (Lowest)	3.1	0.4	6.7	0.7	6.7	0.7	13.7
NA	1.0	0.1	3.7	0.3	3.7	0.3	5.6
PRICE							
Q1 (Highest)	6.5	1.9	6.8	2.1	6.8	2.1	29.7
O2	4.8	1.4	12.5	3.5	12.5	3.5	29.5
Q3	3.1	0.6	7.3	1.8	7.3	1.8	19.9
O4	0.8	0.1	1.2	0.2	1.2	0.2	10.6
Q5 (Lowest)	-3.1	-0.3	1.6	0.1	1.6	0.1	10.2
LTG							
Q1 (Highest)	5.5	1.1	17.5	3.1	17.5	3.1	19.9
Q2	5.4	1.0	4.7	0.8	4.7	0.8	17.8
Q3	6.1	1.3	11.0	2.3	11.0	2.3	22.0
Q4	1.1	0.2	-1.1	-0.2	-1.1	-0.2	17.8
Q5 (Lowest)	0.1	0.0	4.6	0.7	4.6	0.7	12.2
NA	0.7	0.1	9.1	0.8	9.1	0.8	10.4
Beta							
Q1 (Highest)	1.5	0.2	18.9	2.2	18.9	2.2	13.2
Q2	6.0	1.4	17.0	3.8	17.0	3.8	23.2
Q3	2.4	0.5	5.2	1.2	5.2	1.2	21.6
Q4	5.1	1.0	5.1	1.1	5.1	1.1	19.9
Q5 (Lowest)	2.6	0.6	-3.1	-0.7	-3.1	-0.7	22.1
EPS Estimate Revision							
Q1 (Highest)	3.4	0.5	5.5	0.9	5.5	0.9	14.4
O2	2.1	0.5	0.1	0.1	0.1	0.1	22.3
Q3	6.5	1.4	5.3	1.2	5.3	1.2	21.1
Q4	5.6	1.3	15.3	3.9	15.3	3.9	23.6
Q5 (Lowest)	0.3	0.1	9.4	1.5	9.4	1.5	18.4
NA	-25.3	0.0	-18.9	0.0	-18.9	0.0	0.2

Source: BofA US Equity and US Quant Strategy

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S&P 500 Growth

Table 20: S&P 500 Growth Performance Attribution Analysis

1m, 3m and YTD performance attribution (as of 3/31/2023)

	March		Last 3 Months		Year to Date		
	Return	Contrib.	Return	Contrib.	Return	Contrib.	Weight
Growth Index	5.9		9.6		9.6		
GICS Sector							
Consumer Discretionary	3.3	0.3	20.8	1.9	20.8	1.9	10.0
Consumer Staples	4.3	0.3	0.7	0.1	0.7	0.1	7.2
Energy	0.0	0.0	-5.4	-0.4	-5.4	-0.4	7.7
Financials	-1.7	-0.1	1.8	0.0	1.8	0.0	7.9
Health Care	2.7	0.5	-5.8	-1.2	-5.8	-1.2	19.2
Industrials	0.6	0.0	1.4	0.1	1.4	0.1	5.8
Information Technology	12.3	3.9	25.6	8.1	25.6	8.1	32.0
Materials	-3.2	-0.1	4.4	0.1	4.4	0.1	2.4
Real Estate	1.2	0.0	1.2	0.0	1.2	0.0	0.8
Communication Services	14.3	0.9	16.2	1.1	16.2	1.1	6.5
Utilities	2.5	0.0	-1.7	0.0	-1.7	0.0	0.5
Market Cap							
Q1 (Largest)	7.5	5.3	12.1	8.6	12.1	8.6	71.5
Q2	2.5	0.3	2.8	0.4	2.8	0.4	13.9
Q3	2.5	0.2	6.0	0.4	6.0	0.4	7.4
Q4	-0.2	0.0	3.8	0.2	3.8	0.2	4.7
Q5 (Smallest)	-0.3	0.0	0.7	0.0	0.7	0.0	2.5
P/E							
Q1 (Lowest)	-0.5	-0.1	-4.5	-0.8	-4.5	-0.8	14.6
Q2	4.6	1.0	4.4	1.0	4.4	1.0	21.5
Q3	2.5	0.3	7.6	1.6	7.6	1.6	11.1
Q4	9.4	3.2	9.1	3.2	9.1	3.2	33.9
Q5 (Highest)	7.6	1.4	26.0	4.0	26.0	4.0	18.7
NA	15.8	0.0	41.8	0.5	41.8	0.5	0.1
ROE							
Q1 (Highest)	7.8	2.2	13.4	3.6	13.4	3.6	27.4
Q2	5.4	1.3	10.5	2.4	10.5	2.4	23.4
Q3	5.6	1.2	6.9	1.7	6.9	1.7	21.0
Q4	5.3	0.7	7.9	1.0	7.9	1.0	13.3
Q5 (Lowest)	4.8	0.5	9.5	0.8	9.5	0.8	9.6
NA	1.9	0.1	2.7	0.2	2.7	0.2	5.3
PRICE							
Q1 (Highest)	3.6	0.7	1.8	0.4	1.8	0.4	18.6
Q2	7.5	1.9	10.6	2.5	10.6	2.5	24.8
Q3	7.4	2.0	19.3	5.2	19.3	5.2	26.3
Q4	5.8	1.3	7.7	1.7	7.7	1.7	21.7
Q5 (Lowest)	1.1	0.1	-1.9	-0.2	-1.9	-0.2	8.4
LTG							
Q1 (Highest)	5.0	1.0	21.3	3.8	21.3	3.8	19.4
Q2	6.0	1.0	6.1	1.0	6.1	1.0	17.0
Q3	8.0	1.3	9.1	1.1	9.1	1.1	16.1
Q4	7.7	2.0	11.4	3.4	11.4	3.4	25.5
Q5 (Lowest)	2.7	0.5	-2.4	-0.1	-2.4	-0.1	16.9
NA	2.9	0.2	11.0	0.4	11.0	0.4	5.1
Beta							
Q1 (Highest)	6.2	0.9	31.3	3.7	31.3	3.7	14.2
Q2	7.8	2.2	15.9	4.5	15.9	4.5	28.2
Q3	7.8	2.0	10.2	2.5	10.2	2.5	25.2
Q4	1.0	0.1	-4.9	-0.8	-4.9	-0.8	14.3
Q5 (Lowest)	3.7	0.7	-1.8	-0.3	-1.8	-0.3	18.2
EPS Estimate Revision							
Q1 (Highest)	1.6	0.2	2.0	0.2	2.0	0.2	9.7
Q2	3.8	0.6	0.3	0.1	0.3	0.1	15.9
Q3	5.0	0.9	0.7	0.1	0.7	0.1	18.2
Q4	9.4	3.3	26.4	7.3	26.4	7.3	35.3
Q5 (Lowest)	4.2	0.9	10.2	2.0	10.2	2.0	21.0
NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: BofA US Equity and US Quant Strategy

BofA GLOBAL RESEARCH



S&P 500 Value

Table 21: S&P 500 Value Performance Attribution Analysis

1m, 3m and YTD performance attribution (as of 3/31/2023)

	March		Last 3 Months		Year to Date		Weight
	Return	Contrib.	Return	Contrib.	Return	Contrib.	
Value Index	1.3		5.2		5.2		
GICS Sector							
Consumer Discretionary	3.1	0.3	11.8	1.2	11.8	1.2	10.3
Consumer Staples	3.6	0.3	0.4	0.1	0.4	0.1	7.2
Energy	-1.0	0.0	-0.6	0.0	-0.6	0.0	1.6
Financials	-9.8	-2.1	-5.7	-1.2	-5.7	-1.2	21.7
Health Care	1.1	0.1	-0.9	-0.1	-0.9	-0.1	9.1
Industrials	0.8	0.1	4.7	0.6	4.7	0.6	12.4
Information Technology	11.6	1.8	17.4	2.7	17.4	2.7	15.6
Materials	0.8	0.0	4.2	0.1	4.2	0.1	3.2
Real Estate	-1.9	-0.1	2.1	0.1	2.1	0.1	4.7
Communication Services	7.3	0.6	24.3	1.9	24.3	1.9	8.9
Utilities	5.2	0.3	-3.4	-0.2	-3.4	-0.2	5.3
Market Cap							
Q1 (Largest)	3.3	2.0	7.2	4.5	7.2	4.5	61.5
Q2	-1.5	-0.3	0.8	0.2	0.8	0.2	17.6
Q3	-3.0	-0.3	1.8	0.2	1.8	0.2	10.6
Q4	0.1	0.0	5.6	0.4	5.6	0.4	6.7
Q5 (Smallest)	-4.5	-0.2	0.8	0.0	0.8	0.0	3.6
P/E							
Q1 (Lowest)	-9.1	-1.9	-3.8	-0.8	-3.8	-0.8	20.4
Q2	0.6	0.1	4.0	0.8	4.0	0.8	15.2
Q3	3.3	0.6	5.9	0.9	5.9	0.9	17.4
Q4	5.5	1.5	6.3	1.8	6.3	1.8	26.8
Q5 (Highest)	6.0	1.1	10.5	1.8	10.5	1.8	19.1
NA	-10.2	-0.1	9.4	0.9	9.4	0.9	1.1
ROE							
Q1 (Highest)	6.1	1.2	9.0	1.9	9.0	1.9	20.0
Q2	3.3	0.6	10.9	1.8	10.9	1.8	18.1
Q3	-2.7	-0.4	0.4	-0.1	0.4	-0.1	16.1
Q4	-2.9	-0.5	0.7	0.4	0.7	0.4	19.0
Q5 (Lowest)	2.2	0.5	5.8	1.0	5.8	1.0	20.9
NA	0.1	0.0	4.5	0.4	4.5	0.4	5.8
PRICE							
Q1 (Highest)	4.7	1.2	6.7	1.9	6.7	1.9	26.6
Q2	2.9	0.7	8.9	2.0	8.9	2.0	24.3
Q3	0.6	0.1	3.6	1.0	3.6	1.0	20.1
Q4	-0.6	-0.1	2.1	0.3	2.1	0.3	14.1
Q5 (Lowest)	-3.9	-0.6	1.8	0.3	1.8	0.3	14.7
LTG							
Q1 (Highest)	2.4	0.4	10.9	1.9	10.9	1.9	15.1
Q2	5.3	0.9	5.4	0.8	5.4	0.8	17.1
Q3	3.0	0.5	2.9	0.1	2.9	0.1	16.5
Q4	-0.9	-0.2	-0.8	-0.2	-0.8	-0.2	20.8
Q5 (Lowest)	-1.8	-0.3	7.4	1.4	7.4	1.4	14.3
NA	-0.1	0.0	8.4	1.3	8.4	1.3	16.2
Beta							
Q1 (Highest)	-4.4	-0.6	3.9	0.5	3.9	0.5	14.5
Q2	3.8	0.8	16.1	3.8	16.1	3.8	21.9
Q3	-1.1	-0.3	1.1	0.5	1.1	0.5	22.6
Q4	4.7	1.0	6.5	1.2	6.5	1.2	21.1
Q5 (Lowest)	2.5	0.5	-2.4	-0.5	-2.4	-0.5	19.8
EPS Estimate Revision							
Q1 (Highest)	4.3	0.8	7.8	1.7	7.8	1.7	19.4
Q2	1.7	0.4	0.8	0.2	0.8	0.2	21.9
Q3	3.0	0.7	3.2	0.6	3.2	0.6	21.8
Q4	-0.5	-0.1	3.8	1.0	3.8	1.0	16.8
Q5 (Lowest)	-1.9	-0.4	11.1	1.8	11.1	1.8	19.7
NA	-24.5	-0.1	-18.9	-0.1	-18.9	-0.1	0.4

Source: BofA US Equity and US Quant Strategy

BofA GLOBAL RESEARCH



Russell 1000

Table 22: Russell 1000 Performance Attribution Analysis

1m, 3m and YTD performance attribution (as of 3/31/2023)

