

### Global Fund Performance Monitor

### Value dominance faded

#### Value outperformed by the most in 2023

2023 proved difficult for Active funds with only 37% outperforming with a median return of-1.61% versus benchmark. Value funds were the best performers with 55% outperforming by a median 0.46%, while only 36% of Growth funds outperformed with a median relative return of -1.56%. It was a difficult year for funds taking large positions versus benchmark with only 37% of High Active Share Ratio (80-100%) funds outperforming (median relative return was -1.89%).

#### Growth funds outperformed again in December

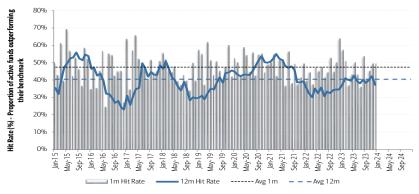
In December, 49% of Active funds outperformed benchmark as global equity markets rallied 4.7%. Growth funds continued to rebound as bond yields fell with 53% outperforming benchmark by a median 0.07% during the month. The best performing regional funds in December were Global (DM+EM) with 65% outperforming by a median +0.34%. High Active Share Ratio (80-100%) funds enjoyed a strong month with 59% outperformed by a median +0.35%. In contrast, only 49% of Value funds outperformed (-0.11%) and only 40% of Yield funds outperformed (-0.36%) during the month.

#### Growth and Value funds' largest overweights

The most overweight stocks held by at least 30 Growth funds includes MercadoLibre, Ryanair, NU, TSMC, and Novo Nordisk. A similar screen for Value funds includes Capital One, Wells Fargo, Charter Communications, Alphabet, CIGNA, and Samsung Electronics.

#### Chart 1: Proportion of Active Funds outperforming their benchmark

49% of funds outperformed benchmark in December



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

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#### 04 January 2024

#### Quant Strategy Global

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- Funds by Regions
- Funds by Investment Style
- Funds by Active/Passive
- Funds by Active Share Ratio
- Funds by FUM
- Funds by Market Cap of Stocks
- Funds by Portfolio Size
- Funds by Turnover
- Relative Returns
- Hit Rate

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Refer to important disclosures on page 69 to 71.

Timestamp: 04 January 2024 01:51AM EST

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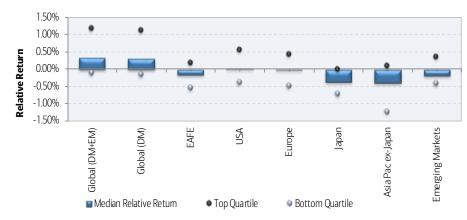
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# **Funds by Region**

#### Chart 2: Relative returns of Funds by Region: Last month

Best fund group based on median 1-m returns was Global (DM+EM)

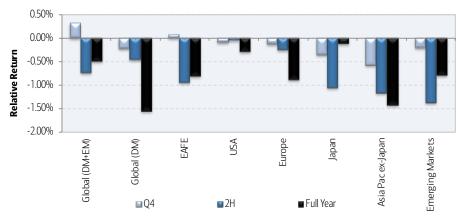


 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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### Chart 3: Relative returns of Funds by Region: Periodic returns

Last month the best performing fund group was Global (DM+EM)



 $Source: Bof A\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### **Chart 4: Percentage of Funds by Region**

USA funds constitutes 42% of this fund group



- ■Europe (366, \$535 bn)
- Global (DM) (207, \$681 bn)
- Asia Pac ex-Japan (195, \$369 bn)
- ☐ Global (DM+EM) (181, \$1,425 bn)
- Emerging Markets (161, \$464 bn)
- Japan (78, \$301 bn)
- EAFE (57, \$642 bn)

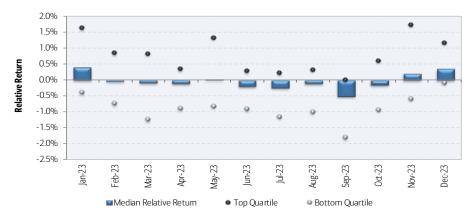
7%<sup>4%</sup> 8% 42%

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

### Funds by Region: GLOBAL (DM + EM)

#### Chart 5: Relative returns of Global DM+EM funds - Last 12 months

Global (DM+EM) funds have outperformed by 0.34% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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### Chart 6: Relative returns of Global DM+EM funds: Periodic returns

Global (DM+EM) have outperformed by 0.34% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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#### Table 1: Relative returns of Global DM+EM funds: Periodic returns

Median, Top and Bottom Quartile returns for various periods

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	0.34%	1.16%	-0.11%
Q4	0.32%	1.98%	-0.42%
2H	-0.73%	0.25%	-2.39%
Full Year	-0.50%	0.93%	-3.46%
2-yr*	-2.24%	-0.30%	-6.45%
3-yr*	-2.12%	-0.35%	-5.76%
4-yr*	-0.68%	0.17%	-2.56%
5-yr*	-0.61%	0.38%	-1.99%

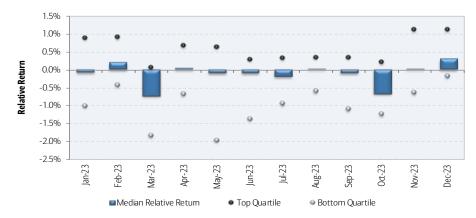
 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^{\star}\ relative\ annualized\ return$ 



### Funds by Region: GLOBAL (Developed Markets)

#### Chart 7: Relative returns of Global DM funds - Last 12 months

Global (DM) funds have outperformed by 0.29% last month



 $Source: Bof A\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 8: Relative returns of Global DM funds: Periodic returns

Global (DM) have outperformed by 0.29% in the last 1-month



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

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#### Table 2: Relative returns of Global DM funds: Periodic returns

Median, Top and Bottom Quartile returns for various periods

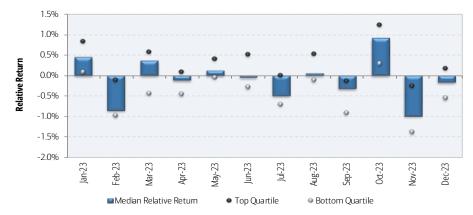
Period	<b>Median Relative Return</b>	Top Quartile	<b>Bottom Quartile</b>
1-month	0.29%	1.12%	-0.18%
Q4	-0.22%	0.80%	-1.33%
2H	-0.46%	0.31%	-2.15%
Full Year	-1.55%	0.07%	-6.48%
2-yr*	-1.38%	-0.44%	-3.90%
3-yr*	-1.13%	-0.25%	-4.02%
4-yr*	-0.88%	-0.27%	-2.72%
5-yr*	-0.82%	-0.18%	-2.84%

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

### Funds by Region: EAFE (DM ex-US)

#### Chart 9: Relative returns of EAFE funds - Last 12 months

EAFE funds have underperformed by -0.16% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 10: Relative returns of EAFE funds: Periodic returns

EAFE have outperformed by 0.07% in the last Q4



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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#### Table 3: Relative returns of EAFE funds: Periodic returns

Median, Top and Bottom Quartile returns for various periods

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	-0.16%	0.17%	-0.56%
Q4	0.07%	0.40%	-0.95%
2H	-0.95%	-0.51%	-1.78%
Full Year	-0.81%	0.43%	-2.23%
2-yr*	-0.79%	-0.36%	-2.85%
3-yr*	-0.75%	-0.25%	-2.09%
4-yr*	-0.63%	0.11%	-1.57%
5-yr*	-0.59%	0.07%	-1.00%

 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 



### Funds by Region: USA

#### Chart 11: Relative returns of USA funds - Last 12 months

USA funds have outperformed by 0.00% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 12: Relative returns of USA funds: Periodic returns

USA have outperformed by 0.00% in the last 1-month



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

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#### Table 4: Relative returns of USA funds: Periodic returns

Median, Top and Bottom Quartile returns for various periods

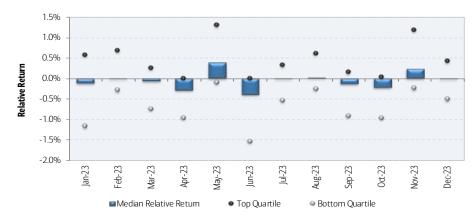
Period	<b>Median Relative Return</b>	Top Quartile	<b>Bottom Quartile</b>
1-month	0.00%	0.55%	-0.40%
Q4	-0.08%	0.42%	-0.94%
2H	-0.06%	0.83%	-0.84%
Full Year	-0.29%	0.90%	-3.48%
2-yr*	-0.38%	0.26%	-2.43%
3-yr*	-0.33%	0.19%	-2.35%
4-yr*	-0.40%	0.04%	-2.18%
5-yr*	-0.40%	0.07%	-1.98%

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

### Funds by Region: EUROPE

#### Chart 13: Relative returns of EUROPE funds - Last 12 months

Europe funds have underperformed by -0.01% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 14: Relative returns of EUROPE funds: Periodic returns

Europe have underperformed by -0.01% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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#### Table 5: Relative returns of EUROPE funds: Periodic returns

Median, Top and Bottom Quartile returns for various periods

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	-0.01%	0.43%	-0.51%
Q4	-0.12%	0.77%	-0.79%
2H	-0.26%	0.43%	-1.17%
Full Year	-0.89%	0.07%	-2.98%
2-yr*	-1.13%	-0.40%	-4.48%
3-yr*	-1.06%	-0.40%	-3.53%
4-yr*	-0.74%	-0.24%	-1.97%
5-yr*	-0.64%	-0.04%	-1.73%

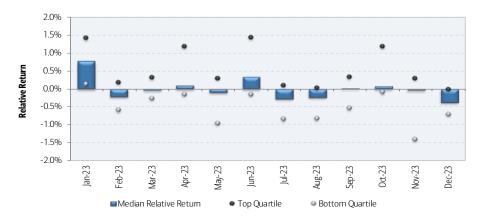
 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^{\star}relative\ annualized\ return$ 



### **Funds by Region: JAPAN**

#### Chart 15: Relative returns of JAPAN funds - Last 12 months

Japan funds have underperformed by -0.37% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 16: Relative returns of JAPAN funds: Periodic returns

Japan have underperformed by -0.12% in the last Full Year



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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#### Table 6: Relative returns of JAPAN funds: Periodic returns

 $Median, Top\ and\ Bottom\ Quartile\ returns\ for\ various\ periods$ 

Period	<b>Median Relative Return</b>	Top Quartile	<b>Bottom Quartile</b>
1-month	-0.37%	-0.02%	-0.73%
Q4	-0.36%	-0.01%	-1.12%
2H	-1.05%	-0.22%	-2.08%
Full Year	-0.12%	0.54%	-2.27%
2-yr*	-0.70%	-0.16%	-1.73%
3-yr*	-0.61%	-0.16%	-1.68%
4-yr*	-0.39%	-0.10%	-1.02%
5-yr*	-0.35%	0.37%	-0.89%

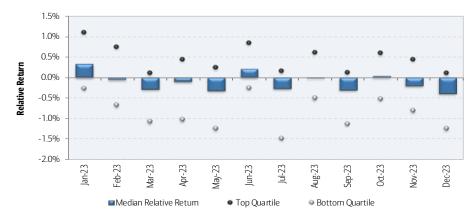
 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 



### Funds by Region: ASIA PAC ex-JAPAN

#### Chart 17: Relative returns of ASIA PAC ex-JAPAN funds - Last 12 months

APxJ funds have underperformed by -0.39% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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### Chart 18: Relative returns of ASIA PAC ex-JAPAN funds: Periodic returns

APxJ have underperformed by -0.39% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^{\star}\ relative\ annualized\ return$ 

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#### Table 7: Relative returns of ASIA PAC ex-JAPAN funds: Periodic returns

 $\label{thm:continuous} \mbox{Median, Top and Bottom Quartile returns for various periods}$ 

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	-0.39%	0.09%	-1.25%
Q4	-0.57%	0.24%	-1.95%
2H	-1.17%	-0.19%	-4.08%
Full Year	-1.43%	0.28%	-5.83%
2-yr*	-1.41%	-0.23%	-4.59%
3-yr*	-0.66%	0.31%	-3.26%
4-yr*	-0.63%	0.39%	-1.74%
5-yr*	-0.47%	0.57%	-1.62%

 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^{\star}\ relative\ annualized\ return$ 



### **Funds by Region: EMERGING MARKETS**

#### Chart 19: Relative returns of EMERGING MARKETS funds - Last 12 months

EM funds have underperformed by -0.19% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 20: Relative returns of EMERGING MARKETS funds: Periodic returns