	March		Last 3 Months		Year to Date		Weight
	Return	Contrib.	Return	Contrib.	Return	Contrib.	
Core Index	3.2		7.5		7.5		
GICS Sector							
Consumer Discretionary	2.8	0.3	15.5	1.5	15.5	1.5	10.3
Consumer Staples	3.9	0.3	0.7	0.1	0.7	0.1	6.7
Energy	-0.5	0.0	-5.1	-0.2	-5.1	-0.2	4.7
Financials	-7.8	-1.1	-2.9	-0.5	-2.9	-0.5	14.8
Health Care	2.3	0.3	-3.8	-0.6	-3.8	-0.6	14.0
Industrials	0.1	0.0	4.6	0.4	4.6	0.4	9.8
Information Technology	11.4	2.7	22.6	5.3	22.6	5.3	23.5
Materials	-1.3	0.0	4.6	0.1	4.6	0.1	3.0
Real Estate	-1.8	-0.1	1.8	0.1	1.8	0.1	3.1
Communication Services	10.0	0.7	20.3	1.4	20.3	1.4	7.4
Utilities	4.8	0.1	-3.2	-0.1	-3.2	-0.1	2.7
Market Cap							
Q1 (Largest)	4.9	3.6	8.4	6.3	8.4	6.3	74.7
Q2	-1.2	-0.2	4.0	0.6	4.0	0.6	13.8
Q3	-1.1	-0.1	5.3	0.3	5.3	0.3	6.2
Q4	-4.1	-0.1	4.3	0.2	4.3	0.2	3.6
Q5 (Smallest)	-4.8	-0.1	6.4	0.1	6.4	0.1	1.7
P/E							
Q1 (Lowest)	-6.1	-0.8	-4.5	-0.6	-4.5	-0.6	12.8
Q2	-1.4	-0.2	3.0	0.6	3.0	0.6	15.8
Q3	3.3	0.6	4.2	0.7	4.2	0.7	18.8
Q4	7.0	2.4	10.1	3.5	10.1	3.5	33.9
Q5 (Highest)	6.8	1.2	17.8	2.7	17.8	2.7	16.9
NA	1.1	0.0	16.5	0.7	16.5	0.7	1.8
ROE							
Q1 (Highest)	6.2	2.2	11.1	3.8	11.1	3.8	34.9
Q2	4.8	1.1	9.8	2.1	9.8	2.1	22.4
Q3	-2.9	-0.4	-1.6	-0.1	-1.6	-0.1	12.4
Q4	-0.9	-0.1	4.5	0.8	4.5	0.8	14.5
Q5 (Lowest)	3.1	0.3	10.4	0.9	10.4	0.9	10.4
NA	1.6	0.1	1.2	0.1	1.2	0.1	5.5
PRICE							
Q1 (Highest)	5.4	2.1	6.7	2.6	6.7	2.6	38.5
Q2	3.0	0.9	9.6	2.6	9.6	2.6	28.7
Q3	3.8	0.7	9.9	1.9	9.9	1.9	17.8
Q4	-3.5	-0.4	0.9	0.1	0.9	0.1	10.7
Q5 (Lowest)	-1.7	-0.1	4.6	0.2	4.6	0.2	4.3
LTG							
Q1 (Highest)	3.8	0.5	16.9	2.5	16.9	2.5	14.2
Q2	6.1	1.3	8.4	1.8	8.4	1.8	21.4
Q3	5.5	1.1	10.1	2.0	10.1	2.0	20.5
Q4	1.2	0.2	-1.5	-0.2	-1.5	-0.2	18.2
Q5 (Lowest)	-0.1	0.0	4.0	0.6	4.0	0.6	11.4
NA	-0.2	0.0	6.2	0.8	6.2	0.8	14.3
Beta							
Q1 (Highest)	1.3	0.1	22.6	2.1	22.6	2.1	10.7
Q2	4.4	0.9	16.0	3.2	16.0	3.2	21.2
Q3	2.6	0.6	6.9	1.6	6.9	1.6	23.7
Q4	4.3	0.9	5.6	1.2	5.6	1.2	21.3
Q5 (Lowest)	2.4	0.6	-2.7	-0.7	-2.7	-0.7	23.1
EPS Estimate Revision							
Q1 (Highest)	2.8	0.4	7.6	1.0	7.6	1.0	13.9
Q2	2.0	0.5	1.2	0.4	1.2	0.4	24.6
Q3	3.1	0.4	2.9	0.3	2.9	0.3	13.8
Q4	6.5	1.9	16.2	4.4	16.2	4.4	29.4
Q5 (Lowest)	-0.4	-0.1	8.8	1.4	8.8	1.4	18.0
NA	0.8	0.0	12.2	0.0	12.2	0.0	0.2

Source: BofA US Equity and US Quant Strategy

BofA GLOBAL RESEARCH



Russell 1000 Growth

Table 23: Russell 1000 Growth Performance Attribution Analysis

1m, 3m and YTD performance attribution (as of 3/31/2023)

	March		Last 3 Months		Year to Date		Weight
	Return	Contrib.	Return	Contrib.	Return	Contrib.	
Growth Index	6.8		14.4		14.4		
GLCS Sector							
Consumer Discretionary	4.1	0.6	20.1	2.8	20.1	2.8	14.7
Consumer Staples	4.1	0.3	1.9	0.1	1.9	0.1	6.1
Energy	-0.6	0.0	-8.3	-0.1	-8.3	-0.1	1.5
Financials	-1.6	-0.1	5.4	0.1	5.4	0.1	7.3
Health Care	3.4	0.4	-1.2	-0.2	-1.2	-0.2	12.0
Industrials	0.7	0.1	5.4	0.4	5.4	0.4	8.7
Information Technology	11.9	4.7	23.8	9.5	23.8	9.5	39.9
Materials	-1.6	0.0	2.7	0.0	2.7	0.0	1.4
Real Estate	1.5	0.0	1.9	0.0	1.9	0.0	1.5
Telecommunication Services	13.3	0.9	20.7	1.4	20.7	1.4	6.8
Utilities	5.2	0.0	-3.8	0.0	-3.8	0.0	0.0
Market Cap							
Q1 (Largest)	8.1	6.5	15.4	12.3	15.4	12.3	80.1
Q2	3.3	0.4	10.9	1.2	10.9	1.2	11.3
Q3	-0.9	0.0	7.0	0.4	7.0	0.4	5.1
Q4	-0.9	0.0	9.8	0.2	9.8	0.2	2.4
Q5 (Smallest)	-0.1	0.0	13.0	0.1	13.0	0.1	1.1
P/E							
Q1 (Lowest)	-2.1	-0.1	2.1	0.2	2.1	0.2	4.9
Q2	4.0	0.9	8.0	1.3	8.0	1.3	22.4
Q3	8.2	2.1	13.9	4.5	13.9	4.5	25.3
Q4	8.9	2.3	15.4	3.5	15.4	3.5	25.5
Q5 (Highest)	8.3	1.7	24.4	3.6	24.4	3.6	20.0
NA	2.1	0.0	16.3	1.0	16.3	1.0	1.9
ROE							
Q1 (Highest)	6.5	2.2	12.4	4.1	12.4	4.1	33.5
Q2	7.3	2.3	14.0	4.2	14.0	4.2	31.4
Q3	8.9	1.4	19.6	3.1	19.6	3.1	15.6
Q4	4.9	0.3	17.8	1.7	17.8	1.7	6.4
Q5 (Lowest)	6.8	0.6	17.3	0.8	17.3	0.8	8.6
NA	1.4	0.1	5.2	0.2	5.2	0.2	4.4
PRICE							
Q1 (Highest)	8.4	3.2	9.6	3.7	9.6	3.7	38.3
Q2	6.3	2.1	18.6	6.0	18.6	6.0	33.7
Q3	6.8	1.4	15.7	3.5	15.7	3.5	20.9
Q4	2.4	0.1	10.1	0.5	10.1	0.5	4.8
Q5 (Lowest)	-2.0	0.0	13.7	0.3	13.7	0.3	2.2
LTG							
Q1 (Highest)	6.4	1.0	27.0	3.4	27.0	3.4	14.9
Q2	6.7	1.1	14.6	2.4	14.6	2.4	17.2
Q3	8.6	1.8	12.5	2.7	12.5	2.7	20.4
Q4	7.9	2.0	14.1	3.7	14.1	3.7	25.9
Q5 (Lowest)	4.3	0.4	6.0	0.6	6.0	0.6	10.1
NA	4.3	0.5	14.2	1.2	14.2	1.2	11.5
Beta							
Q1 (Highest)	6.1	0.7	40.7	3.9	40.7	3.9	11.8
Q2	8.9	2.4	20.6	5.3	20.6	5.3	27.2
Q3	6.4	1.4	12.2	2.7	12.2	2.7	21.9
Q4	7.7	1.7	11.1	2.5	11.1	2.5	22.1
Q5 (Lowest)	3.4	0.6	-1.2	-0.2	-1.2	-0.2	17.0
EPS Estimate Revision							
Q1 (Highest)	3.0	0.3	10.6	0.9	10.6	0.9	10.2
Q2	4.9	0.8	4.5	0.9	4.5	0.9	17.1
Q3	5.5	0.9	8.5	1.3	8.5	1.3	16.6
Q4	10.6	4.2	24.8	9.0	24.8	9.0	39.2
Q5 (Lowest)	3.7	0.6	11.6	2.2	11.6	2.2	16.8
NA	-1.0	0.0	7.2	0.0	7.2	0.0	0.0

Source: BofA US Equity and US Quant Strategy

BofA GLOBAL RESEARCH



Russell 1000 Value

Table 24: Russell 1000 Value Performance Attribution Analysis

1m, 3m and YTD performance attribution (as of 3/31/2023)

	March		Last 3 Months		Year to Date		Weight
	Return	Contrib.	Return	Contrib.	Return	Contrib.	
Value Index	-0.5		1.0		1.0		
GICS Sector							
Consumer Discretionary	-0.3	0.0	5.4	0.3	5.4	0.3	5.9
Consumer Staples	3.7	0.3	-0.3	0.0	-0.3	0.0	7.3
Energy	-0.4	0.0	-4.5	-0.4	-4.5	-0.4	8.0
Financials	-9.8	-2.2	-5.2	-1.2	-5.2	-1.2	22.1
Health Care	1.4	0.2	-5.7	-0.9	-5.7	-0.9	16.0
Industrials	-0.3	0.0	3.9	0.4	3.9	0.4	10.9
Information Technology	8.9	0.6	16.7	1.3	16.7	1.3	7.3
Materials	-1.2	-0.1	5.2	0.2	5.2	0.2	4.5
Real Estate	-2.9	-0.1	1.8	0.1	1.8	0.1	4.6
Telecommunication Services	7.2	0.6	19.9	1.5	19.9	1.5	8.1
Utilities	4.8	0.3	-3.2	-0.2	-3.2	-0.2	5.3
Market Cap							
Q1 (Largest)	0.8	0.6	0.6	0.5	0.6	0.5	67.8
Q2	-2.5	-0.4	1.0	0.2	1.0	0.2	17.2
Q3	-2.4	-0.2	2.9	0.2	2.9	0.2	7.7
Q4	-4.6	-0.2	3.1	0.1	3.1	0.1	4.9
Q5 (Smallest)	-6.7	-0.2	3.2	0.1	3.2	0.1	2.4
P/E							
Q1 (Lowest)	-7.4	-1.4	-5.6	-1.3	-5.6	-1.3	18.3
Q2	-3.2	-0.7	0.6	0.4	0.6	0.4	20.3
Q3	2.4	0.5	3.0	0.7	3.0	0.7	22.8
Q4	2.1	0.5	0.2	0.1	0.2	0.1	25.0
Q5 (Highest)	4.1	0.5	6.9	1.0	6.9	1.0	11.8
NA	0.0	0.0	18.3	0.4	18.3	0.4	1.7
ROE							
Q1 (Highest)	1.1	0.2	-1.1	-0.1	-1.1	-0.1	17.6
Q2	1.2	0.3	3.9	0.7	3.9	0.7	22.4
Q3	-4.8	-0.9	-3.3	-0.6	-3.3	-0.6	18.9
Q4	-1.0	-0.2	2.2	0.4	2.2	0.4	20.2
Q5 (Lowest)	0.5	0.1	5.1	0.8	5.1	0.8	14.3
NA	1.7	0.1	-0.2	0.0	-0.2	0.0	6.6
PRICE							
Q1 (Highest)	2.2	0.7	0.3	0.2	0.3	0.2	32.3
Q2	-0.8	-0.2	2.3	0.8	2.3	0.8	26.6
Q3	-0.4	-0.1	1.4	0.1	1.4	0.1	17.2
Q4	-4.6	-0.8	-1.1	-0.1	-1.1	-0.1	17.2
Q5 (Lowest)	-1.5	-0.1	2.9	0.2	2.9	0.2	6.7
LTG							
Q1 (Highest)	1.3	0.2	5.9	0.8	5.9	0.8	13.7
Q2	0.0	0.0	-2.3	-0.3	-2.3	-0.3	12.7
Q3	1.5	0.2	2.0	0.3	2.0	0.3	15.6
Q4	-0.7	-0.2	-3.1	-0.7	-3.1	-0.7	24.6
Q5 (Lowest)	-1.0	-0.2	3.3	0.6	3.3	0.6	16.3
NA	-3.2	-0.5	2.0	0.5	2.0	0.5	17.2
Beta							
Q1 (Highest)	-4.4	-0.4	4.7	0.5	4.7	0.5	9.0
Q2	-3.2	-0.5	3.7	0.6	3.7	0.6	15.7
Q3	-0.7	-0.2	4.0	1.0	4.0	1.0	26.3
Q4	0.3	0.1	0.3	0.1	0.3	0.1	19.7
Q5 (Lowest)	2.0	0.6	-3.6	-1.1	-3.6	-1.1	29.3
EPS Estimate Revision							
Q1 (Highest)	2.7	0.5	-1.2	1.0	-1.2	1.0	17.1
Q2	0.5	0.1	-2.7	0.1	-2.7	0.1	27.5
Q3	-0.8	-0.1	-4.3	-0.8	-4.3	-0.8	13.8
Q4	-1.8	-0.4	-6.1	0.4	-6.1	0.4	22.2
Q5 (Lowest)	-2.8	-0.5	-5.7	0.4	-5.7	0.4	19.2
NA	1.1	0.0	3.1	0.0	3.1	0.0	0.3