EM have underperformed by -0.19% in the last 1-month



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

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#### Table 8: Relative returns of EMERGING MARKETS funds: Periodic returns

Median, Top and Bottom Quartile returns for various periods

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	-0.19%	0.34%	-0.44%
Q4	-0.20%	0.61%	-0.94%
2H	-1.38%	-0.33%	-2.82%
Full Year	-0.79%	1.66%	-2.86%
2-yr*	-0.99%	0.20%	-3.92%
3-yr*	-0.97%	0.07%	-4.14%
4-yr*	-1.01%	0.02%	-1.99%
5-yr*	-0.59%	0.25%	-1.25%

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

# **Funds by Investment Style**

#### Chart 21: Relative returns of Funds by Investment Style: Last month

Best fund group based on median 1-m returns was Growth

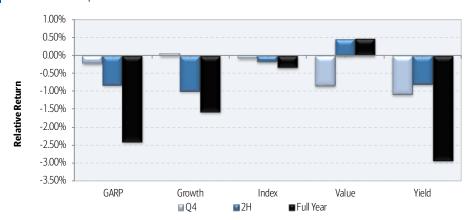


Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

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#### Chart 22: Relative returns of Funds by Investment Style: Periodic returns

Value funds have performed best in the last 6m



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

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#### Chart 23: Percentage of Funds by Investment Style

Growth funds constitutes 36% of this fund group



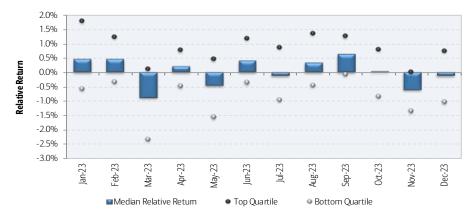
Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices



### Funds by Investment Style: VALUE

#### Chart 24: Relative returns of VALUE funds - Last 12 months

Value funds have underperformed by -0.11% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 25: Relative returns of VALUE funds: Periodic returns

Value have outperformed by 1.64% in the last 2-yr\*



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

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#### Table 9: Relative returns of VALUE funds: Periodic returns

 $Median, Top\ and\ Bottom\ Quartile\ returns\ for\ various\ periods$ 

Period	Median Relative Return	Top Quartile	Bottom Quartile
1-month	-0.11%	0.75%	-1.05%
Q4	-0.84%	0.39%	-2.13%
2H	0.45%	2.08%	-1.60%
Full Year	0.46%	3.36%	-2.99%
2-yr*	1.64%	3.57%	-0.68%
3-yr*	1.17%	3.43%	-1.03%
4-yr*	0.14%	1.87%	-1.85%
5-yr*	0.10%	1.63%	-1.70%
6-yr*	-0.40%	0.85%	-2.16%

 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 



### Funds by Investment Style: GROWTH

#### Chart 26: Relative returns of GROWTH funds - Last 12 months

Growth funds have outperformed by 0.07% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 27: Relative returns of GROWTH funds: Periodic returns

Growth have outperformed by 0.07% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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#### Table 10: Relative returns of GROWTH funds: Periodic returns

 $\label{thm:median} \mbox{Median, Top and Bottom Quartile returns for various periods}$ 

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	0.07%	0.89%	-0.69%
Q4	0.06%	1.66%	-1.22%
2H	-0.98%	0.54%	-2.92%
Full Year	-1.56%	1.84%	-5.13%
2-yr*	-3.23%	-0.85%	-6.45%
3-yr*	-2.78%	-0.52%	-5.84%
4-yr*	-1.41%	0.24%	-3.17%
5-yr*	-0.85%	0.66%	-2.74%
6-yr*	-1.02%	0.45%	-2.64%

 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 



### Funds by Investment Style: GARP

#### Chart 28: Relative returns of GARP funds - Last 12 months

GARP funds have underperformed by -0.07% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 29: Relative returns of GARP funds: Periodic returns

GARP have underperformed by -0.07% in the last 1-month



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

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#### Table 11: Relative returns of GARP funds: Periodic returns

 $Median, Top\ and\ Bottom\ Quartile\ returns\ for\ various\ periods$ 

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	-0.07%	0.49%	-0.75%
Q4	-0.21%	0.64%	-1.60%
2H	-0.81%	0.55%	-2.72%
Full Year	-2.39%	0.51%	-6.90%
2-yr*	-1.66%	-0.21%	-4.49%
3-yr*	-1.87%	-0.13%	-4.22%
4-yr*	-1.58%	-0.09%	-3.05%
5-yr*	-1.25%	0.05%	-2.81%
6-yr*	-1.08%	-0.12%	-2.45%

 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^{\star}\ relative\ annualized\ return$ 



### Funds by Investment Style: YIELD

#### Chart 30: Relative returns of YIELD funds - Last 12 months

Yield funds have underperformed by -0.36% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 31: Relative returns of YIELD funds: Periodic returns

Yield have outperformed by 0.27% in the last 2-yr\*



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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#### Table 12: Relative returns of YIELD funds: Periodic returns

Median, Top and Bottom Quartile returns for various periods

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	-0.36%	0.57%	-0.99%
Q4	-1.07%	0.24%	-2.51%
2H	-0.80%	0.83%	-2.58%
Full Year	-2.93%	0.55%	-10.44%
2-yr*	0.27%	1.47%	-1.88%
3-yr*	-0.11%	1.38%	-1.33%
4-yr*	-0.53%	0.71%	-3.65%
5-yr*	-0.99%	0.57%	-3.62%
6-yr*	-0.77%	0.44%	-3.66%

 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 



### Funds by Investment Style: INDEX funds

#### Chart 32: Relative returns of INDEX funds - Last 12 months

Index funds have underperformed by -0.01% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 33: Relative returns of INDEX funds: Periodic returns

Index have underperformed by -0.01% in the last 1-month



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

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#### Table 13: Relative returns of INDEX funds: Periodic returns

Median, Top and Bottom Quartile returns for various periods

Period	Median Relative Return	Top Quartile	Bottom Quartile
1-month	-0.01%	0.27%	-0.16%
Q4	-0.08%	0.10%	-0.39%
2H	-0.17%	0.05%	-0.54%
Full Year	-0.35%	0.04%	-1.02%
2-yr*	-0.44%	-0.11%	-0.85%
3-yr*	-0.37%	-0.09%	-0.75%
4-yr*	-0.40%	-0.13%	-0.76%
5-yr*	-0.39%	-0.13%	-0.75%
6-yr*	-0.45%	-0.18%	-0.79%

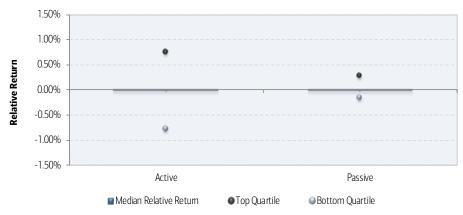
 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 



# **Funds by Active/Passive**

#### Chart 34: Relative returns of Funds by Management Type (Active/Passive): Last month

The narrowest margin between the top and bottom quartile was for Passive funds

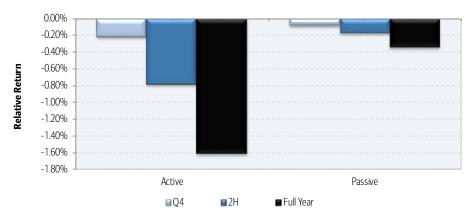


Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

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#### Chart 35: Relative returns of Funds by Type (Active/Passive): Periodic returns

Passive funds have performed best in the last 6m

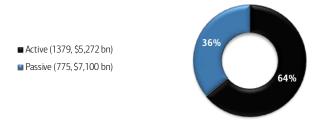


Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

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#### Chart 36: Percentage of Funds by Fund Type (Active/Passive)

Active funds constitutes 64% of this fund group



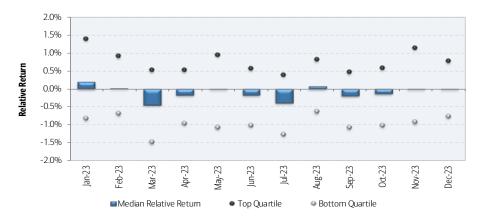
Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices



#### **ACTIVE funds**

#### Chart 37: Relative returns of ACTIVE funds - Last 12 months

Active funds have underperformed by -0.02% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 38: Relative returns of ACTIVE funds: Periodic returns

Active have underperformed by -0.02% in the last 1-month



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

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#### Table 14: Relative returns of ACTIVE funds : Periodic returns

 $Median, Top\ and\ Bottom\ Quartile\ returns\ for\ various\ periods$ 

Period	<b>Median Relative Return</b>	Top Quartile	<b>Bottom Quartile</b>
1-month	-0.02%	0.76%	-0.78%
Q4	-0.22%	1.17%	-1.55%
2H	-0.78%	0.88%	-2.64%
Full Year	-1.61%	1.86%	-5.45%
2-yr*	-1.91%	0.30%	-5.18%
3-yr*	-1.78%	0.29%	-4.72%
4-yr*	-1.23%	0.50%	-3.03%
5-yr*	-0.84%	0.64%	-2.72%

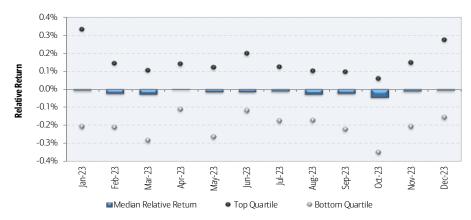
Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return



#### **PASSIVE funds**

#### Chart 39: Relative returns of PASSIVE funds - Last 12 months

Passive funds have underperformed by -0.01% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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### Chart 40: Relative returns of PASSIVE funds: Periodic returns

Passive have underperformed by -0.01% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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#### Table 15: Relative returns of PASSIVE funds: Periodic returns

 $Median, Top\ and\ Bottom\ Quartile\ returns\ for\ various\ periods$ 

Period	<b>Median Relative Return</b>	Top Quartile	<b>Bottom Quartile</b>
1-month	-0.01%	0.27%	-0.16%
Q4	-0.08%	0.10%	-0.39%
2H	-0.17%	0.05%	-0.54%
Full Year	-0.35%	0.04%	-1.02%
2-yr*	-0.44%	-0.11%	-0.85%
3-yr*	-0.37%	-0.09%	-0.75%
4-yr*	-0.40%	-0.13%	-0.76%
5-yr*	-0.39%	-0.13%	-0.75%

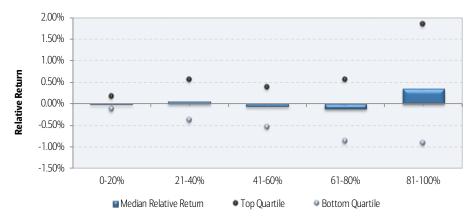
Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return



# **Funds by Active Share Ratio (ASR)**

#### Chart 41: Relative returns of Funds by ASR: Last month

Best fund group based on median 1-m returns was 81-100%



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

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#### Chart 42: Relative returns of Funds by ASR: Periodic returns

0-20% funds have performed the best in the last 12m

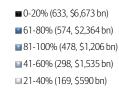


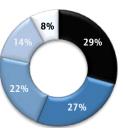
 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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### Chart 43: Percentage of Funds by Active Share Ratio

0-20% funds constitutes 29% of this fund group





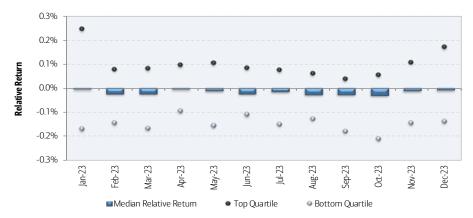
Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices



### Funds by ASR between 1% - 20%

#### Chart 44: Relative returns of funds with ASR < 20% - Last 12 months

0-20% funds have underperformed by -0.01% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 45: Relative returns of funds with ASR < 20%: Periodic returns

0-20% have underperformed by -0.01% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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#### Table 16: Relative returns of funds with ASR < 20%: Periodic returns

 $Median, Top\ and\ Bottom\ Quartile\ returns\ for\ various\ periods$ 

Period	<b>Median Relative Return</b>	Top Quartile	<b>Bottom Quartile</b>
1-month	-0.01%	0.17%	-0.14%
Q4	-0.07%	0.07%	-0.29%
2H	-0.17%	0.01%	-0.46%
Full Year	-0.32%	0.00%	-0.85%
2-yr*	-0.43%	-0.15%	-0.75%
3-yr*	-0.37%	-0.13%	-0.68%
4-yr*	-0.40%	-0.16%	-0.71%
5-yr*	-0.38%	-0.16%	-0.69%