Source: BofA US Equity and US Quant Strategy

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Russell Midcap

Table 25: Russell Midcap Performance Attribution Analysis

1m, 3m and YTD performance attribution (as of 3/31/2023)

	March		Last Three Months		Year to date		Weight
	Return	Contrib.	Return	Contrib.	Return	Contrib.	
Core Index	-1.5	—	4.0	—	4.0	—	
Market Cap Size Quintile							
Q1 (Largest)	-0.4	-0.2	3.8	1.9	3.8	1.9	48.3
Q2	-1.5	-0.3	3.5	0.9	3.5	0.9	22.8
Q3	-2.3	-0.3	5.3	0.8	5.3	0.8	14.4
Q4	-4.1	-0.4	4.5	0.4	4.5	0.4	9.6
Q5 (Smallest)	-5.7	-0.3	5.4	0.3	5.4	0.3	5.0
P/E Quintile							
Q1 (Lowest)	-9.7	-1.3	-2.6	-0.4	-2.6	-0.4	13.7
Q2	-4.3	-0.8	3.6	0.6	3.6	0.6	17.8
Q3	-1.9	-0.4	0.6	0.2	0.6	0.2	21.6
Q4	1.3	0.3	4.2	1.0	4.2	1.0	21.2
Q5 (Highest)	3.0	0.6	8.3	1.7	8.3	1.7	20.7
Nonearnings Stories	1.8	0.1	21.9	1.1	21.9	1.1	4.9
ROE Quintile		-1.5					
Q1 (Highest)	0.3	0.1	7.1	1.7	7.1	1.7	25.7
Q2	-1.7	-0.3	3.3	0.8	3.3	0.8	19.9
Q3	-5.3	-1.0	-1.5	-0.2	-1.5	-0.2	19.1
Q4	-1.0	-0.2	2.7	0.6	2.7	0.6	18.2
Q5 (Lowest)	-0.5	-0.1	8.7	1.4	8.7	1.4	17.1
Beta Quintile		-1.523					
Q1 (Lowest)	0.0	0.0	-0.7	-0.1	-0.7	-0.1	23.0
Q2	-1.0	-0.2	2.1	0.5	2.1	0.5	21.7
Q3	-3.1	-0.6	0.9	0.3	0.9	0.3	20.7
Q4	-2.5	-0.5	9.6	1.8	9.6	1.8	19.6
Q5 (Highest)	-1.2	-0.2	13.2	1.8	13.2	1.8	15.0
Debt to Capital		-1.523					
Q1 (Highest)	-0.8	-0.1	5.4	1.0	5.4	1.0	18.2
Q2	-3.6	-0.7	-0.7	0.1	-0.7	0.1	19.8
Q3	-2.8	-0.6	2.6	0.6	2.6	0.6	20.1
Q4	-1.7	-0.4	3.8	0.8	3.8	0.8	21.7
Q5 (Lowest)	1.3	0.3	10.1	1.8	10.1	1.8	20.2
Stock Price		-1.5					
<=5	-11.8	0.0	-7.0	0.0	-7.0	0.0	0.1
>5, <=10	-4.8	0.0	17.1	0.3	17.1	0.3	0.7
>10, <=20	-6.5	-0.3	0.7	0.0	0.7	0.0	4.3
>20	-1.3	-1.2	4.0	3.8	4.0	3.8	94.9
Long-Term Earnings Growth		-1.5					
<=10%	-1.8	-0.6	0.9	0.5	0.9	0.5	32.3
>10%, <=20%	0.5	0.1	5.8	1.2	5.8	1.2	24.4
>20%	-0.4	0.0	5.4	0.7	5.4	0.7	11.5
NA	-3.1	-1.0	5.4	1.8	5.4	1.8	31.8
Dividend Yield		-1.5					
Yield	-2.7	-1.9	1.2	0.9	1.2	0.9	68.6
No Yield	1.1	0.4	10.7	3.3	10.7	3.3	31.4
GICS Sector		-1.5					
Consumer Discretionary	-0.1	0.0	8.0	1.0	8.0	1.0	11.7
Consumer Staples	3.3	0.1	3.1	0.1	3.1	0.1	3.8
Energy	-3.7	-0.2	-7.9	-0.4	-7.9	-0.4	4.8
Financials	-12.8	-1.9	-6.3	-0.9	-6.3	-0.9	14.9
Health Care	2.0	0.2	3.4	0.4	3.4	0.4	10.6
Industrials	-0.9	-0.2	8.0	1.3	8.0	1.3	17.1
Information Technology	4.4	0.6	14.0	2.0	14.0	2.0	14.2
Materials	-3.9	-0.3	4.1	0.3	4.1	0.3	6.4
Real Estate	-4.1	-0.3	0.5	0.1	0.5	0.1	7.4
Communication Services	2.7	0.1	15.4	0.5	15.4	0.5	3.5
Utilities	4.3	0.2	-1.7	-0.1	-1.7	-0.1	5.4

Source: BofA US Equity and US Quant Strategy

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Russell Midcap Growth

Table 26: Russell Midcap Growth Performance Attribution Analysis

1m, 3m and YTD performance attribution (as of 3/31/2023)

	March		Last Three Months		Year to date		Weight
	Return	Contrib.	Return	Contrib.	Return	Contrib.	
Core Index	1.4	—	9.1	—	9.1	—	
Market Cap Size Quintile							
Q1 (Largest)	3.0	1.5	9.2	4.6	9.2	4.6	49.1
Q2	0.1	0.0	8.6	2.1	8.6	2.1	25.3
Q3	0.8	0.1	8.7	1.2	8.7	1.2	13.7
Q4	-2.7	-0.2	7.7	0.6	7.7	0.6	7.8
Q5 (Smallest)	-0.4	0.0	14.9	0.6	14.9	0.6	4.1
P/E Quintile							
Q1 (Lowest)	-6.7	-0.7	2.0	0.2	2.0	0.2	10.2
Q2	-4.4	-0.7	5.4	0.6	5.4	0.6	16.4
Q3	1.2	0.2	6.0	1.3	6.0	1.3	20.4
Q4	4.2	1.0	10.9	2.6	10.9	2.6	23.5
Q5 (Highest)	5.8	1.3	12.6	2.8	12.6	2.8	21.8
Nonearnings Stories	3.5	0.3	20.6	1.6	20.6	1.6	7.8
ROE Quintile							
Q1 (Highest)	1.7	0.5	6.3	1.7	6.3	1.7	29.7
Q2	1.8	0.4	10.5	2.9	10.5	2.9	24.2
Q3	-1.3	-0.2	5.4	1.0	5.4	1.0	16.0
Q4	3.8	0.5	17.6	2.1	17.6	2.1	12.7
Q5 (Lowest)	0.8	0.1	8.7	1.4	8.7	1.4	17.4
Beta Quintile							
Q1 (Lowest)	0.4	0.1	2.5	0.5	2.5	0.5	18.1
Q2	0.7	0.1	3.1	0.7	3.1	0.7	20.8
Q3	1.3	0.3	7.8	1.9	7.8	1.9	21.3
Q4	3.0	0.7	17.8	3.7	17.8	3.7	23.7
Q5 (Highest)	1.0	0.2	15.2	2.4	15.2	2.4	16.1
Debt to Capital							
Q1 (Highest)	0.4	0.1	5.6	1.2	5.6	1.2	20.4
Q2	0.7	0.1	7.3	1.5	7.3	1.5	20.1
Q3	-2.6	-0.5	7.2	1.3	7.2	1.3	18.7
Q4	2.2	0.4	6.6	1.3	6.6	1.3	18.4
Q5 (Lowest)	5.4	1.2	18.8	3.8	18.8	3.8	22.4
Stock Price							
<=5	-1.9	0.0	26.2	0.0	26.2	0.0	0.0
>5, <=10	1.2	0.0	42.3	0.5	42.3	0.5	0.8
>10, <=20	-2.7	-0.1	15.2	0.2	15.2	0.2	2.3
>20	1.5	1.4	8.7	8.4	8.7	8.4	96.9
Long-Term Earnings Growth							
<=10%	0.7	0.1	5.0	1.0	5.0	1.0	17.1
>10%, <=20%	2.3	0.8	9.0	3.0	9.0	3.0	36.9
>20%	1.4	0.3	8.3	1.8	8.3	1.8	17.9
NA	0.5	0.2	12.6	3.3	12.6	3.3	28.1
Dividend Yield							
Yield	-0.2	-0.1	5.6	2.8	5.6	2.8	47.9
No Yield	2.8	1.5	12.4	6.4	12.4	6.4	52.1
GLCS Sector							
Consumer Discretionary	2.3	0.3	10.1	1.5	10.1	1.5	15.0
Consumer Staples	3.5	0.1	8.2	0.2	8.2	0.2	3.2
Energy	-4.3	-0.2	-9.6	-0.4	-9.6	-0.4	4.4
Financials	-7.9	-0.6	2.8	0.1	2.8	0.1	7.4
Health Care	3.1	0.5	5.9	1.0	5.9	1.0	16.7
Industrials	0.6	0.1	10.4	1.7	10.4	1.7	17.9
Information Technology	4.4	1.1	15.0	3.9	15.0	3.9	25.2
Materials	-5.6	-0.2	0.9	0.1	0.9	0.1	3.8
Real Estate	-4.8	-0.1	0.7	0.0	0.7	0.0	2.0
Communication Services	5.7	0.2	27.9	1.0	27.9	1.0	4.2
Utilities	5.2	0.0	-3.8	0.0	-3.8	0.0	0.2

Source: BofA US Equity and US Quant Strategy

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Russell Midcap Value

Table 27: Russell Midcap Value Performance Attribution Analysis

1m, 3m and YTD performance attribution (as of 3/31/2023)

	March		Last Three Months		Year to date		Weight
	Return	Contrib.	Return	Contrib.	Return	Contrib.	
Core Index	-3.1	—	1.3	—	1.3	—	
Market Cap Size Quintile							
Q1 (Largest)	-2.7	-1.3	0.0	0.1	0.0	0.1	46.7
Q2	-1.6	-0.4	1.3	0.4	1.3	0.4	22.4
Q3	-3.5	-0.5	4.8	0.8	4.8	0.8	14.7
Q4	-5.6	-0.6	2.3	0.3	2.3	0.3	10.6
Q5 (Smallest)	-7.0	-0.4	2.6	0.2	2.6	0.2	5.5
P/E Quintile							
Q1 (Lowest)	-10.5	-1.6	-3.3	-0.5	-3.3	-0.5	15.4
Q2	-5.3	-1.1	2.0	0.3	2.0	0.3	20.1
Q3	-0.4	-0.1	1.8	0.4	1.8	0.4	22.7
Q4	-1.1	-0.2	-0.3	0.0	-0.3	0.0	21.9
Q5 (Highest)	-0.6	-0.1	2.0	0.5	2.0	0.5	16.6
Nonearnings Stories	-0.3	0.0	22.6	0.9	22.6	0.9	3.4
ROE Quintile							
Q1 (Highest)	-2.6	-0.4	5.5	0.8	5.5	0.8	17.0
Q2	-2.8	-0.6	0.0	0.1	0.0	0.1	20.1
Q3	-5.4	-1.2	-2.1	-0.4	-2.1	-0.4	21.9
Q4	-1.6	-0.3	1.4	0.3	1.4	0.3	20.2
Q5 (Lowest)	-2.9	-0.6	3.7	0.8	3.7	0.8	20.8
Beta Quintile							
Q1 (Lowest)	0.4	-3.126	-1.7	-0.4	-1.7	-0.4	24.5
Q2	-1.4	0.1	0.9	0.3	0.9	0.3	23.1
Q3	-4.6	-0.3	-0.9	-0.2	-0.9	-0.2	19.7
Q4	-4.7	-0.9	3.8	0.7	3.8	0.7	17.5
Q5 (Highest)	-7.7	-0.8	6.8	1.1	6.8	1.1	14.8
Debt to Capital							
Q1 (Highest)	-3.4	-3.121	1.4	0.3	1.4	0.3	14.4
Q2	-2.9	-0.5	-0.5	-0.1	-0.5	-0.1	21.5
Q3	-4.6	-0.6	-0.8	0.0	-0.8	0.0	20.4
Q4	-2.7	-0.9	2.6	0.5	2.6	0.5	23.6
Q5 (Lowest)	-2.1	-0.6	4.4	0.9	4.4	0.9	20.1
Stock Price							
<=5	-13.5	-3.1	-12.3	0.0	-12.3	0.0	0.2
>5, <=10	-8.7	0.0	4.8	0.2	4.8	0.2	0.7
>10, <=20	-7.4	-0.1	-2.0	-0.1	-2.0	-0.1	5.4
>20	-2.8	-0.4	1.4	1.3	1.4	1.3	93.8
Long-Term Earnings Growth							
<=10%	-2.4	-2.6	0.0	0.2	0.0	0.2	40.7
>10%, <=20%	-1.7	-1.0	2.0	0.3	2.0	0.3	17.5
>20%	-2.6	-0.3	1.8	0.1	1.8	0.1	8.0
NA	-4.8	-0.2	2.3	1.0	2.3	1.0	33.8
Dividend Yield							
Yield	-3.6	-1.6	-0.3	-0.1	-0.3	-0.1	80.1
No Yield	-1.3	-3.1	8.1	1.6	8.1	1.6	19.9
GICS Sector							
Consumer Discretionary	-2.0	-0.3	6.3	0.7	6.3	0.7	10.0
Consumer Staples	3.2	-0.2	1.0	0.1	1.0	0.1	4.2
Energy	-3.4	0.1	-7.1	-0.4	-7.1	-0.4	5.0
Financials	-13.8	-0.2	-8.1	-1.4	-8.1	-1.4	19.1
Health Care	0.6	-2.6	0.4	0.1	0.4	0.1	7.2
Industrials	-1.9	0.0	6.6	1.0	6.6	1.0	16.6
Information Technology	4.4	-0.3	12.4	1.1	12.4	1.1	8.1
Materials	-3.5	0.4	5.0	0.4	5.0	0.4	7.9
Real Estate	-4.0	-0.3	0.5	0.1	0.5	0.1	10.5
Communication Services	0.6	-0.4	7.3	0.2	7.3	0.2	3.2
Utilities	4.3	0.0	-1.7	-0.1	-1.7	-0.1	8.2

Source: BofA US Equity and US Quant Strategy

BofA GLOBAL RESEARCH



Russell 2500

Table 28: Russell 2500 Performance Attribution Analysis

1m, 3m and YTD performance attribution (as of 3/31/2023)

	March		Last Three Months		Year to date		Weight
	Return	Contrib.	Return	Contrib.	Return	Contrib.	
Core Index	-3.8	—	3.4	—	3.4	—	
Market Cap Size Quintile							
Q1 (Largest)	-2.5	-1.5	3.5	2.2	3.5	2.2	59.8
Q2	-4.4	-1.0	4.1	1.0	4.1	1.0	22.6
Q3	-5.7	-0.6	4.3	0.5	4.3	0.5	10.7
Q4	-8.7	-0.4	0.2	0.1	0.2	0.1	4.8
Q5 (Smallest)	-10.7	-0.2	-2.8	-0.1	-2.8	-0.1	2.1
Market Cap Bucket							
>1 BIL	-3.3	-3.1	3.7	3.4	3.7	3.4	93.1
>500 MIL, <=1 BIL	-8.4	-0.4	0.3	0.1	0.3	0.1	4.3
>250 MIL, <=500M	-11.6	-0.2	-5.0	0.0	-5.0	0.0	1.7
<=250M	-10.0	-0.1	2.6	0.0	2.6	0.0	0.9
P/E Quintile							
Q1 (Lowest)	-6.8	-0.7	1.7	0.3	1.7	0.3	10.0
Q2	-9.4	-1.5	-1.5	-0.1	-1.5	-0.1	15.4
Q3	-4.9	-0.9	2.0	0.3	2.0	0.3	19.5
Q4	-1.1	-0.2	4.5	1.1	4.5	1.1	22.4
Q5 (Highest)	0.4	0.1	6.2	1.4	6.2	1.4	20.9
Nonearnings Stories	-4.2	-0.5	6.0	0.9	6.0	0.9	11.8
ROE Quintile							
Q1 (Highest)	-2.7	-0.8	5.7	1.7	5.7	1.7	31.3
Q2	-5.6	-1.3	0.3	0.2	0.3	0.2	23.3
Q3	-3.6	-0.8	1.5	0.4	1.5	0.4	20.8
Q4	-2.8	-0.4	4.8	1.0	4.8	1.0	15.0
Q5 (Lowest)	-4.3	-0.4	5.0	0.5	5.0	0.5	9.6
Beta Quintile							
Q1 (Lowest)	-3.6	-0.7	-2.2	-0.4	-2.2	-0.4	19.2
Q2	-2.8	-0.7	2.5	0.7	2.5	0.7	24.8
Q3	-3.5	-0.9	3.4	0.9	3.4	0.9	24.5
Q4	-4.1	-0.7	8.0	1.6	8.0	1.6	18.4
Q5 (Highest)	-5.7	-0.7	7.1	1.0	7.1	1.0	13.1
Debt to Capital							
Q1 (Highest)	-4.3	-0.8	4.1	0.9	4.1	0.9	19.0
Q2	-5.1	-1.2	1.5	0.4	1.5	0.4	23.1
Q3	-3.3	-0.7	3.6	0.8	3.6	0.8	22.4
Q4	-3.1	-0.6	4.2	0.5	4.2	0.5	19.2
Q5 (Lowest)	-2.6	-0.4	3.9	1.2	3.9	1.2	16.3
Stock Price							
<=5	-14.6	-0.2	-4.0	0.1	-4.0	0.1	1.4
>5, <=10	-6.4	-0.2	6.3	0.3	6.3	0.3	3.8
>10, <=20	-5.6	-0.6	2.2	0.4	2.2	0.4	11.1
>20	-3.2	-2.7	3.4	2.8	3.4	2.8	83.8
Long-Term Earnings Growth							
<=10%	-2.6	-0.5	4.4	0.8	4.4	0.8	19.4
>10%, <=20%	0.3	0.0	8.9	1.1	8.9	1.1	12.1
>20%	-3.3	-0.2	2.2	0.2	2.2	0.2	6.4
NA	-4.9	-3.1	2.2	1.6	2.2	1.6	62.2
Dividend Yield							
Yield	-4.9	-2.9	0.9	0.7	0.9	0.7	58.6
No Yield	-2.1	-0.9	7.1	3.0	7.1	3.0	41.4
GLCS Sector							
Consumer Discretionary	-2.3	-0.3	10.5	1.2	10.5	1.2	11.9
Consumer Staples	1.4	0.0	5.8	0.2	5.8	0.2	3.3
Energy	-6.9	-0.3	-9.1	-0.4	-9.1	-0.4	4.8
Financials	-12.8	-2.2	-6.8	-1.1	-6.8	-1.1	17.0
Health Care	-2.4	-0.3	-0.1	0.1	-0.1	0.1	12.2
Industrials	-3.0	-0.6	7.4	1.3	7.4	1.3	19.2
Information Technology	2.6	0.3	12.7	1.7	12.7	1.7	12.3
Materials	-3.2	-0.2	6.8	0.4	6.8	0.4	6.0
Real Estate	-3.5	-0.3	1.5	0.2	1.5	0.2	7.7
Communication Services	-2.4	-0.1	8.5	0.2	8.5	0.2	2.6
Utilities	2.7	0.1	1.1	0.0	1.1	0.0	2.8

Source: FactSet, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH



Russell 2500 Growth

Table 29: Russell 2500 Growth Performance Attribution Analysis

1m, 3m and YTD performance attribution (as of 3/31/2023)

	March		Last Three Months		Year to date		Weight
	Return	Contrib.	Return	Contrib.	Return	Contrib.	
Growth Index	-1.6	—	6.5	—	6.5	—	
Market Cap Size Quintile							
Q1 (Largest)	-0.6	-0.3	5.8	3.4	5.8	3.4	57.0
Q2	-1.9	-0.4	8.9	2.1	8.9	2.1	23.5
Q3	-3.4	-0.4	6.8	0.9	6.8	0.9	11.8
Q4	-4.3	-0.2	6.6	0.4	6.6	0.4	5.6
Q5 (Smallest)	-9.1	-0.2	-2.6	-0.1	-2.6	-0.1	2.2
Market Cap Bucket							
>1 BIL	-1.3	-1.2	6.7	6.2	6.7	6.2	93.8
>500 MIL, <=1 BIL	-5.9	-0.2	4.7	0.3	4.7	0.3	3.8
>250 MIL, <=500M	-11.0	-0.2	-4.9	0.0	-4.9	0.0	1.5
<=250M	-6.2	-0.1	4.2	0.0	4.2	0.0	0.9
P/E Quintile							
Q1 (Lowest)	-6.9	-0.6	-0.7	0.0	-0.7	0.0	8.3
Q2	-4.1	-0.6	6.5	0.9	6.5	0.9	14.0
Q3	-2.2	-0.3	8.6	1.5	8.6	1.5	14.8
Q4	0.0	0.0	6.6	1.5	6.6	1.5	25.7
Q5 (Highest)	1.9	0.4	9.2	2.0	9.2	2.0	21.5
Nonearnings Stories	-3.7	-0.6	4.0	0.8	4.0	0.8	15.8
ROE Quintile							
Q1 (Highest)	-2.2	-0.7	5.1	1.7	5.1	1.7	32.5
Q2	-0.6	-0.2	8.8	2.1	8.8	2.1	23.8
Q3	-0.6	-0.1	7.7	1.6	7.7	1.6	19.1
Q4	-3.0	-0.4	3.4	0.5	3.4	0.5	13.2
Q5 (Lowest)	-2.1	-0.2	7.6	0.9	7.6	0.9	11.4
Beta Quintile							
Q1 (Lowest)	-2.3	-0.5	0.8	0.2	0.8	0.2	22.8
Q2	-0.2	0.0	6.2	1.6	6.2	1.6	21.3
Q3	-1.2	-0.3	7.6	1.4	7.6	1.4	23.0
Q4	-1.6	-0.3	10.1	2.0	10.1	2.0	17.8
Q5 (Highest)	-3.2	-0.5	10.0	1.5	10.0	1.5	15.1
Debt to Capital							
Q1 (Highest)	-2.1	-0.4	6.3	1.4	6.3	1.4	20.6
Q2	-2.8	-0.6	6.6	1.6	6.6	1.6	22.2
Q3	-2.3	-0.4	5.6	1.1	5.6	1.1	18.8
Q4	-0.4	-0.1	7.5	1.4	7.5	1.4	20.5
Q5 (Lowest)	-0.2	0.0	6.4	1.2	6.4	1.2	17.9
Stock Price							
<=5	-15.3	-0.2	-6.3	0.0	-6.3	0.0	1.5
>5, <=10	-4.1	-0.1	9.4	0.3	9.4	0.3	3.3
>10, <=20	-3.2	-0.3	5.7	0.7	5.7	0.7	8.1
>20	-1.1	-1.0	6.5	5.6	6.5	5.6	87.1
Long-Term Earnings Growth							
<=10%	-2.4	-0.3	6.1	0.8	6.1	0.8	12.8
>10%, <=20%	2.4	0.4	12.6	2.0	12.6	2.0	16.4
>20%	-3.9	-0.3	4.5	0.5	4.5	0.5	8.3
NA	-2.2	-1.4	5.3	3.4	5.3	3.4	62.6
Dividend Yield							
Yield	-2.4	-1.1	4.6	2.1	4.6	2.1	44.2
No Yield	-1.0	-0.6	8.1	4.5	8.1	4.5	55.8
GICS Sector							
Consumer Discretionary	-1.1	-0.1	12.3	1.5	12.3	1.5	12.8
Consumer Staples	3.4	0.1	9.8	0.4	9.8	0.4	3.9
Energy	-7.4	-0.4	-12.0	-0.7	-12.0	-0.7	5.4
Financials	-6.9	-0.6	3.5	0.1	3.5	0.1	9.3
Health Care	-1.6	-0.3	1.6	0.4	1.6	0.4	18.3
Industrials	-2.5	-0.5	7.5	1.4	7.5	1.4	20.0
Information Technology	2.2	0.4	13.3	2.8	13.3	2.8	19.3
Materials	-3.4	-0.2	6.7	0.4	6.7	0.4	5.3
Real Estate	-2.8	-0.1	3.9	0.1	3.9	0.1	2.6
Communication Services	0.9	0.0	14.1	0.3	14.1	0.3	1.9
Utilities	3.2	0.0	4.0	0.1	4.0	0.1	1.2

Source: BofA US Equity and US Quant Strategy

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Russell 2500 Value

Table 30: Russell 2500 Value Performance Attribution Analysis

1m, 3m and YTD performance attribution (as of 3/31/2023)