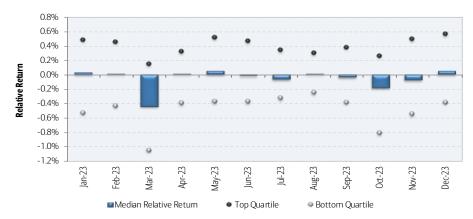
Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return



### Funds by ASR between 21% - 40%

#### Chart 46: Relative returns of funds with ASR (21% - 40%) - Last 12 months

21-40% funds have outperformed by 0.05% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 47: Relative returns of funds with ASR (21% - 40%): Periodic returns

21-40% have outperformed by 0.05% in the last 1-month



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

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### Table 17: Relative returns of funds with ASR (21% - 40%) : Periodic returns

Median, Top and Bottom Quartile returns for various periods

Period	Median Relative Return	Top Quartile	Bottom Quartile
1-month	0.05%	0.56%	-0.39%
Q4	-0.28%	0.27%	-0.89%
2H	-0.17%	0.42%	-1.11%
Full Year	-0.75%	0.54%	-2.31%
2-yr*	-0.81%	-0.01%	-1.88%
3-yr*	-0.56%	0.06%	-1.74%
4-yr*	-0.69%	0.01%	-1.55%
5-yr*	-0.71%	-0.09%	-1.71%

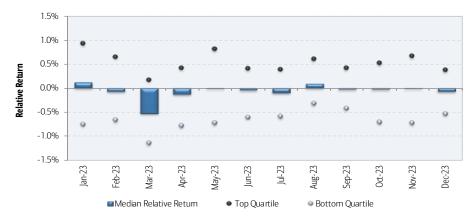
 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 



### Funds by ASR between 41% - 60%

#### Chart 48: Relative returns of funds with ASR (41% - 60%) - Last 12 months

41-60% funds have underperformed by -0.07% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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### Chart 49: Relative returns of funds with ASR (41% - 60%) : Periodic returns

41-60% have underperformed by -0.07% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^{\star}\ relative\ annualized\ return$ 

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#### Table 18: Relative returns of funds with ASR (41% - 60%): Periodic returns

 $Median, Top\ and\ Bottom\ Quartile\ returns\ for\ various\ periods$ 

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	-0.07%	0.38%	-0.54%
Q4	-0.12%	0.71%	-1.10%
2H	-0.20%	1.11%	-1.46%
Full Year	-0.71%	2.20%	-4.47%
2-yr*	-1.72%	-0.02%	-3.75%
3-yr*	-1.53%	-0.06%	-3.88%
4-yr*	-1.39%	-0.16%	-3.04%
5-yr*	-1.41%	-0.08%	-2.83%

 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^{\star}\ relative\ annualized\ return$ 



### Funds by ASR between 61% - 80%

#### Chart 50: Relative returns of funds with ASR (61% - 80%) - Last 12 months

61-80% funds have underperformed by -0.12% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 51: Relative returns of funds with ASR (61% - 80%): Periodic returns

61-80% have underperformed by -0.12% in the last 1-month



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

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### Table 19: Relative returns of funds with ASR (61% - 80%) : Periodic returns

Median, Top and Bottom Quartile returns for various periods

Period	Median Relative Return	Top Quartile	Bottom Quartile
1-month	-0.12%	0.55%	-0.88%
Q4	-0.21%	1.12%	-1.61%
2H	-1.09%	0.82%	-3.11%
Full Year	-2.20%	1.70%	-5.84%
2-yr*	-2.20%	0.21%	-5.20%
3-yr*	-2.04%	0.11%	-4.55%
4-yr*	-1.15%	0.59%	-2.90%
5-yr*	-0.51%	0.80%	-2.52%

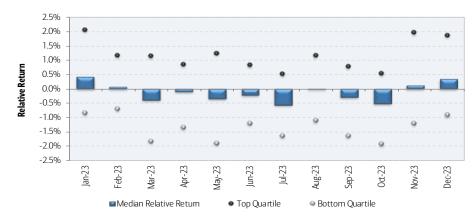
Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return



### Funds by ASR between 81% - 100%

#### Chart 52: Relative returns of funds with ASR (81% - 100%) - Last 12 months

81-100% funds have outperformed by 0.35% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 53: Relative returns of funds with ASR (81% - 100%): Periodic returns

81-100% have outperformed by 0.35% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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#### Table 20: Relative returns of funds with ASR (81% - 100%): Periodic returns

 $\label{thm:median} \mbox{Median, Top and Bottom Quartile returns for various periods}$ 

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	0.35%	1.84%	-0.92%
Q4	-0.25%	1.79%	-1.95%
2H	-1.14%	1.25%	-3.39%
Full Year	-1.89%	2.28%	-7.11%
2-yr*	-2.26%	1.17%	-6.44%
3-yr*	-2.04%	1.36%	-5.91%
4-yr*	-1.17%	1.30%	-3.51%
5-yr*	-0.81%	1.50%	-2.85%

 $Source: Bof A\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^{\star}\ relative\ annualized\ return$ 



# Funds by Funds Under Management (FUM) (\$US)

#### Chart 54: Relative returns of Funds by FUM (USD \$): Last month

The narrowest margin between the top and bottom quartile was for > \$10bn funds

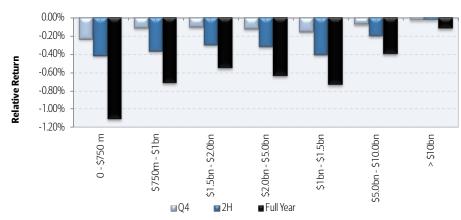


Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

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#### Chart 55: Relative returns of Funds by FUM (USD \$): Periodic returns

Last month the best performing fund group was \$1bn - \$1.5bn



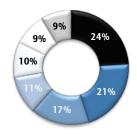
Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

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#### Chart 56: Percentage of Funds by FUM (USD \$)

0 - \$750 m funds constitutes 24% of this fund group

■0 - \$750 m (519, \$260 bn)
■\$2.0bn - \$5.0bn (451, \$1,386 bn)
■\$1bn - \$1.5bn (356, \$439 bn)
■\$750m - \$1bn (232, \$202 bn)
■\$1.5bn - \$2.0bn (216, \$373 bn)
■\$5.0bn - \$10.0bn (195, \$1,334 bn)
■\$ \$10bn (185, \$8,378 bn)



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 



### Funds by FUM between \$1 - \$750m

#### Chart 57: Relative returns of funds managing < \$750m - Last 12 months

0 - \$750 m funds have underperformed by -0.06% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 58: Relative returns of funds managing < \$750m: Periodic returns

0 - \$750 m have underperformed by -0.06% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^{\star}\ relative\ annualized\ return$ 

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#### Table 21: Relative returns of funds managing < \$750m: Periodic returns

Median, Top and Bottom Quartile returns for various periods

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	-0.06%	0.54%	-0.56%
Q4	-0.23%	0.65%	-1.53%
2H	-0.41%	0.27%	-2.27%
Full Year	-1.10%	0.38%	-4.95%
2-yr*	-1.28%	-0.16%	-4.92%
3-yr*	-1.02%	-0.14%	-4.12%
4-yr*	-1.01%	-0.16%	-3.02%
5-yr*	-0.78%	-0.05%	-2.64%

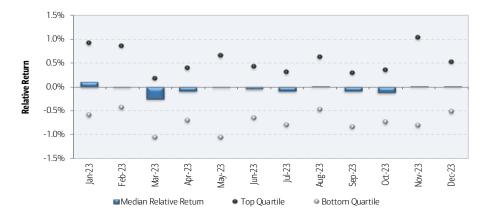
 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^{\star}\ relative\ annualized\ return$ 



### Funds by FUM between \$750m - \$1bn

#### Chart 59: Relative returns of funds managing between \$750m and \$1bn - Last 12 months

\$750m - \$1000m funds have outperformed by 0.01% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 60: Relative returns of funds managing between \$750m and \$1bn: Periodic returns

\$750m - \$1000m have outperformed by 0.01% in the last 1-month



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

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# **Table 22: Relative returns of funds managing between \$750m and \$1bn : Periodic returns** Median, Top and Bottom Quartile returns for various periods

Period	<b>Median Relative Return</b>	Top Quartile	<b>Bottom Quartile</b>
1-month	0.01%	0.51%	-0.52%
Q4	-0.11%	0.92%	-1.31%
2H	-0.36%	0.32%	-1.85%
Full Year	-0.72%	0.85%	-4.44%
2-yr*	-1.07%	-0.02%	-3.78%
3-yr*	-0.93%	0.03%	-3.89%
4-yr*	-0.68%	0.13%	-2.41%
5-yr*	-0.61%	0.22%	-2.40%

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

### Funds by FUM between \$1bn - 1.5bn

### Chart 61: Relative returns of funds managing between \$1.0bn and \$1.5bn - Last 12 months

\$1000m - 1500m funds have outperformed by 0.03% last month



 $Source: Bof A\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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### Chart 62: Relative returns of funds managing between \$1.0bn and \$1.5bn : Periodic returns

\$1000m - 1500m have outperformed by 0.03% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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# **Table 23: Relative returns of funds managing between \$1.0bn and \$1.5bn : Periodic returns** Median, Top and Bottom Quartile returns for various periods

Period	Median Relative Return	Top Quartile	Bottom Quartile
1-month	0.03%	0.73%	-0.51%
Q4	-0.15%	0.76%	-1.11%
2H	-0.40%	0.48%	-1.81%
Full Year	-0.73%	0.91%	-3.39%
2-yr*	-0.76%	0.19%	-3.44%
3-yr*	-0.62%	0.33%	-2.92%
4-yr*	-0.56%	0.27%	-1.76%
5-yr*	-0.46%	0.42%	-1.46%

 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^{\star}\ relative\ annualized\ return$ 



### Funds by FUM between \$1.5bn - \$2.0bn

# Chart 63: Relative returns of funds managing between \$1.5bn and \$2.0bn - Last 12 months \$1500m - \$2000m funds have outperformed by 0.01% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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# Chart 64: Relative returns of funds managing between \$1.5bn and \$2.0bn : Periodic returns \$1500m - \$2000m have outperformed by 0.01% in the last 1-month



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

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**Table 24: Relative returns of funds managing between \$1.5bn and \$2.0bn : Periodic returns** Median, Top and Bottom Quartile returns for various periods

Period	<b>Median Relative Return</b>	Top Quartile	<b>Bottom Quartile</b>
1-month	0.01%	0.81%	-0.65%
Q4	-0.10%	0.90%	-0.93%
2H	-0.30%	0.85%	-1.63%
Full Year	-0.55%	1.57%	-3.36%
2-yr*	-0.92%	0.06%	-3.67%
3-yr*	-0.81%	-0.09%	-3.32%
4-yr*	-0.70%	0.06%	-2.15%
5-yr*	-0.54%	0.32%	-2.02%

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

### Funds by FUM between \$2bn - \$5bn

#### Chart 65: Relative returns of funds managing between \$2.0bn and \$5.0bn - Last 12 months \$2000m - \$5000m funds have underperformed by 0.00% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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### Chart 66: Relative returns of funds managing between \$2.0bn and \$5.0bn : Periodic returns





Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

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#### Table 25: Relative returns of funds managing between \$2.0bn and \$5.0bn: Periodic returns Median, Top and Bottom Quartile returns for various periods

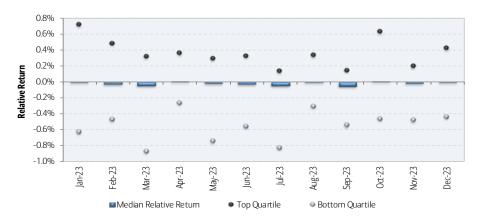
Period	<b>Median Relative Return</b>	Top Quartile	<b>Bottom Quartile</b>
1-month	0.00%	0.57%	-0.48%
Q4	-0.13%	0.59%	-0.77%
2H	-0.31%	0.37%	-1.63%
Full Year	-0.64%	0.43%	-3.00%
2-yr*	-0.78%	-0.12%	-3.59%
3-yr*	-0.57%	-0.02%	-2.97%
4-yr*	-0.53%	0.18%	-1.96%
5-yr*	-0.48%	0.29%	-1.69%

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return



### Funds by FUM between \$5.0bn - \$10bn

#### Chart 67: Relative returns of funds managing between \$5.0bn and \$10.0bn - Last 12 months \$5000m - \$10000m funds have underperformed by -0.02% last month



 $Source: Bof A\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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### Chart 68: Relative returns of funds managing between \$5.0bn and \$10.0bn: Periodic returns

\$5000m - \$10000m have underperformed by -0.02% in the last 1-month



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

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#### Table 26: Relative returns of funds managing between \$5.0bn and \$10.0bn: Periodic returns Median, Top and Bottom Quartile returns for various periods

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	-0.02%	0.42%	-0.44%
Q4	-0.07%	0.51%	-0.59%
2H	-0.20%	0.29%	-1.25%
Full Year	-0.39%	0.38%	-3.33%
2-yr*	-0.63%	-0.06%	-2.20%
3-yr*	-0.61%	-0.09%	-2.30%
4-yr*	-0.57%	-0.12%	-2.08%
5-yr*	-0.44%	-0.04%	-1.71%

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

### Funds by FUM > \$10bn

#### Chart 69: Relative returns of funds managing > \$10bn - Last 12 months

> \$10000m funds have underperformed by 0.00% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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### $Chart \, 70: Relative \, returns \, of \, funds \, managing \, > \, \$10bn: Periodic \, returns$

> \$10000m have underperformed by 0.00% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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#### Table 27: Relative returns of funds managing > \$10bn: Periodic returns

Median, Top and Bottom Quartile returns for various periods

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	0.00%	0.26%	-0.24%
Q4	-0.02%	0.21%	-0.30%
2H	-0.03%	0.41%	-0.63%
Full Year	-0.12%	0.43%	-1.03%
2-yr*	-0.21%	-0.02%	-0.94%
3-yr*	-0.23%	-0.01%	-1.25%
4-yr*	-0.21%	-0.01%	-0.87%
5-yr*	-0.27%	-0.04%	-0.90%

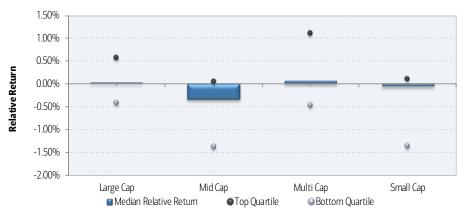
 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^{\star}\ relative\ annualized\ return$ 



# **Funds by Market Cap of Stocks**

#### Chart 71: Relative returns of Funds by MCAP: Last month

The narrowest margin between the top and bottom quartile was for Large Cap funds



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

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#### Chart 72: Relative returns of Funds by MCAP: Periodic returns

Last month the best performing fund group was Multi Cap



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

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#### Chart 73: Percentage of Funds by MCAP

Large Cap funds constitutes 85% of this fund group



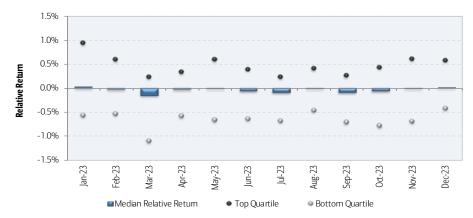
Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices



# Funds by Market Cap: LARGE CAP

#### Chart 74: Relative returns of LARGE CAP funds - Last 12 months

Large Cap funds have outperformed by 0.00% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 75: Relative returns of LARGE CAP funds: Periodic returns

Large Cap have outperformed by 0.00% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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#### Table 28: Relative returns of LARGE CAP funds: Periodic returns

 $Median, Top\ and\ Bottom\ Quartile\ returns\ for\ various\ periods$ 

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	0.00%	0.57%	-0.43%
Q4	-0.11%	0.64%	-0.96%
2H	-0.34%	0.33%	-1.69%
Full Year	-0.74%	0.49%	-3.99%
2-yr*	-0.90%	-0.09%	-3.64%
3-yr*	-0.81%	-0.07%	-3.35%
4-yr*	-0.70%	-0.07%	-2.25%
5-yr*	-0.59%	-0.01%	-1.98%

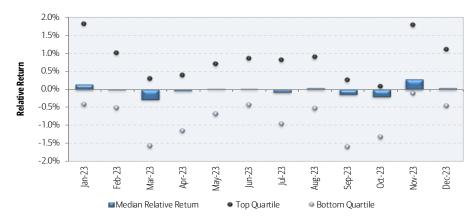
 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^{\star}\ relative\ annualized\ return$ 



# Funds by Market Cap: MULTI CAP

#### Chart 76: Relative returns of MULTI CAP funds - Last 12 months

Multi Cap funds have outperformed by 0.04% last month



 $Source: Bof A\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 77: Relative returns of MULTI CAP funds: Periodic returns

Multi Cap have outperformed by 0.04% in the last 1-month



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return

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#### Table 29: Relative returns of MULTI CAP funds: Periodic returns

Median, Top and Bottom Quartile returns for various periods

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	0.04%	1.10%	-0.47%
Q4	-0.05%	1.69%	-0.81%
2H	-0.20%	1.02%	-1.46%
Full Year	-0.42%	1.19%	-2.89%
2-yr*	-0.63%	0.20%	-6.79%
3-yr*	-0.37%	0.13%	-4.09%
4-yr*	-0.28%	0.71%	-1.31%
5-yr*	-0.27%	0.64%	-1.29%

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return



# Funds by Market Cap: MID CAP

#### 

Mid Cap funds have underperformed by -0.34% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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### Chart 79: Relative returns of MID CAP funds: Periodic returns

Mid Cap have underperformed by -0.06% in the last 5-yr\*



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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#### Table 30: Relative returns of MID CAP funds: Periodic returns

 $Median, Top\ and\ Bottom\ Quartile\ returns\ for\ various\ periods$ 

Period	<b>Median Relative Return</b>	Top Quartile	<b>Bottom Quartile</b>
1-month	-0.34%	0.05%	-1.39%
Q4	-0.15%	0.18%	-1.71%
2H	-0.11%	0.74%	-1.52%
Full Year	-0.15%	1.72%	-1.33%
2-yr*	-0.24%	0.86%	-1.81%
3-yr*	-0.11%	1.36%	-0.84%
4-yr*	-0.12%	1.35%	-0.93%
5-yr*	-0.06%	1.50%	-0.62%

 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^{\star}\ relative\ annualized\ return$ 



# Funds by Market Cap: SMALL CAP

#### Chart 80: Relative returns of SMALL CAP funds - Last 12 months

Small Cap funds have underperformed by -0.06% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^*relative\ annualized\ return$ 

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#### Chart 81: Relative returns of SMALL CAP funds: Periodic returns

Small Cap have underperformed by -0.06% in the last 1-month



 $Source: Bof A\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Table 31: Relative returns of SMALL CAP funds: Periodic returns

 $Median, Top\ and\ Bottom\ Quartile\ returns\ for\ various\ periods$ 

Period	Median Relative Return	Top Quartile	Bottom Quartile
1-month	-0.06%	0.09%	-1.36%
Q4	-0.09%	0.25%	-2.65%
2H	-0.17%	0.13%	-2.27%
Full Year	-0.33%	0.50%	-0.94%
2-yr*	-0.14%	2.55%	-1.29%
3-yr*	-0.23%	3.18%	-0.91%
4-yr*	-0.16%	1.75%	-0.94%
5-yr*	-0.16%	0.18%	-0.65%

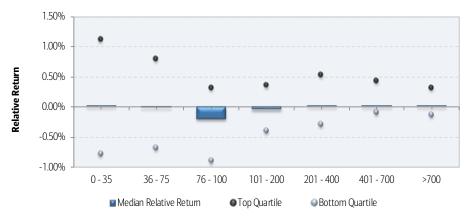
 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 



# Funds by Portfolio Size (# stocks)

#### Chart 82: Relative returns of Funds by Portfolio Size (# of stocks): Last month

Dispersion between top and bottom quintile by perf was largest for 0 - 35 funds

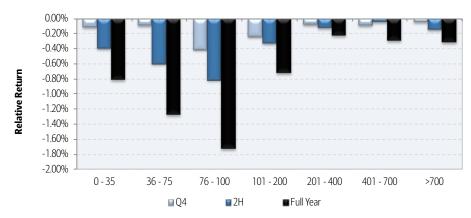


 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 83: Relative returns of Funds by Portfolio Size (# of stocks): Periodic returns

Last month the best performing fund group was >700



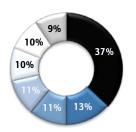
Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

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#### Chart 84: Percentage of Funds by Portfolio Size (# of stocks)

36 - 75 funds constitutes 37% of this fund group

■ 36 - 75 (792, \$2,221 bn)
■ 101 - 200 (287, \$1,670 bn)
■ 0 - 35 (232, \$495 bn)
■ 201 - 400 (230, \$1,996 bn)
■ 401 - 700 (208, \$2,933 bn)
■ >700 (205, \$2,443 bn)
■ 76 - 100 (200, \$614 bn)



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices



# Funds by Portfolio Size (< 35 stocks)

#### Chart 85: Relative returns of funds with <= 35 stocks - Last 12 months

0-35 funds have outperformed by 0.01% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 86: Relative returns of funds with <= 35 stocks : Periodic returns

0-35 have outperformed by 0.01% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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#### Table 32: Relative returns of funds with <= 35 stocks : Periodic returns

 $Median, Top\ and\ Bottom\ Quartile\ returns\ for\ various\ periods$ 

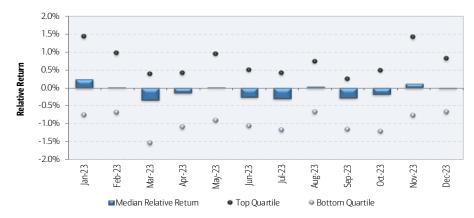
Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	0.01%	1.12%	-0.78%
Q4	-0.11%	1.73%	-1.15%
2H	-0.39%	0.57%	-2.49%
Full Year	-0.81%	1.53%	-5.38%
2-yr*	-1.83%	-0.22%	-6.11%
3-yr*	-1.57%	-0.23%	-5.96%
4-yr*	-1.11%	-0.12%	-3.64%
5-yr*	-0.92%	-0.04%	-2.82%

 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^{\star}\ relative\ annualized\ return$ 

# **Funds by Portfolio Size (36-75 stocks)**

#### Chart 87: Relative returns of funds managing > 35 and <= 75 stocks - Last 12 months

36 - 75 funds have underperformed by 0.00% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 88: Relative returns of funds managing > 35 and <= 75 stocks: Periodic returns

36 - 75 have underperformed by 0.00% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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# Table 33: Relative returns of funds managing > 35 and <=75 stocks : Periodic returns

 $\label{thm:median} \mbox{Median, Top and Bottom Quartile returns for various periods}$ 

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	0.00%	0.80%	-0.69%
Q4	-0.09%	1.30%	-1.50%
2H	-0.59%	0.85%	-2.74%
Full Year	-1.27%	1.99%	-5.33%
2-yr*	-2.02%	-0.09%	-5.36%
3-yr*	-1.78%	-0.07%	-4.72%
4-yr*	-0.98%	0.43%	-2.90%
5-yr*	-0.63%	0.58%	-2.49%

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return



# Funds by Portfolio Size (76-100 stocks)

#### Chart 89: Relative returns of funds managing > 75 and <= 100 stocks - Last 12 months

76 - 100 funds have underperformed by -0.20% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 90: Relative returns of funds managing > 75 and <= 100 stocks : Periodic returns

76 - 100 have underperformed by -0.20% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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# Table 34: Relative returns of funds managing > 75 and <= 100 stocks : Periodic returns

 $Median, Top\ and\ Bottom\ Quartile\ returns\ for\ various\ periods$ 

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	-0.20%	0.31%	-0.89%
Q4	-0.40%	0.31%	-1.92%
2H	-0.81%	0.03%	-2.74%
Full Year	-1.72%	-0.01%	-6.25%
2-yr*	-0.97%	0.31%	-4.89%
3-yr*	-0.98%	0.19%	-4.26%
4-yr*	-0.83%	0.17%	-2.90%
5-yr*	-0.65%	0.48%	-2.67%

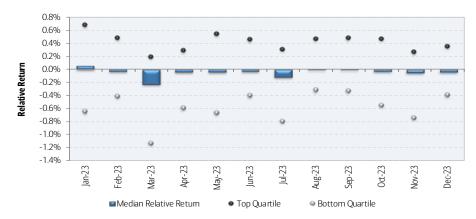
 $Source: Bof A\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^{\star}\ relative\ annualized\ return$ 



### Funds by Portfolio Size (101-200 stocks)

#### Chart 91: Relative returns of funds managing > 100 and <= 200 stocks - Last 12 months

101 - 200 funds have underperformed by -0.04% last month



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

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#### Chart 92: Relative returns of funds managing > 100 and <= 200 stocks: Periodic returns