	March		Last Three Months		Year to date		Weight
	Return	Contrib.	Return	Contrib.	Return	Contrib.	
Value Index	-5.1	—	1.4	—	1.4	—	
Market Cap Size Quintile							
Q1 (Largest)	-3.6	-2.2	2.1	1.4	2.1	1.4	60.3
Q2	-6.2	-1.4	0.8	0.4	0.8	0.4	22.5
Q3	-7.7	-0.8	1.5	0.2	1.5	0.2	10.4
Q4	-10.0	-0.5	-2.0	0.0	-2.0	0.0	4.8
Q5 (Smallest)	-12.2	-0.2	-3.3	-0.1	-3.3	-0.1	2.0
Market Cap Bucket							
>1 BIL	-4.6	-4.3	1.7	1.6	1.7	1.6	92.6
>500 MIL, <=1 BIL	-9.7	-0.5	-2.0	0.0	-2.0	0.0	4.7
>250 MIL, <=500M	-11.9	-0.2	-5.1	0.0	-5.1	0.0	1.8
<=250M	-12.3	-0.1	1.6	0.0	1.6	0.0	0.9
P/E Quintile							
Q1 (Lowest)	-6.9	-0.8	2.7	0.5	2.7	0.5	11.2
Q2	-11.6	-1.9	-4.8	-0.5	-4.8	-0.5	16.1
Q3	-6.3	-1.4	0.4	-0.2	0.4	-0.2	22.2
Q4	-1.9	-0.4	2.0	0.6	2.0	0.6	21.8
Q5 (Highest)	-1.0	-0.2	2.9	0.7	2.9	0.7	19.5
Nonearnings Stories	-4.8	-0.4	8.0	1.0	8.0	1.0	9.3
ROE Quintile							
Q1 (Highest)	-4.7	-1.3	4.0	1.3	4.0	1.3	28.6
Q2	-7.3	-1.8	-3.0	-0.6	-3.0	-0.6	24.8
Q3	-4.4	-1.0	-0.1	0.1	-0.1	0.1	23.8
Q4	-2.6	-0.4	5.9	1.0	5.9	1.0	15.8
Q5 (Lowest)	-7.1	-0.5	2.7	0.3	2.7	0.3	7.1
Beta Quintile							
Q1 (Lowest)	-4.0	-0.8	-3.3	-0.6	-3.3	-0.6	20.0
Q2	-4.5	-1.1	0.1	0.1	0.1	0.1	24.5
Q3	-4.4	-1.1	2.2	0.8	2.2	0.8	25.1
Q4	-6.0	-1.2	6.2	1.1	6.2	1.1	19.3
Q5 (Highest)	-8.4	-0.9	4.7	0.6	4.7	0.6	11.1
Debt to Capital							
Q1 (Highest)	-6.5	-1.0	0.4	0.3	0.4	0.3	16.0
Q2	-6.3	-1.6	-0.9	-0.3	-0.9	-0.3	25.0
Q3	-3.8	-0.9	3.1	0.8	3.1	0.8	23.7
Q4	-4.5	-0.9	2.4	-0.1	2.4	-0.1	20.0
Q5 (Lowest)	-4.5	-0.7	2.3	1.3	2.3	1.3	15.4
Stock Price							
<=5	-14.0	-0.2	-2.3	0.1	-2.3	0.1	1.3
>5, <=10	-7.6	-0.3	4.7	0.4	4.7	0.4	4.0
>10, <=20	-6.6	-0.9	0.7	0.2	0.7	0.2	13.1
>20	-4.6	-3.7	1.3	1.1	1.3	1.1	81.6
Long-Term Earnings Growth							
<=10%	-2.6	-0.6	3.8	0.7	3.8	0.7	23.6
>10%, <=20%	-2.1	-0.2	4.9	0.5	4.9	0.5	9.3
>20%	-2.7	-0.1	-0.2	0.0	-0.2	0.0	5.2
NA	-6.7	-4.1	0.2	0.5	0.2	0.5	61.9
Dividend Yield							
Yield	-5.9	-4.0	-0.6	-0.2	-0.6	-0.2	67.9
No Yield	-3.3	-1.1	6.0	2.0	6.0	2.0	32.1
GLCS Sector							
Consumer Discretionary	-3.2	-0.4	9.1	1.0	9.1	1.0	11.4
Consumer Staples	-0.2	0.0	2.4	0.1	2.4	0.1	2.9
Energy	-6.5	-0.3	-6.7	-0.3	-6.7	-0.3	4.5
Financials	-14.4	-3.2	-9.3	-1.9	-9.3	-1.9	22.0
Health Care	-3.5	-0.3	-2.3	-0.1	-2.3	-0.1	8.3
Industrials	-3.3	-0.6	7.3	1.3	7.3	1.3	18.8
Information Technology	3.3	0.3	11.8	1.0	11.8	1.0	7.8
Materials	-3.1	-0.2	6.9	0.4	6.9	0.4	6.4
Real Estate	-3.6	-0.4	1.2	0.2	1.2	0.2	10.9
Communication Services	-3.6	-0.1	6.4	0.2	6.4	0.2	3.1
Utilities	2.6	0.1	0.5	0.0	0.5	0.0	3.8

Source: BofA US Equity and US Quant Strategy

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Russell 2000

Table 31: Russell 2000 Performance Attribution Analysis

1m, 3m and YTD performance attribution (as of 3/31/2023)

	March		Last Three Months		Year to date		Weight
	Return	Contrib.	Return	Contrib.	Return	Contrib.	
Core Index	-4.8	—	2.7	—	2.7	—	
Market Cap Size Quintile							
Q1 (Largest)	-3.0	-1.6	3.6	2.0	3.6	2.0	52.9
Q2	-5.7	-1.4	2.9	0.8	2.9	0.8	24.3
Q3	-5.9	-0.8	3.6	0.6	3.6	0.6	13.2
Q4	-9.7	-0.6	-1.6	0.0	-1.6	0.0	6.5
Q5 (Smallest)	-11.4	-0.4	-2.4	-0.1	-2.4	-0.1	3.2
Market Cap Bucket							
>1 BIL	-3.9	-3.3	3.5	2.9	3.5	2.9	84.7
>500 MIL, <=1 BIL	-8.4	-0.8	0.1	0.3	0.1	0.3	9.8
>250 MIL, <=500M	-11.7	-0.4	-5.1	0.0	-5.1	0.0	3.8
<=250M	-11.2	-0.2	1.2	0.0	1.2	0.0	1.7
P/E Quintile							
Q1 (Lowest)	-5.4	-0.5	5.3	0.7	5.3	0.7	9.7
Q2	-10.3	-1.5	-3.4	-0.4	-3.4	-0.4	14.5
Q3	-6.0	-1.0	1.6	0.3	1.6	0.3	16.1
Q4	-2.1	-0.5	5.2	1.1	5.2	1.1	21.6
Q5 (Highest)	-1.2	-0.2	5.9	1.2	5.9	1.2	19.9
Nonearnings Stories	-5.9	-1.1	1.5	0.5	1.5	0.5	18.4
ROE Quintile							
Q1 (Highest)	-2.9	-0.8	7.1	2.0	7.1	2.0	28.8
Q2	-7.5	-1.7	-1.5	-0.3	-1.5	-0.3	23.0
Q3	-4.4	-1.0	1.6	0.5	1.6	0.5	23.6
Q4	-4.0	-0.6	3.8	0.7	3.8	0.7	14.0
Q5 (Lowest)	-5.6	-0.6	3.0	0.4	3.0	0.4	10.6
Beta Quintile							
Q1 (Lowest)	-5.5	-1.1	-2.6	-0.4	-2.6	-0.4	19.0
Q2	-5.4	-1.3	0.6	0.2	0.6	0.2	25.0
Q3	-4.3	-0.9	3.6	1.0	3.6	1.0	21.9
Q4	-3.6	-0.7	7.4	1.4	7.4	1.4	20.4
Q5 (Highest)	-4.9	-0.7	7.6	1.2	7.6	1.2	13.7
Debt to Capital							
Q1 (Highest)	-5.6	-1.0	4.5	0.9	4.5	0.9	17.5
Q2	-4.8	-1.0	2.8	0.6	2.8	0.6	21.6
Q3	-4.9	-1.1	1.9	0.5	1.9	0.5	22.9
Q4	-4.4	-0.9	1.4	0.1	1.4	0.1	20.1
Q5 (Lowest)	-4.1	-0.7	3.8	1.1	3.8	1.1	17.8
Stock Price							
<=5	-15.2	-0.4	-5.1	0.1	-5.1	0.1	2.9
>5, <=10	-5.9	-0.4	4.9	0.5	4.9	0.5	6.6
>10, <=20	-6.1	-1.0	1.6	0.5	1.6	0.5	15.9
>20	-4.0	-3.0	3.0	2.2	3.0	2.2	74.7
Long-Term Earnings Growth							
<=10%	-1.8	-0.2	7.0	0.7	7.0	0.7	11.0
>10%, <=20%	-0.5	0.0	12.3	0.9	12.3	0.9	6.3
>20%	-3.8	-0.2	2.5	0.1	2.5	0.1	4.1
NA	-5.6	-4.4	1.6	1.4	1.6	1.4	78.6
Dividend Yield							
Yield	-5.9	-2.9	0.6	0.5	0.6	0.5	49.0
No Yield	-3.6	-1.8	5.2	2.7	5.2	2.7	51.0
IGCS Sector							
Consumer Discretionary	-2.2	-0.2	12.3	1.3	12.3	1.3	11.1
Consumer Staples	0.9	0.0	6.2	0.2	6.2	0.2	3.5
Energy	-7.0	-0.5	-3.4	-0.2	-3.4	-0.2	6.6
Financials	-13.5	-2.4	-8.2	-1.4	-8.2	-1.4	17.7
Health Care	-4.9	-0.8	-1.9	-0.2	-1.9	-0.2	15.8
Industrials	-3.8	-0.6	7.5	1.2	7.5	1.2	17.0
Information Technology	1.8	0.2	13.1	1.6	13.1	1.6	11.6
Materials	-3.0	-0.1	9.0	0.4	9.0	0.4	4.5
Real Estate	-4.3	-0.3	1.1	0.1	1.1	0.1	6.3
Communication Services	-5.1	-0.1	7.0	0.2	7.0	0.2	2.7
Utilities	1.4	0.0	1.9	0.1	1.9	0.1	3.1

Source: BofA US Equity and US Quant Strategy

BofA GLOBAL RESEARCH



Russell 2000 Growth

Table 32: Russell 2000 Growth Performance Attribution Analysis

1m, 3m and YTD performance attribution (as of 3/31/2023)

Index	March		Last Three Months		Year to date		Weight
	Return	Contrib.	Return	Contrib.	Return	Contrib.	
Index	-2.5	—	6.1	—	6.1	—	
Market Cap Size Quintile							
Q1 (Largest)	-1.5	-0.8	5.9	3.2	5.9	3.2	53.8
Q2	-2.6	-0.6	8.1	2.0	8.1	2.0	24.3
Q3	-3.0	-0.4	5.7	0.8	5.7	0.8	12.6
Q4	-6.6	-0.4	4.5	0.3	4.5	0.3	6.3
Q5 (Smallest)	-8.3	-0.2	-2.9	-0.1	-2.9	-0.1	2.9
Market Cap Bucket							
>1 BIL	-1.9	-1.7	6.4	5.6	6.4	5.6	89.4
>500 MIL, <=1 BIL	-5.9	-0.4	4.3	0.5	4.3	0.5	6.5
>250 MIL, <=500M	-11.3	-0.3	-5.4	0.0	-5.4	0.0	2.5
<=250M	-6.2	-0.1	4.2	0.1	4.2	0.1	1.6
P/E Quintile							
Q1 (Lowest)	-5.2	-0.5	0.4	0.1	0.4	0.1	8.6
Q2	-4.1	-0.5	7.7	0.9	7.7	0.9	12.4
Q3	-2.9	-0.5	9.4	1.6	9.4	1.6	16.4
Q4	-0.7	-0.2	5.2	1.1	5.2	1.1	22.5
Q5 (Highest)	0.3	0.1	10.3	2.0	10.3	2.0	19.5
Nonearnings Stories	-4.6	-0.9	1.9	0.6	1.9	0.6	20.6
ROE Quintile							
Q1 (Highest)	-2.7	-0.7	6.4	1.8	6.4	1.8	27.8
Q2	-1.4	-0.4	8.1	2.1	8.1	2.1	25.8
Q3	-1.8	-0.4	6.2	1.3	6.2	1.3	20.0
Q4	-4.2	-0.6	0.9	0.3	0.9	0.3	15.3
Q5 (Lowest)	-3.5	-0.4	7.5	0.8	7.5	0.8	11.1
Beta Quintile							
Q1 (Lowest)	-2.2	-0.5	1.6	0.4	1.6	0.4	21.5
Q2	-1.6	-0.3	6.2	1.7	6.2	1.7	21.6
Q3	-2.7	-0.6	7.9	1.4	7.9	1.4	21.7
Q4	-2.2	-0.4	9.3	1.9	9.3	1.9	20.4
Q5 (Highest)	-4.3	-0.6	6.2	1.0	6.2	1.0	14.8
Debt to Capital							
Q1 (Highest)	-4.2	-0.7	7.1	1.4	7.1	1.4	17.2
Q2	-1.3	-0.3	7.4	1.5	7.4	1.5	20.6
Q3	-3.8	-0.9	4.8	1.1	4.8	1.1	22.7
Q4	-1.0	-0.2	7.0	1.3	7.0	1.3	19.6
Q5 (Lowest)	-2.2	-0.4	4.2	1.0	4.2	1.0	19.9
Stock Price							
<=5	-16.0	-0.4	-8.0	0.0	-8.0	0.0	2.5
>5, <=10	-4.1	-0.2	8.2	0.5	8.2	0.5	5.2
>10, <=20	-3.5	-0.4	5.1	0.9	5.1	0.9	10.9
>20	-1.8	-1.5	6.2	4.9	6.2	4.9	81.5
Long-Term Earnings Growth							
<=10%	-0.8	-0.1	9.9	0.8	9.9	0.8	9.5
>10%, <=20%	1.9	0.1	13.9	1.3	13.9	1.3	7.8
>20%	-3.9	-0.2	3.6	0.3	3.6	0.3	6.0
NA	-3.0	-2.3	4.9	3.7	4.9	3.7	76.8
Dividend Yield							
Yield	-3.2	-1.2	5.1	1.9	5.1	1.9	36.2
No Yield	-2.1	-1.3	6.6	4.3	6.6	4.3	63.8
GLCS Sector							
Consumer Discretionary	-1.4	-0.2	13.2	1.4	13.2	1.4	11.3
Consumer Staples	3.2	0.1	8.7	0.4	8.7	0.4	4.4
Energy	-6.8	-0.5	-7.3	-0.5	-7.3	-0.5	6.8
Financials	-8.4	-0.6	2.7	0.1	2.7	0.1	7.1
Health Care	-3.5	-0.8	-0.1	0.1	-0.1	0.1	21.7
Industrials	-3.3	-0.7	8.1	1.4	8.1	1.4	19.8
Information Technology	1.7	0.3	12.9	2.5	12.9	2.5	17.7
Materials	-3.8	-0.2	10.1	0.5	10.1	0.5	4.7
Real Estate	-5.0	-0.1	0.7	0.0	0.7	0.0	2.1
Communication Services	-0.9	0.0	13.1	0.3	13.1	0.3	2.4
Utilities	1.6	0.0	4.2	0.1	4.2	0.1	1.6