101 - 200 have underperformed by -0.04% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^{\star}\ relative\ annualized\ return$ 

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# Table 35: Relative returns of funds managing > 100 and <= 200 stocks : Periodic returns

 $\label{thm:median} \mbox{Median, Top and Bottom Quartile returns for various periods}$ 

Period	<b>Median Relative Return</b>	Top Quartile	<b>Bottom Quartile</b>
1-month	-0.04%	0.35%	-0.40%
Q4	-0.24%	0.29%	-1.17%
2H	-0.33%	0.45%	-1.50%
Full Year	-0.72%	0.50%	-2.97%
2-yr*	-0.64%	0.01%	-2.21%
3-yr*	-0.52%	0.06%	-2.16%
4-yr*	-0.63%	-0.03%	-1.85%
5-yr*	-0.53%	0.08%	-1.69%

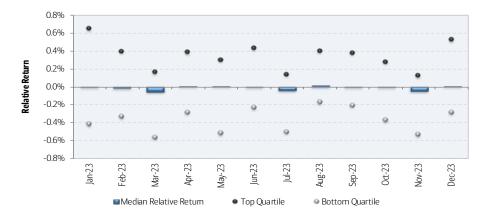
 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^{\star}\ relative\ annualized\ return$ 



# Funds by Portfolio Size (201-400 stocks)

#### Chart 93: Relative returns of funds managing > 200 and <= 400 stocks - Last 12 months

201 - 400 funds have outperformed by 0.00% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 94: Relative returns of funds managing > 200 and <=400 stocks: Periodic returns

201 -  $400\,\text{have}$  outperformed by 0.00% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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# Table 36: Relative returns of funds managing > 200 and <=400 stocks : Periodic returns

 $Median, Top\ and\ Bottom\ Quartile\ returns\ for\ various\ periods$ 

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	0.00%	0.52%	-0.29%
Q4	-0.08%	0.36%	-0.63%
2H	-0.13%	0.35%	-0.82%
Full Year	-0.22%	0.64%	-1.45%
2-yr*	-0.45%	-0.02%	-1.37%
3-yr*	-0.40%	0.05%	-1.26%
4-yr*	-0.44%	-0.01%	-1.09%
5-yr*	-0.42%	-0.05%	-1.12%

 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^{\star}\ relative\ annualized\ return$ 



### Funds by Portfolio Size (401-700 stocks)

#### Chart 95: Relative returns of funds managing > 400 and <= 700 stocks - Last 12 months

401 - 700 funds have outperformed by 0.00% last month



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

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#### Chart 96: Relative returns of funds managing > 400 and <= 700 stocks: Periodic returns

401 - 700 have outperformed by 0.00% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^{\star}\ relative\ annualized\ return$ 

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# Table 37: Relative returns of funds managing > 400 and <=700 stocks : Periodic returns

Median, Top and Bottom Quartile returns for various periods

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	0.00%	0.42%	-0.09%
Q4	-0.09%	0.10%	-0.43%
2H	-0.04%	0.20%	-0.41%
Full Year	-0.29%	0.09%	-1.25%
2-yr*	-0.33%	-0.05%	-0.86%
3-yr*	-0.23%	0.02%	-0.80%
4-yr*	-0.32%	-0.05%	-0.79%
5-yr*	-0.28%	-0.04%	-0.70%

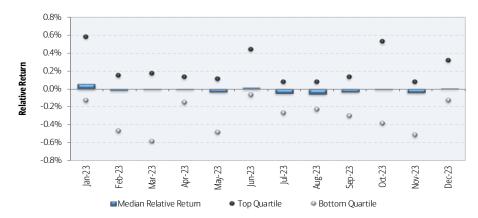
 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^{\star}\ relative\ annualized\ return$ 



# Funds by Portfolio Size (> 700 stocks)

#### Chart 97: Relative returns of funds with > 700 stocks - Last 12 months

>700 funds have outperformed by 0.01% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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### Chart 98: Relative returns of funds with > 700 stocks : Periodic returns

>700 have outperformed by 0.01% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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#### Table 38: Relative returns of funds with > 700 stocks: Periodic returns

 $\label{thm:continuous} \mbox{Median, Top and Bottom Quartile returns for various periods}$ 

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	0.01%	0.32%	-0.14%
Q4	-0.04%	0.27%	-0.30%
2H	-0.15%	0.14%	-0.73%
Full Year	-0.32%	0.16%	-1.07%
2-yr*	-0.43%	-0.06%	-0.86%
3-yr*	-0.34%	-0.06%	-0.73%
4-yr*	-0.41%	-0.09%	-0.73%
5-yr*	-0.41%	-0.16%	-0.71%

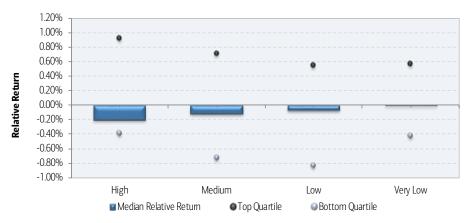
 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^{\star}\ relative\ annualized\ return$ 



# **Funds by Turnover**

#### Chart 99: Relative returns of Funds by Turnover: Last month

Dispersion between top and bottom quintile by perf was largest for Medium funds

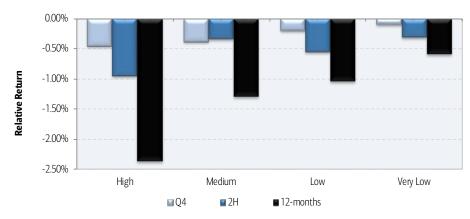


 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 100: Relative returns of Funds by Turnover: Periodic returns

Very Low funds have performed the best in the last 12m

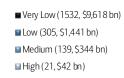


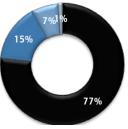
 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 101: Percentage of Funds by Turnover

Very Low funds constitutes 77% of this fund group





Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices



# **Funds by Turnover: HIGH**

#### Chart 102: Relative returns of HIGH turnover funds - Last 12 months

High funds have underperformed by -0.20% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 103: Relative returns of HIGH turnover funds: Periodic returns

High have underperformed by -0.20% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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#### Table 39: Relative returns of HIGH turnover funds: Periodic returns

 $Median, Top\ and\ Bottom\ Quartile\ returns\ for\ various\ periods$ 

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	-0.20%	0.91%	-0.39%
Q4	-0.45%	0.02%	-1.21%
2H	-0.95%	0.29%	-2.73%
12-months	-2.36%	0.22%	-9.84%
2-yr*	-1.96%	-0.81%	-4.62%
3-yr*	-1.30%	-0.10%	-4.56%
4-yr*	-1.27%	-0.40%	-3.91%
5-yr*	-2.04%	-0.33%	-4.75%

 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 



# **Funds by Turnover: MEDIUM**

#### Chart 104: Relative returns of MEDIUM turnover funds - Last 12 months

Medium funds have underperformed by -0.12% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 105: Relative returns of MEDIUM turnover funds: Periodic returns

Medium have underperformed by -0.12% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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#### Table 40: Relative returns of MEDIUM turnover funds: Periodic returns

Median, Top and Bottom Quartile returns for various periods

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	-0.12%	0.70%	-0.73%
Q4	-0.38%	0.97%	-1.62%
2H	-0.33%	1.35%	-2.01%
12-months	-1.29%	2.09%	-4.84%
2-yr*	-1.59%	0.37%	-4.10%
3-yr*	-1.11%	0.35%	-3.84%
4-yr*	-1.02%	0.51%	-2.88%
5-yr*	-0.93%	0.50%	-2.64%

 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^{\star}\ relative\ annualized\ return$ 



# **Funds by Turnover: LOW**

#### Chart 106: Relative returns of LOW turnover funds - Last 12 months

Low funds have underperformed by -0.07% last month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices$ 

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#### Chart 107: Relative returns of LOW turnover funds: Periodic returns

Low have underperformed by -0.07% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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### Table 41: Relative returns of LOW turnover funds: Periodic returns

 $Median, Top\ and\ Bottom\ Quartile\ returns\ for\ various\ periods$ 

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	-0.07%	0.54%	-0.84%
Q4	-0.20%	0.92%	-1.57%
2H	-0.55%	0.88%	-2.18%
12-months	-1.04%	1.37%	-4.91%
2-yr*	-1.84%	0.17%	-5.22%
3-yr*	-1.52%	0.49%	-4.57%
4-yr*	-1.08%	0.32%	-2.67%
5-yr*	-0.81%	0.29%	-2.58%

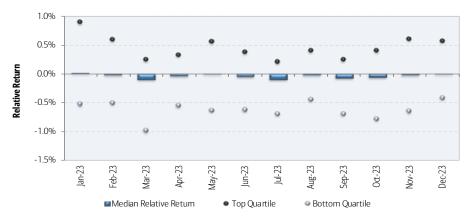
 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 



# **Funds by Turnover: VERY LOW**

#### Chart 108: Relative returns of VERY LOW turnover funds - Last 12 months

Very Low funds have underperformed by 0.00% last month



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

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#### Chart 109: Relative returns of VERY LOW turnover funds: Periodic returns

Very Low have underperformed by 0.00% in the last 1-month



 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return$ 

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### Table 42: Relative returns of VERY LOW turnover funds: Periodic returns

 $Median, Top\ and\ Bottom\ Quartile\ returns\ for\ various\ periods$ 

Period	Median Relative Return	Top Quartile	<b>Bottom Quartile</b>
1-month	0.00%	0.57%	-0.42%
Q4	-0.10%	0.60%	-0.89%
2H	-0.31%	0.33%	-1.58%
12-months	-0.59%	0.53%	-3.38%
2-yr*	-0.72%	-0.05%	-3.13%
3-yr*	-0.61%	-0.03%	-2.87%
4-yr*	-0.58%	-0.01%	-1.97%
5-yr*	-0.48%	0.11%	-1.65%

 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ {}^{\star}\ relative\ annualized\ return$ 



# **Summary Table: Median Relative Returns**

Table 43: Median relative returns matrix

Relative returns of all fund groups for various periods

Group	Sub-Group	1m	3m	6m	YTD	12m	2-yr*	3-yr*	4-yr*	5-yr*
Fund by ASR	0-20%	-0.01%	-0.07%	-0.17%	-0.32%	-0.32%	-0.43%	-0.37%	-0.40%	-0.38%
Fund by ASR	21-40%	0.05%	-0.28%	-0.17%	-0.75%	-0.75%	-0.81%	-0.56%	-0.69%	-0.71%
Fund by ASR	41-60%	-0.07%	-0.12%	-0.20%	-0.71%	-0.71%	-1.72%	-1.53%	-1.39%	-1.41%
Fund by ASR	61-80%	-0.12%	-0.21%	-1.09%	-2.20%	-2.20%	-2.20%	-2.04%	-1.15%	-0.51%
Fund by ASR	81-100%	0.35%	-0.25%	-1.14%	-1.89%	-1.89%	-2.26%	-2.04%	-1.17%	-0.81%
Fund by FUM(\$)	0 - \$750 m	-0.06%	-0.23%	-0.41%	-1.10%	-1.10%	-1.28%	-1.02%	-1.01%	-0.78%
Fund by FUM(\$)	\$750m - \$1bn	0.01%	-0.11%	-0.36%	-0.72%	-0.72%	-1.07%	-0.93%	-0.68%	-0.61%
Fund by FUM(\$)	\$1.0bn- 1.5bn	0.03%	-0.15%	-0.40%	-0.73%	-0.73%	-0.76%	-0.62%	-0.56%	-0.46%
Fund by FUM(\$)	\$1.5bn - \$2.0bn	0.01%	-0.10%	-0.30%	-0.55%	-0.55%	-0.92%	-0.81%	-0.70%	-0.54%
Fund by FUM(\$)	\$2.0bn - \$5.0bn	0.00%	-0.13%	-0.31%	-0.64%	-0.64%	-0.78%	-0.57%	-0.53%	-0.48%
Fund by FUM(\$)	\$5.0bn - \$10.0bn	-0.02%	-0.07%	-0.20%	-0.39%	-0.39%	-0.63%	-0.61%	-0.57%	-0.44%
Fund by FUM(\$)	>\$10.0bn	0.00%	-0.02%	-0.03%	-0.12%	-0.12%	-0.21%	-0.23%	-0.21%	-0.27%
Fund by MCAP	Large Cap	0.00%	-0.11%	-0.34%	-0.74%	-0.74%	-0.90%	-0.81%	-0.70%	-0.59%
Fund by MCAP	Mid Cap	-0.34%	-0.15%	-0.11%	-0.15%	-0.15%	-0.24%	-0.11%	-0.12%	-0.06%
Fund by MCAP	Small Cap	-0.06%	-0.09%	-0.17%	-0.33%	-0.33%	-0.14%	-0.23%	-0.16%	-0.16%
Fund by MCAP	Multi Cap	0.04%	-0.05%	-0.20%	-0.42%	-0.42%	-0.63%	-0.37%	-0.28%	-0.27%
Fund by Investment Style	Value	-0.11%	-0.84%	0.45%	0.46%	0.46%	1.64%	1.17%	0.14%	0.10%
Fund by Investment Style	Growth	0.07%	0.06%	-0.98%	-1.56%	-1.56%	-3.23%	-2.78%	-1.41%	-0.85%
Fund by Investment Style	GARP	-0.07%	-0.21%	-0.81%	-2.39%	-2.39%	-1.66%	-1.87%	-1.58%	-1.25%
Fund by Investment Style	Yield	-0.36%	-1.07%	-0.80%	-2.93%	-2.93%	0.27%	-0.11%	-0.53%	-0.99%
Fund by Investment Style	Index	-0.01%	-0.08%	-0.17%	-0.35%	-0.35%	-0.44%	-0.37%	-0.40%	-0.39%
Fund by Manager Type	Active	-0.02%	-0.22%	-0.78%	-1.61%	-1.61%	-1.91%	-1.78%	-1.23%	-0.84%
Fund by Manager Type	Passive	-0.01%	-0.08%	-0.17%	-0.35%	-0.35%	-0.44%	-0.37%	-0.40%	-0.39%
Fund by Portfolio Size (# stocks)	0-35	0.01%	-0.11%	-0.39%	-0.81%	-0.81%	-1.83%	-1.57%	-1.11%	-0.92%
Fund by Portfolio Size (# stocks)	36 - 75	0.00%	-0.09%	-0.59%	-1.27%	-1.27%	-2.02%	-1.78%	-0.98%	-0.63%
Fund by Portfolio Size (# stocks)	76 - 100	-0.20%	-0.40%	-0.81%	-1.72%	-1.72%	-0.97%	-0.98%	-0.83%	-0.65%
Fund by Portfolio Size (# stocks)	101 - 200	-0.04%	-0.24%	-0.33%	-0.72%	-0.72%	-0.64%	-0.52%	-0.63%	-0.53%
Fund by Portfolio Size (# stocks)	201 - 400	0.00%	-0.08%	-0.13%	-0.22%	-0.22%	-0.45%	-0.40%	-0.44%	-0.42%
Fund by Portfolio Size (# stocks)	401 - 700	0.00%	-0.09%	-0.04%	-0.29%	-0.29%	-0.33%	-0.23%	-0.32%	-0.28%
Fund by Portfolio Size (# stocks)	>700	0.01%	-0.04%	-0.15%	-0.32%	-0.32%	-0.43%	-0.34%	-0.41%	-0.41%
Fund by Turnover	High	-0.20%	-0.45%	-0.95%	-2.36%	-2.36%	-1.96%	-1.30%	-1.27%	-2.04%
Fund by Turnover	Medium	-0.12%	-0.38%	-0.33%	-1.29%	-1.29%	-1.59%	-1.11%	-1.02%	-0.93%
Fund by Turnover	Low	-0.07%	-0.20%	-0.55%	-1.04%	-1.04%	-1.84%	-1.52%	-1.08%	-0.81%
Fund by Turnover	Very Low	0.00%	-0.10%	-0.31%	-0.59%	-0.59%	-0.72%	-0.61%	-0.58%	-0.48%
Fund by Region	Global (DM+EM)	0.34%	0.32%	-0.73%	-0.50%	-0.50%	-2.24%	-2.12%	-0.68%	-0.61%
Fund by Region	Global (DM)	0.29%	-0.22%	-0.46%	-1.55%	-1.55%	-1.38%	-1.13%	-0.88%	-0.82%
Fund by Region	EAFE	-0.16%	0.07%	-0.95%	-0.81%	-0.81%	-0.79%	-0.75%	-0.63%	-0.59%
Fund by Region	USA	0.00%	-0.08%	-0.06%	-0.29%	-0.29%	-0.38%	-0.33%	-0.40%	-0.40%
Fund by Region	Europe	-0.01%	-0.12%	-0.26%	-0.89%	-0.89%	-1.13%	-1.06%	-0.74%	-0.64%
Fund by Region	Japan	-0.37%	-0.36%	-1.05%	-0.12%	-0.12%	-0.70%	-0.61%	-0.39%	-0.35%
Fund by Region	APXJ	-0.39%	-0.57%	-1.17%	-1.43%	-1.43%	-1.41%	-0.66%	-0.63%	-0.47%
Fund by Region										

 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return.\ Empty\ cell\ suggests\ no\ data\ is\ available\ for\ that\ period.$ 



**Table 44: Median relative returns matrix: Global (DM+EM)**Relative returns of all fund groups in Global (DM+EM) for various periods

Group	Sub-Group	<b>Fund Count</b>	1m	3m	6m	YTD	12m	2-yr*	3-yr*	4-yr*	5-yr*
Fund by ASR	0-20%	27	-0.04%	-0.03%	-0.38%	-0.36%	-0.36%	-0.46%	-0.42%	-0.45%	-0.44%
Fund by ASR	21-40%	12	0.15%	0.04%	-0.17%	-0.62%	-0.62%	-0.64%	-0.59%	-0.62%	-0.41%
Fund by ASR	41-60%	11	0.18%	-0.15%	0.21%	1.18%	1.18%	-0.71%	-0.65%	-1.80%	-1.97%
Fund by ASR	61-80%	37	0.47%	0.73%	-0.54%	-0.34%	-0.34%	-3.50%	-3.59%	-1.07%	-0.38%
Fund by ASR	81-100%	94	0.59%	1.30%	-1.62%	-2.51%	-2.51%	-4.56%	-3.63%	-1.20%	-0.82%
Fund by FUM(\$)	0 - \$750 m	21	0.61%	0.14%	-0.45%	-0.53%	-0.53%	-1.98%	-3.35%	-0.86%	-0.73%
Fund by FUM(\$)	\$750m - \$1bn	20	0.35%	1.29%	-1.18%	-2.18%	-2.18%	-3.60%	-2.49%	-1.21%	-0.22%
Fund by FUM(\$)	\$1.0bn- 1.5bn	38	0.58%	0.06%	-1.06%	-0.42%	-0.42%	-2.77%	-2.36%	-0.69%	-0.81%
Fund by FUM(\$)	\$1.5bn - \$2.0bn	16	0.27%	0.79%	-0.62%	0.05%	0.05%	-0.50%	-1.58%	-0.47%	-0.31%
Fund by FUM(\$)	\$2.0bn - \$5.0bn	56	0.28%	0.28%	-0.47%	-0.54%	-0.54%	-1.20%	-1.22%	-0.57%	-0.68%
Fund by FUM(\$)	\$5.0bn - \$10.0bn	12	0.22%	0.92%	-0.65%	0.27%	0.27%	-3.31%	-3.62%	-1.60%	-1.03%
Fund by FUM(\$)	>\$10.0bn	18	-0.03%	0.17%	-0.80%	-0.38%	-0.38%	-0.53%	-0.88%	-0.41%	-0.39%
Fund by MCAP	Large Cap	164	0.33%	0.46%	-0.71%	-0.54%	-0.54%	-2.39%	-2.25%	-0.69%	-0.65%
Fund by MCAP	Mid Cap	8	0.86%	0.87%	-0.24%	0.69%	0.69%	-0.53%	-0.37%	-0.42%	-0.38%
Fund by MCAP	Small Cap	3	-0.25%	-0.04%	-1.50%	-0.36%	-0.36%	-0.33%	-0.42%	-0.67%	-0.40%
Fund by MCAP	Multi Cap	6	2.19%	-0.19%	-1.54%	-0.47%	-0.47%	-0.32%	-1.29%	-0.34%	-0.98%
Fund by Investment Style	Value	9	0.53%	-0.81%	0.20%	-1.52%	-1.52%	1.64%	-0.54%	-2.11%	-0.97%
Fund by Investment Style	Growth	114	0.52%	1.40%	-1.25%	-0.51%	-0.51%	-4.51%	-4.27%	-1.11%	-0.67%
Fund by Investment Style	GARP	12	0.61%	-0.28%	0.09%	-2.47%	-2.47%	0.10%	-1.42%	-1.19%	-1.36%
Fund by Investment Style	Yield	5	0.08%	-1.83%	-1.66%	-7.31%	-7.31%	-1.78%	-1.30%	-3.09%	-1.29%
Fund by Investment Style	Index	41	-0.04%	-0.03%	-0.36%	-0.33%	-0.33%	-0.45%	-0.41%	-0.50%	-0.45%
Fund by Manager Type	Active	140	0.49%	1.09%	-1.23%	-1.04%	-1.04%	-3.82%	-3.58%	-1.17%	-0.83%
Fund by Manager Type	Passive	41	-0.04%	-0.03%	-0.36%	-0.33%	-0.33%	-0.45%	-0.41%	-0.50%	-0.45%
Fund by Portfolio Size (# stocks)	0-35	16	0.21%	1.52%	-1.00%	-1.53%	-1.53%	-5.17%	-4.97%	0.48%	1.23%
Fund by Portfolio Size (# stocks)	36 - 75	86	0.54%	0.77%	-0.92%	-0.52%	-0.52%	-3.10%	-2.73%	-1.14%	-0.78%
Fund by Portfolio Size (# stocks)	76 - 100	22	0.65%	0.95%	-1.06%	-1.17%	-1.17%	-3.82%	-3.67%	-1.20%	-0.67%
Fund by Portfolio Size (# stocks)	101 - 200	18	0.31%	0.40%	-1.19%	-0.34%	-0.34%	-0.98%	-1.73%	-0.15%	-0.21%
Fund by Portfolio Size (# stocks)	201 - 400	14	0.10%	0.11%	-0.34%	-0.40%	-0.40%	-0.71%	-1.11%	-0.73%	-0.50%
Fund by Portfolio Size (# stocks)	401 - 700	7	-0.04%	-0.27%	-0.55%	-0.18%	-0.18%	-0.34%	0.03%	-0.45%	-0.92%
Fund by Portfolio Size (# stocks)	>700	18	0.03%	0.13%	-0.37%	-0.49%	-0.49%	-0.46%	-0.43%	-0.45%	-0.49%
Fund by Turnover	High										
Fund by Turnover	Medium	12	0.28%	1.28%	0.68%	1.54%	1.54%	-2.78%	-0.99%	-0.77%	-0.71%
Fund by Turnover	Low	32	0.35%	0.78%	-1.47%	-1.03%	-1.03%	-2.48%	-3.43%	-1.00%	-0.67%
Fund by Turnover	Very Low	134	0.29%	0.28%	-0.80%	-0.51%	-0.51%	-1.85%	-2.03%	-0.62%	-0.61%

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return. Empty cell suggests no data is available for that period.