Source: BofA US Equity and US Quant Strategy

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Russell 2000 Value

Table 33: Russell 2000 Value Performance Attribution Analysis

1m, 3m and YTD performance attribution (as of 3/31/2023)

Index	March		Last Three Months		Year to date		Weight
	Return	Contrib.	Return	Contrib.	Return	Contrib.	
	-7.2	—	-0.7	—	-0.7	—	
Market Cap Size Quintile							
O1 (Largest)	-5.7	-3.0	-1.3	-0.5	-1.3	0.0	51.4
Q2	-6.9	-1.7	2.9	0.8	2.9	0.0	24.5
Q3	-8.9	-1.2	-1.6	-0.1	-1.6	0.0	13.4
Q4	-11.9	-0.9	-4.0	-0.2	-4.0	0.0	7.4
Q5 (Smallest)	-13.8	-0.5	-3.6	-0.1	-3.6	0.0	3.3
Market Cap Bucket							
>1 BIL	-6.2	-5.0	-0.2	-0.2	-0.2	0.0	79.9
>500 MIL, <=1 BIL	-9.7	-1.3	-2.3	0.0	-2.3	0.0	13.1
>250 MIL, <=500M	-11.9	-0.6	-5.2	-0.1	-5.2	0.0	5.1
<=250M	-15.8	-0.3	-2.4	0.0	-2.4	0.0	1.8
P/E Quintile							
O1 (Lowest)	-5.6	-0.6	7.9	1.1	7.9	0.0	10.7
Q2	-11.8	-2.1	-5.8	-1.1	-5.8	0.0	18.1
Q3	-11.2	-2.0	-7.7	-1.3	-7.7	0.0	17.4
Q4	-3.2	-0.6	1.4	0.4	1.4	0.0	19.6
O5 (Highest)	-3.4	-0.6	2.4	0.5	2.4	0.0	18.1
Nonearnings Stories	-7.7	-1.2	0.9	0.3	0.9	0.0	16.0
ROE Quintile							
Q1 (Highest)	-5.6	-1.3	4.8	1.2	4.8	0.0	24.1
Q2	-10.7	-3.0	-6.7	-1.9	-6.7	0.0	28.0
Q3	-5.4	-1.5	-1.3	-0.1	-1.3	0.0	27.0
Q4	-5.7	-0.8	3.2	0.5	3.2	0.0	13.2
Q5 (Lowest)	-8.1	-0.6	0.8	0.1	0.8	0.0	7.7
Beta Quintile							
Q1 (Lowest)	-6.3	-1.4	-4.1	-0.9	-4.1	0.0	22.2
Q2	-9.0	-2.3	-4.6	-1.1	-4.6	0.0	25.5
Q3	-7.1	-1.6	-0.5	0.1	-0.5	0.0	22.2
Q4	-5.8	-1.1	5.3	1.1	5.3	0.0	19.3
O5 (Highest)	-7.1	-0.8	6.6	0.7	6.6	0.0	10.8
Debt to Capital							
Q1 (Highest)	-7.2	-1.2	0.2	0.1	0.2	0.0	17.0
Q2	-8.1	-1.9	-1.3	-0.3	-1.3	0.0	23.2
Q3	-5.9	-1.5	-0.3	-0.1	-0.3	0.0	24.5
Q4	-7.8	-1.5	-4.3	-0.9	-4.3	0.0	19.2
Q5 (Lowest)	-7.1	-1.1	1.4	1.1	1.4	0.0	16.1
Stock Price							
<=5	-14.5	-0.5	-2.8	0.2	-2.8	0.0	3.3
>5, <=10	-7.1	-0.6	2.5	0.5	2.5	0.0	8.0
>10, <=20	-7.5	-1.6	-0.7	0.0	-0.7	0.0	21.1
>20	-6.7	-4.5	-1.2	-0.8	-1.2	0.0	67.6
Long-Term Earnings Growth							
<=10%	-2.7	-0.3	4.3	0.5	4.3	0.0	12.6
>10%, <=20%	-4.6	-0.2	9.2	0.5	9.2	0.0	4.7
>20%	-3.6	-0.1	-2.1	0.0	-2.1	0.0	2.1
NA	-8.1	-6.5	-2.0	-1.4	-2.0	0.0	80.5
Dividend Yield							
Yield	-7.7	-4.8	-2.6	-1.4	-2.6	0.0	62.2
No Yield	-6.3	-2.4	2.7	1.1	2.7	0.0	37.8
IGCS Sector							
Consumer Discretionary	-3.2	-0.3	10.9	1.1	10.9	0.0	10.8
Consumer Staples	-3.3	-0.1	1.1	0.0	1.1	0.0	2.7
Energy	-7.2	-0.5	0.4	0.0	0.4	0.0	6.4
Financials	-14.8	-4.2	-10.9	-3.0	-10.9	0.0	28.6
Health Care	-8.1	-0.8	-6.0	-0.5	-6.0	0.0	9.8
Industrials	-4.5	-0.6	6.4	0.9	6.4	0.0	14.1
Information Technology	2.4	0.1	13.6	0.8	13.6	0.0	5.3
Materials	-2.1	-0.1	7.4	0.3	7.4	0.0	4.2
Real Estate	-4.1	-0.4	0.7	0.1	0.7	0.0	10.5
Communication Services	-8.6	-0.3	1.5	0.1	1.5	0.0	3.1
Utilities	1.2	0.1	0.6	0.0	0.6	0.0	4.6

Source: BofA US Equity and US Quant Strategy

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Appendix

BofA US Equity & Quant Strategy ADR Indices

Table 34: Monthly price performance by different regions of the world

BofA Quant Strategy ADR Index Performance As of 3/31/2023

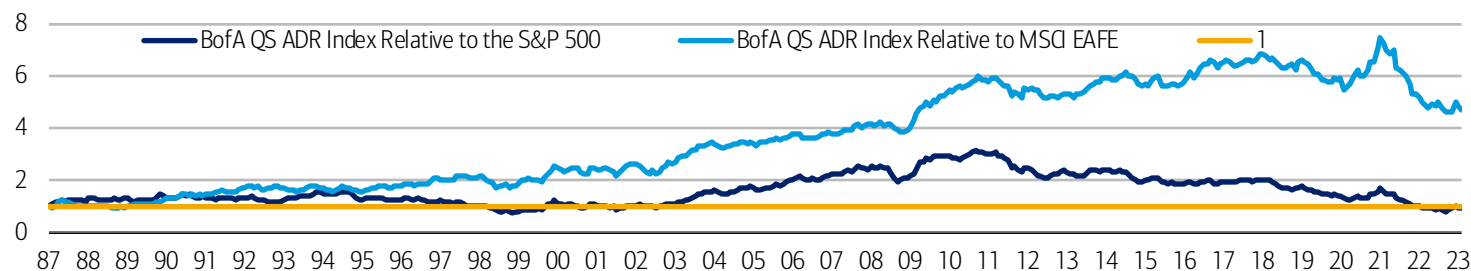
	Price Index	Price Performance % Change (US\$)								ADR vs. MSCI™	Weights
	3/31/2023	1 M	3 M	6 M	12 M	YTD	3yr	5yr	10yr	1M Rel Ret	
ADR COMPOSITE	1,593	-1.3	8.1	23.1	-10.9	8.1	4.8	-6.5	1.0		100.0%
ADR COMPOSITE (ex Latin America)	762	-1.8	8.1	23.4	-12.0	8.1	2.4	-6.8	1.1		85.4%
ADR Latin America	442	2.1	7.0	18.5	-6.2	7.0	19.1	-5.7	-0.7		14.6%
ADR Asia (ex Japan)	239	-0.3	9.7	27.6	-10.0	9.7	-6.3	-13.0	0.8		34.4%
ADR Europe (non - EMU)	338	-6.0	2.6	15.5	-16.8	2.6	3.2	-3.2	0.5		16.6%
ADR EMU	274	-1.5	14.1	32.5	-4.7	14.1	12.7	-1.1	3.2		18.7%
ADR Emerging Europe	160	-7.6	-2.5	-19.4	-55.8	-2.5	-21.8	-27.7	-16.8		4.0%
MSCI EAFE® (re-indexed to 12/86)	340	1.9	7.6	25.9	-4.1	7.6	10.3	0.9	2.3		
S&P 500	4,109	3.5	7.0	14.6	-9.3	7.0	16.7	9.2	10.1		
EUROPE											
ADR France	774	-0.2	13.3	33.5	-1.2	13.3	11.4	-1.6	2.2	-3.3	6.2%
ADR Germany	224	-0.6	16.3	27.8	-15.4	16.3	6.5	-6.4	-0.8	-4.6	4.5%
ADR Ireland	2,691	-5.7	28.7	51.5	16.7	28.7	14.9	5.5	6.5	-10.5	1.5%
ADR Italy	275	-4.6	4.3	33.8	-8.0	4.3	39.1	3.3	6.3	-5.2	1.3%
ADR Netherlands	1,092	1.7	11.9	40.0	4.3	11.9	12.1	2.7	6.5	-3.3	2.3%
ADR Norway	1,265	7.2	9.5	38.4	-12.8	9.5	20.8	-1.4	4.0	12.0	0.8%
ADR Spain	568	-3.3	14.0	39.9	10.0	14.0	13.9	-4.1	-1.4	-4.6	0.9%
ADR Sweden	1,428	-2.3	2.9	22.0	-10.4	2.9	-1.9	3.9	-3.1	-1.2	1.5%
ADR Switzerland	411	-7.2	11.9	26.6	-15.6	11.9	8.3	-1.6	2.2	-10.4	2.6%
ADR United Kingdom	1,247	-7.1	1.1	10.2	-18.1	1.1	2.5	-5.0	-0.6	-5.9	10.6%
LATIN AMERICA											
ADR Argentina	185	-12.2	3.6	34.4	22.9	3.6	25.8	-20.2	7.2	-4.9	2.5%
ADR Brazil	460	4.5	0.8	0.2	-22.3	0.8	14.1	-5.6	-4.3	5.4	6.8%
ADR Chile	231	4.8	11.1	21.4	-2.0	11.1	3.7	-13.8	-7.5	6.5	1.7%
ADR Mexico	480	8.5	28.4	51.2	19.6	28.4	40.4	8.6	1.6	5.5	2.5%
ASIA											
ADR China	267	-0.3	10.5	28.0	-9.4	10.5	-13.0	-17.9	-1.0	-4.8	25.7%
ADR Hong Kong	20	-4.3	2.6	37.2	-17.9	2.6	-5.2	-10.3	-5.2	-5.1	2.3%
ADR Indonesia	82	5.4	13.8	-5.1	-8.0	13.8	22.8	4.6	1.8	3.5	0.4%
ADR India	1,444	-1.1	4.9	2.5	-15.3	4.9	36.4	10.3	10.1	-2.3	1.3%
ADR Japan	645	0.5	5.4	18.8	-6.5	5.4	6.0	-1.6	3.7	-2.4	6.4%
ADR Korea	215	0.5	3.9	21.2	-15.0	3.9	13.5	-2.6	4.6	-4.1	1.9%
ADR Philippines	98	7.7	10.7	-0.2	-28.1	10.7	7.1	-2.3	-10.1	6.0	0.2%
ADR Taiwan	945	7.7	23.3	44.5	-11.3	23.3	31.8	10.8	13.0	5.0	1.1%
OTHER											
ADR Australia	388	-5.5	-4.8	-5.0	-41.7	-4.8	20.7	-2.1	-4.5	-3.9	3.2%
ADR Israel	92	-11.3	-7.3	-26.2	-61.3	-7.3	-8.1	-22.6	-14.4	-11.9	3.6%
ADR Russia	16	0.0	0.0	0.0	0.0	0.0	-45.4	-38.7	-22.1	na	0.0%
ADR South Africa	580	25.4	12.9	44.9	-8.3	12.9	35.0	18.8	4.2	22.8	1.1%

Source: FactSet, BofA US Equity and Quantitative Strategy

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Exhibit 5: Monthly relative performance based on ADR index

BofA USQS ADR Composite Relative to S&P 500 and MSCI™ EAFE (3/31/2023)



Source: FactSet, BofA US Equity and Quant Strategy

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S&P 500 Company Distribution

Exhibit 6: Latest month's end S&P 500 weights for companies sorted by sectors/industries

Company Distribution of S&P 500 by GICS Sector/Industry Classifications as of 3/31/2023

COMMUNICATION SERVICES	8.11%	SPECIALTY RETAIL	2.16%	FOOT CORPORATION	0.03%	ASSURANT INC	0.02%
DIVERSIFIED TELECOM	0.88%	ADVANCE AUTO PARTS	0.02%	EXXON MOBIL CORP	1.31%	BROWN & BROWN INC	0.04%
AT&T INC	0.40%	AITOZONE INC	0.13%	HFSS CORP	0.11%	CHIRR LIMITED	0.23%
VERIZON COMMUNICATIONS	0.48%	BATH & BODY WORKS	0.02%	KINDER MORGAN INC	0.10%	CINCINNATI FINANCIAL CORP	0.05%
ENTERTAINMENT	1.43%	RESTRIY CO INC	0.04%	MARATHON OIL CORP	0.04%	FVRFST RF GROUP LTD	0.04%
ACTIVISION BLIZZARD INC	0.18%	CARMAX INC	0.03%	MARATHON PETROLEUM	0.18%	GLOBE LIFE INC	0.03%
ELECTRONIC ARTS	0.09%	HOME DEPOT INC	0.88%	OCCIDENTAL PETROLEUM	0.13%	HARTFORD FINL SERVICES GROUP	0.06%
IMV NATION ENTERTAINMENT	0.03%	LOWE'S COS INC	0.35%	ONFOK INC	0.08%	INCOIN NATIONAL CORP	0.01%
NETFLIX INC	0.45%	O'REILLY AUTOMOTIVE	0.15%	PHILLIPS 66	0.14%	LOEWS CORP	0.03%
TAKF-TWO INTERACTIVE	0.06%	ROSS STORES INC	0.11%	PIONFFER NATURAL	0.14%	MARSH & MC FNNAN COMPANIES	0.24%
WALT DISNEY CO	0.53%	TIX COS INC	0.26%	TARGA RESOURCES CORP	0.05%	METLIFE INC	0.11%
WARNER BROS DISCOVERY	0.10%	TRACTOR SUPPLY CO	0.08%	THE WIL IAMS COMPANIES	0.11%	PRINCIPAL FINANCIAL GROUP	0.05%
INTERACTIVE MEDIA & SERV	4.78%	ULTA BEAUTY INC	0.08%	VALERO ENERGY CORP	0.16%	PROGRESSIVE CORP	0.24%
AI PHARBT INC A	1.80%	TEXTILES APPAREL & LUX	0.51%	FINANCIALS	17.91	PRUDENTIAL FINANCIAL INC	0.09%
ALPHABET INC C	1.57%	NIKE INC B	0.44%	BANKS	3.12%	TRAVELERS COS INC	0.12%
MATCH GROUP INC	0.03%	RAI PHAI IREFN CORP A	0.01%	RANK OF AMERICA CORP	0.58%	WIL IIS TOWERS WATSON PLC	0.07%
META PLATFORMS INC CLASS	1.37%	TAPESTRY INC	0.03%	CITIGROUP INC	0.26%	WR BERKELEY CORP	0.04%
MEDIA	0.78%	VF CORP	0.02%	CITIZENS FINANCIAL GROUP	0.04%	HEALTH CARE	14.20
CHARTER COMMUNICATIONS	0.11%	CONSUMER STAPLES	7.23%	COMERICA INC (MI)	0.02%	BIOTECHNOLOGY	2.29%
COMCAST CORP A	0.46%	BEVERAGES	1.81%	FIFTH THIRD BANCORP (OH)	0.05%	ABBVIE INC	0.82%
DISH NETWORK CORP A	0.01%	BROWN-FORMAN CORP	0.03%	FIRST REPUBLIC BANK	0.01%	AMGEN INC	0.38%
FOX CORP A	0.03%	COCA-COLA CO	0.70%	HUNTINGTON BANCSHARES	0.05%	BIOGEN INC	0.12%
FOX CORP B	0.01%	CONSTELLATION	0.11%	JP MORGAN CHASE & CO	1.11%	GILFAD SCIENCES INC	0.30%
INTERPUBLIC GROUP COS	0.04%	KEURIG DR PEPPER INC	0.09%	KEYCORP	0.03%	INCYTE CORP	0.04%
NEWS CORP A	0.02%	MONSIEUR COORS	0.03%	M&T BANK CORP	0.06%	MODERNA INC	0.15%
NEWS CORP B	0.01%	MONSTER BEVERAGE	0.12%	PNC FINL SERVICES GROUP	0.15%	REGENERON PHARMACEUTICALS INC	0.26%
OMNICOM GROUP	0.06%	PepsiCo INC	0.73%	REGIONS FINANCIAL CORP	0.05%	VERTEXX PHARMACEUTICALS INC	0.24%
PARAMOUNT GLOBAL CLASS B	0.03%	CONSUMER STAPLES DIST	1.97%	TRUIST FINANCIAL CORP	0.13%	HEALTH EQUIP & SUPPLIES	2.86%
WIRELESS TELECOM	0.25%	OSTON WHOLESALE	0.64%	US BANCORP	0.15%	ARRONTTI LABORATORIES	0.51%
T-MOBILE US INC	0.25%	DOLLAR GENERAL CORP	0.14%	WELLS FARGO & CO	0.41%	ALIGN TECHNOLOGY INC	0.07%
CONSUMER DISCRETIONARY	10.13%	DOLLAR TREE INC	0.09%	ZIONS BANCORPORATION	0.01%	RAXTER INTL INC	0.06%
AUTO COMPONENTS	0.12%	KROGER CO	0.09%	CAPITAL MARKETS	2.83%	BECTON DICKINSON & CO	0.20%
APTIV PLC	0.09%	SYSCO CORP	0.11%	AMERIPRISE FINANCIAL INC	0.09%	ROSTON SCIENTIFIC CORP	0.21%
BORGWARNER INC	0.03%	TARGET CORP	0.22%	BLACKROCK INC	0.29%	COOPER COMPANIES INC	0.05%
AUTOMOBILES	1.97%	WAL GREEKS ROOTS	0.07%	CRDF GLORAI MARKETS INC	0.04%	DEFNTEPIY SIRONA INC	0.07%
FORD MOTOR CO	0.14%	WALMART INC	0.60%	CHARLES SCHWAB CORP	0.23%	DEXCOM INC	0.13%
GENERAL MOTORS COMPANY	0.15%	FOOD PRODUCTS	1.16%	CME GROUP INC A	0.20%	EDWARDS LIFESCIENCES CORP	0.15%
TESLA INC	1.62%	ARCHER-DANIEL-CL	0.13%	FACITSET RESEARCH SYSTEM	0.05%	GFHAI THCARF TECHNOLOGIES INC	0.09%
BROADLINE RETAIL	2.79%	BUNGE LTD	0.04%	FRANKLIN RESOURCES INC	0.02%	HOLOGIC INC	0.06%
AMAZON.COM INC	2.68%	CAMPRELL SUPPLY CO	0.03%	GLOBAL MAN SACHS GROUP	0.30%	IDEXX LABORATORIES INC	0.17%
EBAY INC	0.07%	CONAGRA BRANDS INC	0.05%	INTERCONTINENTAL	0.17%	INSULET CORP	0.06%
FTSY INC	0.04%	GENFRAI MILLS INC	0.15%	INVESCO LTD	0.07%	INTUITIVE SURGICAL INC	0.26%
DISTRIBUTORS	0.15%	HERSHEY FOODS CORP	0.11%	MARKETAXESS HOLDINGS	0.04%	MEDTRONIC PLC	0.31%
GENUINE PARTS CO	0.07%	HORMEL FOODS CORP	0.03%	MODDY'S CORP	0.14%	RESMED INC	0.09%
LKO CORP	0.04%	I.M. SMUCKER CO	0.05%	MORGAN STANLEY	0.33%	STERIS PLC	0.06%
POUL CORP	0.04%	KFI LOGG CO	0.05%	MSCI INC	0.13%	STRYKER CORP	0.28%
HOTELS RESTAURANTS	2.11%	LAMB WESTON	0.04%	NASDAQ INC	0.05%	TELEFLEX INC	0.03%
BOOKING HOLDINGS INC	0.30%	MCCORMICK & CO	0.06%	NORTHERN TRUST CORP (IL)	0.05%	ZIMMER BIOMED HOLDINGS INC	0.08%
CAESARS ENTERTAINMENT	0.03%	MONDELEZ	0.28%	RAYMOND JAMES	0.05%	HEALTH PROVIDERS & SVS	3.04%
CARNIVAL CORP	0.03%	THE KRAFT HEINZ	0.09%	S&P GLOBAL INC	0.33%	AMERISOURCEBERGEN CORP	0.08%
CHIPOTLE MEXICAN GRILL INC	0.14%	TYSON FOODS INC A	0.05%	STATE STREET CORP	0.08%	CARDINAL HEALTH INC	0.06%
DARDEN RESTAURANTS INC	0.05%	HOUSEHOLD PRODUCTS	1.46%	T ROWE PRICE GROUP INC	0.07%	CENTENE CORP	0.10%
DOMINO'S PIZZA INC	0.03%	CHURCH & DWIGHT CO	0.06%	THE BANK OF NEW YORK	0.10%	CVS HEALTH CORPORATION	0.28%
EXPEDIA GROUP INC	0.04%	CLOREX CO	0.06%	CONSUMER FINANCE	0.51%	DAVITA INC	0.01%
HILTON WORLDWIDE	0.11%	COI GATE-PALMOIVE	0.18%	AMERICAN EXPRESS CO	0.29%	FLVANCE HEALTH INC	0.32%
LAS VEGAS SANDS	0.05%	KIMBERLY-CLARK	0.13%	CAPITAL ONE FINANCIAL	0.11%	HCA HEALTHCARE INC	0.16%
MARRIOTT INTERNATIONAL	0.13%	PROCTER & GAMBLE	1.07%	DISCOVER FINANCIAL	0.08%	HENRY SCHEIN INC	0.03%
MCDONALD'S CORP	0.60%	PERSONAL PRODUCTS	0.17%	SYNCHRONY FINANCIAL	0.04%	HUMANA INC	0.18%
MGM RESORTS	0.04%	ESTEE LAUDER COS A	0.17%	FINANCIAL SVS	4.79%	LABOR CORP OF AMERICA HOLDINGS	0.06%
NORWEGIAN CRUISE LINE	0.02%	TOBACCO	0.67%	BERKSHIRE HATHAWAY B	1.62%	MCKESSON CORP	0.14%
ROYAL CARIBBEAN GROUP	0.04%	AMTRIA GROUP INC	0.73%	FINFITY NATIONAL	0.09%	MOINA HEALTHCARE	0.05%
STARBUCKS CORP	0.35%	PHILIP MORRIS	0.44%	FISERV INC	0.21%	QUEST DIAGNOSTICS	0.05%
WYNN RESORTS LTD	0.03%	ENERGY	4.61%	FFETCOR TECHNOLOGIES	0.05%	THE CIGNA GROUP	0.22%
YUM! BRANDS INC	0.11%	ENERGY EQUIP & SVS	0.37%	GLOBAL PAYMENTS INC	0.08%	UNITEDHEALTH GROUP INC	1.29%
HOUSEHOLD DURABLES	0.35%	BAKER HUGHES	0.08%	JACK HENRY & ASSOCIATES	0.03%	UNIVERSAL HEALTH SERVICES R	0.07%
GARMIN LTD	0.05%	HALLIBURTON CO	0.08%	MASTERCARD INC A	0.89%	LIFE SCIENCES TOOLS	1.84%
HORTON D.R. INC	0.09%	SCHLUMBERGER LTD	0.20%	PAYPAL HOLDINGS INC	0.25%	AGILENT TECHNOLOGIES INC	0.12%
IFNNAR CORP A	0.08%	OIL GAS & CONSUMABLE	4.24%	VISA INC A	1.07%	BIO-RAD LABORATORIES INC A	0.03%
MOHAWK INDUSTRIES INC	0.02%	APA CORPORATION	0.03%	INSURANCE	2.16%	BIO-TECHNE CORP	0.03%
NFWFI BRANDS INC	0.01%	CHEVRON CORP	0.85%	AFI AC INC	0.11%	CHARI FSRIVER LABORATORIES	0.03%
NVR INC	0.05%	CONOCOPHILLIPS	0.35%	ALLSTATE CORP	0.08%	DANAHER CORP	0.48%
PIITF GROUP INC	0.04%	COTERRA ENERGY INC	0.06%	AMERICAN INTL GROUP INC	0.11%	IIJIMINA INC	0.11%
WHIRLPOOL CORP	0.02%	DEVON ENERGY CORP	0.10%	AON PLC	0.19%	IOVIA HOLDINGS INC	0.11%
LEISURE PRODUCTS	0.02%	DIAMONDRACK ENERGY	0.07%	ARCH CAPITAL GROUP LTD	0.07%	MFTT FRTOI FOD INTL	0.10%
HASBRO INC	0.02%	EOG RESOURCES	0.20%	ARTHUR I. GALLAGHER & CO	0.12%	PERKINELMER INC	0.05%