**Table 45: Median relative returns matrix: Global (DM)**Relative returns of all fund groups in Global (DM) for various periods

Group	Sub-Group	<b>Fund Count</b>	1m	3m	6m	YTD	12m	2-yr*	3-yr*	4-yr*	5-yr*
Fund by ASR	0-20%	47	0.28%	-0.18%	-0.18%	-0.28%	-0.28%	-0.69%	-0.49%	-0.59%	-0.55%
Fund by ASR	21-40%	11	0.56%	-0.17%	0.42%	0.54%	0.54%	-1.29%	-0.62%	-0.57%	-0.76%
Fund by ASR	41-60%	23	0.20%	-0.12%	-0.63%	-0.75%	-0.75%	-1.01%	-0.65%	-0.48%	-0.48%
Fund by ASR	61-80%	49	-0.07%	-0.58%	-0.30%	-2.33%	-2.33%	-2.11%	-1.79%	-1.19%	-0.77%
Fund by ASR	81-100%	76	0.65%	-0.37%	-2.13%	-6.48%	-6.48%	-3.29%	-3.71%	-2.67%	-2.45%
Fund by FUM(\$)	0 - \$750 m	12	0.01%	0.02%	-0.25%	-0.84%	-0.84%	-0.47%	-1.02%	-0.58%	-0.67%
Fund by FUM(\$)	\$750m - \$1bn	26	-0.01%	-0.08%	-0.93%	-1.41%	-1.41%	-1.51%	-1.84%	-1.91%	-1.78%
Fund by FUM(\$)	\$1.0bn- 1.5bn	44	0.59%	-0.57%	-1.02%	-2.43%	-2.43%	-1.74%	-1.32%	-1.27%	-0.94%
Fund by FUM(\$)	\$1.5bn - \$2.0bn	31	0.46%	0.22%	-0.52%	-1.91%	-1.91%	-2.28%	-1.63%	-0.78%	-0.74%
Fund by FUM(\$)	\$2.0bn - \$5.0bn	62	0.34%	-0.20%	-0.19%	-1.30%	-1.30%	-1.35%	-0.91%	-0.81%	-0.69%
Fund by FUM(\$)	\$5.0bn - \$10.0bn	21	0.08%	-0.27%	-0.46%	-3.02%	-3.02%	-1.02%	-0.96%	-1.00%	-0.73%
Fund by FUM(\$)	>\$10.0bn	11	0.45%	-0.50%	0.11%	-0.75%	-0.75%	-0.57%	-0.29%	-0.54%	-0.63%
Fund by MCAP	Large Cap	204	0.29%	-0.23%	-0.47%	-1.47%	-1.47%	-1.36%	-1.13%	-0.88%	-0.82%
Fund by MCAP	Mid Cap										
Fund by MCAP	Small Cap										
Fund by MCAP	Multi Cap	3	3.05%	4.47%	0.30%	-2.40%	-2.40%	-3.79%	-0.91%	-0.17%	1.07%
Fund by Investment Style	Value	16	0.58%	-2.89%	-1.12%	-6.48%	-6.48%	-1.31%	-1.79%	-1.71%	-1.95%
Fund by Investment Style	Growth	87	0.41%	0.34%	-0.24%	-1.91%	-1.91%	-2.71%	-2.57%	-1.17%	-0.70%
Fund by Investment Style	GARP	28	0.30%	0.46%	-0.99%	-2.57%	-2.57%	-3.27%	-3.80%	-2.08%	-1.78%
Fund by Investment Style	Yield	22	-0.38%	-2.65%	-2.49%	-9.97%	-9.97%	0.38%	-0.31%	-1.97%	-2.85%
Fund by Investment Style	Index	53	0.31%	-0.21%	-0.18%	-0.28%	-0.28%	-0.70%	-0.50%	-0.62%	-0.61%
Fund by Manager Type	Active	154	0.29%	-0.24%	-0.98%	-2.92%	-2.92%	-2.24%	-2.19%	-1.64%	-1.57%
Fund by Manager Type	Passive	53	0.31%	-0.21%	-0.18%	-0.28%	-0.28%	-0.70%	-0.50%	-0.62%	-0.61%
Fund by Portfolio Size (# stocks)	0-35	27	0.22%	0.06%	-1.54%	-4.38%	-4.38%	-3.13%	-4.26%	-2.98%	-2.23%
Fund by Portfolio Size (# stocks)	36 - 75	63	0.64%	0.42%	-1.24%	-2.91%	-2.91%	-2.97%	-2.57%	-0.88%	-0.63%
Fund by Portfolio Size (# stocks)	76 - 100	27	0.09%	-1.40%	-1.62%	-4.38%	-4.38%	-1.37%	-0.83%	-1.63%	-1.71%
Fund by Portfolio Size (# stocks)	101 - 200	11	0.21%	-0.19%	0.90%	-1.70%	-1.70%	-0.51%	-0.84%	-1.44%	-0.72%
Fund by Portfolio Size (# stocks)	201 - 400	19	0.29%	-0.07%	-0.17%	-0.85%	-0.85%	-0.85%	-0.61%	-0.65%	-0.81%
Fund by Portfolio Size (# stocks)	401 - 700	14	-0.12%	-0.96%	0.00%	-0.98%	-0.98%	-0.77%	-0.69%	-1.15%	-1.02%
Fund by Portfolio Size (# stocks)	>700	46	0.37%	-0.20%	-0.08%	-0.32%	-0.32%	-0.73%	-0.52%	-0.60%	-0.56%
Fund by Turnover	High	4	1.67%	1.81%	-1.22%	-8.16%	-8.16%	-2.63%	-3.44%	-3.91%	-4.37%
Fund by Turnover	Medium	13	-0.11%	-0.86%	-0.61%	-2.37%	-2.37%	-1.50%	-1.69%	-1.32%	-1.43%
Fund by Turnover	Low	24	0.12%	-0.30%	-0.75%	-2.59%	-2.59%	-1.61%	-0.85%	-1.50%	-1.56%
Fund by Turnover	Very Low	153	0.41%	-0.23%	-0.46%	-1.26%	-1.26%	-1.27%	-1.09%	-0.76%	-0.72%

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return. Empty cell suggests no data is available for that period.