Source: BofA Global Research

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Exhibit 7: Latest month's end S&P 500 weights for companies sorted by sectors/industries

Company Distribution of S&P 500 by GICS Sector/Industry Classifications as of 3/31/2023

THERMO FISHER SCIENTIFIC	0.66%	SNAP ON INC	0.04%	CADENCE DESIGN SYSTEMS	0.17%	INVITATION HOMES	0.05%
WATERS CORP	0.05%	STANLEY BLACK & DECKER	0.03%	CEFRIDIAN HOLDING	0.03%	MID-AMERICA APT	0.05%
WEST PHARMACEUTICAL SERVICES	0.07%	WABTEC	0.05%	FAIR ISAAC & CO INC	0.05%	UDR INC	0.04%
PHARMACEUTICALS	4.16%	XVI FM INC	0.05%	FORTINET INC	0.13%	RETAIL REITS	0.31%
BRISTOL-MYERS SQUIBB	0.43%	AIRLINES	0.21%	GEN DIGITAL INC	0.03%	FEDERAL REALTY INVT	0.02%
CATALANT INC	0.03%	ALASKA AIR GROUP INC	0.02%	INTUIT INC	0.36%	KIMCO REALTY CORP	0.04%
ELLI LILLY & CO	0.79%	AMERICAN AIRLINES GROUP INC	0.03%	MICROSOFT CORP	6.25%	REALTY INCOME CORP	0.12%
JOHNSON & JOHNSON	1.18%	DELTA AIRLINES	0.07%	ORACLE CORP	0.47%	REGENCY CENTERS CORP	0.03%
MERCK & CO INC	0.79%	SOUTHWEST AIRLINES CO	0.06%	PAYCOM SOFTWARE INC	0.04%	SIMON PROPERTY GROUP	0.11%
ORGANON & CO	0.02%	UNITED AIRLINES HOLDING INC	0.04%	PTC INC	0.04%	SPECIALIZED REITS	1.21%
PFIZER INC	0.67%	PROFESSIONAL SERVICES	0.77%	ROPER TECHNOLOGIES INC	0.14%	AMERICAN TOWER CORP	0.28%
VIATRIS INC	0.03%	AUTOMATIC DATA PROCESSING	0.27%	SALESFORCE INC	0.58%	CROWN CASTLE INC	0.17%
ZOETIS INC	0.73%	BROADRIDGE FINANCIAL	0.05%	SERVICENOW INC	0.77%	DIGITAL REALTY TRUST	0.08%
INDUSTRIALS	8.66%	COSTAR GROUP INC	0.08%	SYNOPSYS INC	0.17%	EQUINIX INC	0.19%
AEROSPACE & DEFENSE	1.75%	FOHIFAX INC	0.07%	TYE TECHNOLOGIES INC	0.04%	EXTRA SPACE STORAGE	0.06%
BOEING CO	0.35%	JACOBS SOLUTIONS INC	0.04%	TECHNOLOGY HARDWARE	7.39%	IRON MOUNTAIN INC	0.04%
GENERA DYNAMICS	0.15%	LEIDOS HOLDINGS INC	0.04%	APPLE INC	7.14%	PHILIC STORAGE	0.14%
HOWMET AEROSPACE INC	0.05%	PAYCHEX INC	0.11%	HEWLETT PACKARD	0.06%	SBA COMMUNICATIONS	0.08%
HUNTINGTON INGALLIS	0.02%	ROBERT HALF INTL INC	0.03%	HP INC	0.07%	VICI PROPERTIES INC	0.10%
L3HARRIS TECHNOLOGIES INC	0.11%	VERISK ANALYTICS INC	0.09%	NETAPP INC	0.04%	WEYERHAEUSER CO	0.06%
LOCKHEED MARTIN	0.31%	TRADING CO. & DISTR	0.26%	SFAGATE TECHNOLOGY	0.04%	UTILITIES	7.86%
NORTHROP GRUMMAN CORP	0.19%	FASTENAL CO	0.09%	WESTERN DIGITAL CORP	0.04%	ELECTRIC UTILITIES	1.87%
RAYTHEON TECHNOLOGIES CORP	0.42%	UNITED RECENTAL INC	0.08%	MATERIALS	2.64%	AIR FUEL ENERGY CORP	0.04%
TEXTRON INC	0.04%	W.W. GRAINGER INC	0.09%	CHEMICALS	1.80%	AMERICAN ELECTRIC	0.14%
TRANSDIGM GROUP	0.11%	INFORMATION TECHNOLOGY	26.08	AIR PRODUCTS &	0.19%	CONSTELLATION ENERGY	0.07%
AIR FREIGHT & LOGISTICS	0.65%	COMMUNICATIONS EQUIP	0.94%	AIRFARMER CORP	0.08%	DUKE ENERGY CORP	0.22%
CH ROBINSON WORLDWIDE INC	0.03%	ARISTA NETWORKS INC	0.12%	CELANESE CORP A	0.03%	EDISON INTL	0.08%
EXPEDITORS INTL OF WA INC	0.05%	CISCO SYSTEMS INC	0.63%	CE INDUSTRIES HOLDINGS	0.04%	ENTERGY CORP	0.06%
FEDEX CORP	0.15%	F5 INC	0.03%	CORTEVA INC	0.13%	EVERGY INC	0.04%
UNITED PARCEL SERVICE INC	0.41%	IIINIPER NETWORKS INC	0.03%	DOW INC	0.11%	EVERSOURCE ENERGY	0.08%
BUILDING PRODUCTS	0.44%	MOTOROLA SOLUTIONS INC	0.14%	DUPONT DE NEMOURS INC	0.10%	EXELON CORP	0.12%
A O SMITH CORP	0.03%	ELECTRONIC EQUIP, INSTR & COMP	0.65%	FASTMAN CHEMICAL CO	0.03%	FIRSTENERGY CORP	0.06%
ALLEGION PLC	0.03%	AMPHENOL CORP A	0.14%	ECOLAB INC	0.12%	NEXTERA ENERGY INC	0.45%
CARRIER GLOBAL CORP	0.11%	COW CORP	0.08%	FMC CORP	0.04%	NRG ENERGY	0.07%
JOHNSON CONTROLS	0.12%	CORNING INC	0.08%	INTL FLAVORS &	0.07%	PG&E CORPORATION	0.08%
MASON CORP	0.03%	KEYSIGHT TECHNOLOGIES INC	0.08%	INDUSTRIAL	0.51%	PINNACLE WEST CAPITAL	0.03%
TRANE TECHNOLOGIES PLC	0.12%	TE CONNECTIVITY LTD.	0.12%	LYONDELLBASELL	0.07%	PPL CORP	0.06%
COMMERCIAL SVS	0.49%	TELEFONOS DE MEXICO INC	0.06%	MOSAIC CO	0.05%	SOUTHERN CO	0.22%
CINTAS CORP	0.12%	TRIMBLE INC	0.04%	PPG INDUSTRIES INC	0.09%	XCEL ENERGY INC	0.11%
COMPART INC	0.09%	ZEBRA TECHNOLOGIES CORP	0.05%	SHERWIN-WILLIAMS CO	0.15%	GAS UTILITIES	0.05%
REPLICA SERVICES INC	0.08%	IT SVS	1.19%	CONSTRUCTION MATERIALS	0.13%	ATMOS ENERGY CORP	0.05%
ROLLINS INC	0.03%	ACCENTURE PLC A	0.52%	MARTIN MARIETTA	0.06%	INDEPENDENT POWER	0.05%
WASTE MANAGEMENT INC	0.18%	AKAMAI TECHNOLOGIES INC	0.04%	WILLIAMSON S CO	0.07%	AES CORP	0.05%
CONSTR & ENGINEERING	0.07%	COGNIZANT TECH SOLUTIONS	0.09%	CONTAINERS & PACKAGING	0.26%	MULTI-UTILITIES	0.82%
QUANTA SERVICES INC	0.07%	DXC TECHNOLOGY COMPANY	0.07%	AMCOR PLC	0.05%	AMEREN CORP	0.07%
ELECTRICAL EQUIP	0.56%	EPAM SYSTEMS INC	0.05%	AVERY DENNISON CORP	0.04%	CENTERPOINT ENERGY	0.05%
AMETEK INC	0.10%	GARTNER INC	0.07%	BAI CORP	0.05%	CMS ENERGY CORP	0.05%
EATON CORP PLC	0.20%	INTL BUSINESS MACHINES	0.35%	INTL PAPER CO	0.04%	CONSOLIDATED EDISON	0.10%
EMERSON ELECTRIC CO	0.14%	VERISIGN INC	0.06%	PACKAGING CORP OF	0.04%	DOMINION ENERGY INC	0.14%
GENERAC HOLDINGS INC	0.02%	SEMICONDUCTORS	6.45%	SEALED AIR CORP	0.02%	DTE ENERGY CO	0.06%
ROCKWELL AUTOMATION INC	0.10%	ADVANCED MICRO DEVICES	0.46%	WESTROCK CO	0.07%	NISOURCE INC	0.03%
GROUND TRANSP	0.81%	ANALOG DEVICES INC	0.29%	METALS & MINING	0.45%	PUBLIC SERVICE	0.09%
CSX CORPORATION	0.18%	APPLICATION MATERIALS INC	0.30%	FRYHOFF-MCMORAN INC	0.17%	SMPRA	0.14%
LB HUNT TRANSPORT SERVICES	0.04%	BROADCOM INC	0.78%	NEWMONT CORP	0.11%	WEC ENERGY GROUP INC	0.09%
NORFOLK SOUTHERN CORP	0.14%	ENPHASE ENERGY INC	0.08%	NUCOR CORP	0.11%	WATER UTILITIES	0.08%
OTI DOMINION FREIGHT LINE INC	0.09%	FIRST SOLAR INC	0.06%	STEEL DYNAMICS INC	0.05%	AMERICAN WATER WORKS	0.08%
UNION PACIFIC CORP	0.36%	INTEL CORP	0.39%	REAL ESTATE	2.56%		
IND CONGLOMERATES	0.84%	KIA CORPORATION	0.16%	HEALTH CARE REITS	0.18%		
3M CO	0.17%	LAM RESEARCH CORP	0.21%	HEALTHPEAK PROPERTIES	0.03%		
GENERA ELECTRIC CO	0.30%	MICROCHIP TECHNOLOGY INC	0.13%	VENTAS INC	0.05%		
HONEYWELL INTL INC	0.37%	MICRON TECHNOLOGY INC	0.19%	WELLTOWER INC	0.10%		
MACHINERY	1.80%	MONITORING POWER SYSTEMS	0.07%	HOTEL & RESORT REITS	0.03%		
CATERPILLAR INC	0.35%	NVIDIA CORP	1.99%	HOST HOTELS & RESORTS	0.03%		
CUMMINS INC	0.10%	NXP SEMICONDUCTOR NV	0.14%	INDUSTRIAL REITS	0.34%		
DEERE & CO	0.33%	ON SEMICONDUCTOR CORP	0.10%	PROLOGIS INC	0.34%		
DOVER CORP	0.06%	ORVO INC	0.03%	OFFICE REITS	0.08%		
FORTIVE CORP	0.07%	QUALCOMM INC	0.41%	ALEXANDRIA REAL ESTATE	0.06%		
IDEX CORP	0.05%	SKYWORKS SOLUTIONS INC	0.05%	BOSTON PROPERTIES INC	0.07%		
ILLINOIS TOOL WORKS INC	0.20%	SOLAREDGE TECHNOLOGIES INC	0.05%	REAL ESTATE M&D	0.07%		
INGERSOLL RAND INC	0.07%	TERADYNE INC	0.05%	CBRE GROUP INC	0.07%		
NORSON CORP	0.03%	TFXAS INSTRUMENTS INC	0.49%	RESIDENTIAL REITS	0.34%		
OTIS WORLDWIDE CORP	0.10%	SOFTWARE	9.45%	AVALONBAY COMMUNITIES	0.07%		
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PARKER-HANNIFIN CORP	0.13%	ANSYS INC	0.08%	EQUITY RESIDENTIAL	0.06%		
PENTAIR PLC	0.03%	AIITODESK INC	0.13%	ESSFX PROPERTY TRUST	0.04%		

Source: BofA Global Research.

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R1}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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