**Table 46: Median relative returns matrix: EAFE**Relative returns of all fund groups in EAFE for various periods

Fund by ASR 21-40% Fund by ASR 21-40% Fund by ASR 41-60% 6 - 0.73% - 0.64% - 1.11% 0.25% 0.25% 0.07% 1.40% 0.36% - 0.17% Fund by ASR 61-80% 19 0.05% - 0.39% - 1.32% - 1.47% - 1.47% - 1.98% - 1.61% 0.28% Fund by ASR 81-100% 13 0.79% - 0.78% - 1.49% - 1.02% - 2.45% - 2.00% - 2.04% - 1.79% Fund by ASR 81-100% 13 0.79% - 0.78% - 1.49% - 1.02% - 2.45% - 2.00% - 2.04% - 1.79% Fund by FUM(S) 0.5750m 6 0.81% - 1.66% - 2.94% - 1.23% - 1.23% - 1.23% - 1.23% - 2.21% - 2.21% - 2.21% - 2.21% Fund by FUM(S) S750m - S1bn 7 0.40% 0.09% - 1.48% - 1.61% - 1.61% - 1.95% - 2.20% - 2.21% - 2.29% Fund by FUM(S) S1.0bn 1.5bn 5 0.04% 0.35% - 0.60% - 0.90% - 1.41% - 1.18% - 0.64% - 0.55% Fund by FUM(S) S1.0bn 5.50bn 11 0.22% 0.35% - 1.47% 0.72% 0.72% 1.74% - 1.18% - 0.64% 0.25% Fund by FUM(S) S5.0bn 5.50bn 11 0.22% 0.19% - 1.47% 0.72% 0.72% 0.72% 0.38% 0.38% 0.46% Fund by FUM(S) S5.0bn 510.0bn 16 0.08% 0.08% 0.09% 0.46% 0.09% 0.06% 0.09% 0.06% 0.09% 0.06% 0.09% 0.06% Fund by FUM(S) S5.0bn 510.0bn 16 0.08% 0.08% 0.08% 0.06% 0.09% 0.06% 0.09% 0.06% 0.05% 0.02% 0.08% 0.08% 0.06% Fund by FUM(S) S5.0bn 510.0bn 16 0.08% 0.08% 0.08% 0.08% 0.05% 0.05% 0.05% 0.06% 0.05% 0.06% 0.05% 0.06% 0.05% 0.06% 0.0	Group	Sub-Group	<b>Fund Count</b>	1m	3m	6m	YTD	12m	2-yr*	3-yr*	4-yr*	5-yr*
Fund by ASR         41-60%         6         0.73%         0.64%         -1.11%         0.25%         0.25%         0.10%         1.40%         0.36%         0.17%           Fund by ASR         61-80%         13         0.07%         0.73%         -1.47%         -1.47%         -1.98%         -1.61%         -0.63%         -0.28%           Fund by FUM(S)         0.5750m         6         0.81%         -1.66%         2.94%         -1.23%         -1.23%         -2.35%         -2.31%         -1.21%           Fund by FUM(S)         5750m-51bn         7         0.04%         0.35%         -1.66%         -0.94%         -1.23%         -1.93%         -2.35%         -2.31%         -1.22%           Fund by FUM(S)         \$1.05h-1.5bn         5         0.04%         0.35%         -0.66%         0.09%         -1.47%         -1.23%         -1.13%         -0.55%           Fund by FUM(S)         \$1.05h-52.0bn         11         0.02%         -0.23%         -0.12%         -0.75%         -0.95%         -0.66%         -0.68%           Fund by FUM(S)         \$1.05h-52.0bn         11         -0.22%         -0.23%         -0.09%         -0.56%         -0.66%         -0.45%           Fund by FUM(S)         \$1.00h-5	Fund by ASR	0-20%	19	0.01%	0.20%	-0.60%	-0.84%	-0.84%	-0.56%	-0.56%	-0.60%	-0.60%
Fund by ASR 61-80% 19 0.05% 0.39% 1.32% 1.47% 1.47% 1.98% 1.61% 0.63% 0.28% 1.98% 1.48% 1.10% 1.	Fund by ASR	21-40%										
Fund by ASR 81-100% 91-375	Fund by ASR	41-60%	6	-0.73%	-0.64%	-1.11%	0.25%	0.25%	0.07%	1.40%	0.36%	-0.17%
Fund by FUM(S)   0 - S750 m   6   0 - 81%   0 - 166%   2-94%   1-23%   1-23%   1-23%   2-23%	Fund by ASR	61-80%	19	0.05%	-0.39%	-1.32%	-1.47%	-1.47%	-1.98%	-1.61%	-0.63%	-0.28%
Fund by FUM(S) \$750m - S1bn 7 0.40% 0.09% -1.48% -1.61% -1.61% -1.98% -2.00% -1.21% -1.29% Fund by FUM(S) \$1.0bn 1.5bn 5 0.04% 0.35% -0.60% 0.090% -0.90% -1.41% -1.18% 0.64% -0.55% Fund by FUM(S) \$1.5bn -5.20bn 4 1.03% -0.19% -1.47% 0.72% 0.72% 0.72% 1.41% -1.18% 0.64% -0.65% 6.82% Fund by FUM(S) \$2.0bn -5.50bn 11 -0.22% 0.23% -1.32% 1.07% 1.07% 1.09% 0.69% 0.68% 0.68% 0.82% Fund by FUM(S) \$5.0bn -510.0bn 16 -0.08% 0.08% 0.06% 0.06% 0.69% 0.65% 0.65% 0.62% 0.68% 0.45% 0.65% 0.60% 0.65% 0.65% 0.62% 0.68% 0.45% 0.69% 0.69% 0.69% 0.69% 0.65% 0.62% 0.68% 0.45% 0.69% 0.69% 0.69% 0.65% 0.65% 0.62% 0.65% 0	Fund by ASR	81-100%	13	-0.79%	-0.78%	-1.49%	-1.02%	-1.02%	-2.45%	-2.00%	-2.04%	-1.79%
Fund by FUM(S) \$1.0bn-1.5bn \$ 0.04% 0.35% 0.60% 0.90% 0.90% 0.141% 0.118% 0.64% 0.55% 0.06% 0.19% 0.141% 0.12% 0.22% 0.17% 0.17% 0.17% 0.13% 0.82% 0.82% 0.82% 0.10% 0.1	Fund by FUM(\$)	0 - \$750 m	6	-0.81%	-1.66%	-2.94%	-1.23%	-1.23%	-1.93%	-2.35%	-2.31%	-2.12%
Fund by FUM(S)         \$1.5bn - \$2.0bn         4         -1.03%         -0.19%         -1.47%         0.72%         -1.74%         -1.32%         0.28%         0.82%           Fund by FUM(S)         \$2.0bn - \$5.0bn         11         -0.22%         -0.23%         -1.07%         -1.07%         -0.94%         -0.66%         -0.67%         -0.67%           Fund by FUM(S)         \$5.0bn - \$10.0bn         16         -0.08%         -0.04%         -0.32%         -0.63%         -0.43%         -0.44%         -0.59%           Fund by MCAP         Large Cap         54         -0.08%         -0.09%         -0.65%         -0.75%         -0.77%         -0.80%         -0.69%           Fund by MCAP         Midi Cap         2         -1.13%         -1.92%         -2.32%         -0.06%         -0.05%         -2.96%         -3.28%         -2.67%           Fund by MCAP         Multi Cap         1         -0.33%         -0.09%         -1.33%         -1.07%         -0.84%         -0.68%         -0.79%         -0.70%           Fund by Investment Style         Growth         30         -0.13%         -1.62%         0.73%         0.55%         0.55%         2.81%         0.50%         0.79%           Fund by Investment Style	Fund by FUM(\$)	\$750m - \$1bn	7	0.40%	0.09%	-1.48%	-1.61%	-1.61%	-1.98%	-2.00%	-1.21%	-1.29%
Fund by FUM(\$)   \$2.0bn - \$5.0bn   11   -0.22%   -0.23%   -1.32%   -1.07%   -1.07%   -0.94%   -0.68%   -0.70%   -0.67%   Fund by FUM(\$)   \$5.0bn - \$10.0bn   8   -0.16%   0.16%   0.04%   -0.69%   -0.69%   -0.65%   -0.62%   -0.32%   -0.45%   -0.05%   Fund by FUM(\$)   > 510.0bn   16   -0.08%   0.08%   -0.68%   -0.68%   -0.32%   -0.32%   -0.63%   -0.43%   -0.45%   -0.05%   Fund by MCAP   Large Cap   54   -0.08%   0.09%   -0.05%   -0.05%   -0.05%   -0.77%   -0.08%   -0.62%   -0.56%   -0.65%   -0.06%   -0.	Fund by FUM(\$)	\$1.0bn- 1.5bn	5	0.04%	0.35%	-0.60%	-0.90%	-0.90%	-1.41%	-1.18%	-0.64%	-0.55%
Fund by FUM(\$)   \$5.0bn - \$10.0bn   8   -0.16%   0.14%   -0.91%   -0.69%   -0.69%   -0.69%   -0.62%   -0.38%   -0.45%   Fund by FUM(\$)   > \$10.0bn   16   -0.08%   0.08%   -0.64%   -0.32%   -0.32%   -0.33%   -0.43%   -0.44%   -0.50%   Fund by MCAP   Large Cap   54   -0.08%   -0.09%   -0.85%   -0.75%   -0.75%   -0.77%   -0.80%   -0.66	Fund by FUM(\$)	\$1.5bn - \$2.0bn	4	-1.03%	-0.19%	-1.47%	0.72%	0.72%	-1.74%	-1.32%	0.28%	0.82%
Fund by FUM(\$)	Fund by FUM(\$)	\$2.0bn - \$5.0bn	11	-0.22%	-0.23%	-1.32%	-1.07%	-1.07%	-0.94%	-0.68%	-0.70%	-0.67%
Fund by MCAP Large Cap 54 -0.08% 0.09% -0.85% -0.75% -0.75% -0.77% -0.80% -0.62% -0.56% Fund by MCAP Mid Cap 2 -1.13% -1.92% -2.32% -0.06% -0.06% -1.95% -2.96% -3.28% -2.67% Fund by MCAP Small Cap Fund by MCAP Multi Cap 1 -0.33% -0.09% -1.33% -1.07% -1.07% -1.07% -0.84% -0.68% -0.79% -0.70% Fund by Investment Style Value 1 -0.23% -1.62% -0.16% -0.55% 0.55% 3.56% 2.81% 0.50% 0.11% Fund by Investment Style Growth 30 -0.13% -0.11% -1.48% -0.84% -0.84% -2.26% 1.77% -0.66% -0.51% Fund by Investment Style GARP Fund by Investment Style Index 22 -0.04% 0.19% -0.61% -0.84% -0.84% -0.59% -0.55% -0.56% -0.66% -0.61% -0.61% -0.84% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% -0.61% -0.84% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% -0.61% -0.84% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% -0.61% -0.84% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% -0.61% -0.84% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% -0.61% -0.84% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% -0.61% -0.84% -0.84% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% -0.84% -0.84% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% -0.84% -0.84% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% -0.84% -0.84% -0.84% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% -0.84% -0.84% -0.84% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% -0.84% -0.84% -0.84% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% -0.84% -0.84% -0.84% -0.84% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% -0.84% -0.84% -0.84% -0.84% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% -0.84	Fund by FUM(\$)	\$5.0bn - \$10.0bn	8	-0.16%	0.14%	-0.91%	-0.69%	-0.69%	-0.56%	-0.62%	-0.38%	-0.45%
Fund by MCAP         Mid Cap         2         -1.13%         -1.92%         -2.32%         -0.06%         -0.95%         -2.96%         -3.28%         -2.67%           Fund by MCAP         Small Cap         Small Cap         -1.07%         -1.07%         -0.64%         -0.68%         -0.79%         -0.70%           Fund by Investment Style         Value         1         -0.23%         -1.62%         0.73%         0.55%         0.55%         3.56%         2.81%         0.50%         0.11%           Fund by Investment Style         Growth         30         -0.13%         -0.11%         -1.48%         -0.84%         -2.26%         -1.77%         -0.66%         -0.51%           Fund by Investment Style         GGARP         Yield         4         -1.15%         -0.64%         -1.06%         0.73%         0.73%         -0.08%         -0.54%         -0.63%         -0.73%           Fund by Investment Style         Index         22         -0.04%         0.19%         -0.61%         -0.84%         -0.84%         -0.56%         -0.56%         -0.63%         -0.73%           Fund by Investment Style         Index         22         -0.04%         0.19%         -0.61%         -0.84%         -0.84%         -0.56%	Fund by FUM(\$)	>\$10.0bn	16	-0.08%	0.08%	-0.64%	-0.32%	-0.32%	-0.63%	-0.43%	-0.44%	-0.50%
Fund by MCAP Multi Cap 1 -0.33% -0.09% -1.33% -1.07% -1.07% -0.84% -0.68% -0.79% -0.70% -0.70% -0.00	Fund by MCAP	Large Cap	54	-0.08%	0.09%	-0.85%	-0.75%	-0.75%	-0.77%	-0.80%	-0.62%	-0.56%
Fund by MCAP Multi Cap 1 0.33% 0.09% -1.33% -1.07% -1.07% -0.84% -0.68% -0.79% -0.70% Fund by Investment Style Value 1 0.23% -1.62% 0.73% 0.55% 0.55% 3.56% 2.81% 0.50% 0.11% Fund by Investment Style Growth 30 0.13% -0.11% -1.48% -0.84% -0.84% -0.84% -2.26% -1.77% -0.66% 0.51% Fund by Investment Style GARP  Fund by Investment Style Yield 4 1.115% 0.64% 0.19% -0.61% 0.73% 0.73% 0.08% 0.05% 0.08% 0.05% 0.05% 0.05% 0.08% 0.05% 0.08% 0.05% 0.08% 0.05% 0.08% 0.05% 0.08% 0.073% 0.08% 0.08% 0.08% 0.08% 0.08% 0.05% 0.06% 0.06% 0.01% 0.09% 0.01% 0.09% 0.01% 0.08% 0.08% 0.05% 0.06% 0.06% 0.01% 0.09% 0.01% 0.08% 0.09% 0.05	Fund by MCAP	Mid Cap	2	-1.13%	-1.92%	-2.32%	-0.06%	-0.06%	-1.95%	-2.96%	-3.28%	-2.67%
Fund by Investment Style   Value   1   -0.23%   -1.62%   0.73%   0.55%   0.55%   3.56%   2.81%   0.50%   0.11%   Fund by Investment Style   Growth   30   -0.13%   -0.11%   -1.48%   -0.84%   -0.84%   -2.26%   -1.77%   -0.66%   -0.51%   Fund by Investment Style   GARP   -1.15%   -0.64%   -1.06%   0.73%   0.73%   0.73%   -0.08%   -0.54%   -0.63%   -0.73%   Fund by Investment Style   Index   22   -0.04%   0.19%   -0.61%   -0.84%   -0.84%   -0.84%   -0.59%   -0.56%   -0.60%   -0.61%   Fund by Manager Type   Active   35   -0.22%   -0.24%   -1.36%   -0.12%   -0.12%   -1.91%   -1.61%   -0.65%   -0.51%   Fund by Portfolio Size (# stocks)   0 - 35   4   -0.81%   -2.10%   -2.16%   -2.19%   -2.19%   -4.43%   -4.72%   -1.33%   -1.13%   Fund by Portfolio Size (# stocks)   36 - 75   11   -0.08%   -0.84%   -0.84%   -1.49%   -1.02%   -1.02%   -0.79%   -1.57%   -0.19%   -0.82%   Fund by Portfolio Size (# stocks)   76 - 100   7   -0.22%   1.53%   -1.51%   0.19%   0.19%   -5.77%   -1.76%   0.37%   0.82%   Fund by Portfolio Size (# stocks)   101 - 200   9   0.05%   0.00%   -0.86%   0.01%   0.11%   -1.57%   -0.93%   -0.55%   -0.51%   Fund by Portfolio Size (# stocks)   201 - 400   6   -0.45%   -0.93%   -1.79%   -3.49%   -3.49%   -3.49%   -1.64%   -1.93%   -1.19%   -0.59%   Fund by Portfolio Size (# stocks)   401 - 700   2   -0.20%   -0.69%   1.20%   0.25%   0.25%   5.08%   3.26%   -0.46%   -1.62%   Fund by Portfolio Size (# stocks)   5700   18   -0.04%   0.19%   -0.56%   -0.82%   -0.82%   -0.82%   -0.55%   -0.51%   -0.55%   -0.55%   Fund by Turnover   High   -0.43%   -0.95%   -0.55%   -0.03%   0.43%   0.43%   -2.20%   -1.90%   -1.90%   -0.59%   -0.55%   -0.51%   -0.05%   -0.55%   -0.05%	Fund by MCAP	Small Cap										
Fund by Investment Style Growth 30 -0.13% -0.11% -1.48% -0.84% -0.84% -2.26% -1.77% -0.66% -0.51% Fund by Investment Style GARP  Fund by Investment Style Yield 4 -1.15% -0.64% -1.06% 0.73% 0.73% -0.08% -0.54% -0.63% -0.73% Fund by Investment Style Index 22 -0.04% 0.19% -0.61% -0.84% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% Fund by Manager Type Active 35 -0.22% -0.24% -1.36% -0.12% -0.12% -1.91% -1.61% -0.65% -0.51% Fund by Manager Type Passive 22 -0.04% 0.19% -0.61% -0.84% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% Fund by Portfolio Size (# stocks) 0-35 4 -0.81% -2.10% -2.16% -2.19% -2.19% -4.43% -4.72% -1.33% -1.13% Fund by Portfolio Size (# stocks) 76 - 100 7 -0.22% 1.53% -1.51% 0.19% -1.57% -0.19% -0.77% -1.76% 0.37% 0.82% Fund by Portfolio Size (# stocks) 101 - 200 9 0.05% -0.06% -0.08% 0.01% 0.01% -1.57% -0.93% -1.64% -1.93% -1.19% -0.51% Fund by Portfolio Size (# stocks) 201 - 400 6 -0.45% -0.93% -1.79% -3.49% -3.49% -1.64% -1.93% -1.19% -0.55% Fund by Portfolio Size (# stocks) 401 -700 2 -0.20% -0.66% -0.82% -0.82% -0.82% -0.55% -0.51% -0.55%	Fund by MCAP	Multi Cap	1	-0.33%	-0.09%	-1.33%	-1.07%	-1.07%	-0.84%	-0.68%	-0.79%	-0.70%
Fund by Investment Style GARP  Fund by Investment Style Yield 4 -1.15% -0.64% -1.06% 0.73% 0.73% -0.08% -0.54% -0.63% -0.73% -0.08% -0.54% -0.63% -0.73% -0.08% -0.54% -0.63% -0.73% -0.08% -0.	Fund by Investment Style	Value	1	-0.23%	-1.62%	0.73%	0.55%	0.55%	3.56%	2.81%	0.50%	0.11%
Fund by Investment Style Yield 4 -1.15% -0.64% -1.06% 0.73% 0.73% -0.08% -0.54% -0.63% -0.73% Fund by Investment Style Index 22 -0.04% 0.19% -0.61% -0.84% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% Fund by Manager Type Active 35 -0.22% -0.24% -1.36% -0.12% -0.12% -1.91% -1.61% -0.65% -0.51% Fund by Manager Type Passive 22 -0.04% 0.19% -0.61% -0.84% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% Fund by Portfolio Size (# stocks) 0 - 35 4 -0.81% -2.10% -2.10% -2.16% -2.19% -2.19% -4.43% -4.72% -1.33% -1.13% Fund by Portfolio Size (# stocks) 36 - 75 11 -0.08% -0.84% -1.49% -1.02% -1.02% -0.79% -1.57% -0.19% -0.82% Fund by Portfolio Size (# stocks) 76 - 100 7 -0.22% 1.53% -1.51% 0.19% 0.19% -5.77% -1.76% 0.37% 0.82% Fund by Portfolio Size (# stocks) 101 - 200 9 0.05% 0.00% -0.86% 0.01% 0.01% -1.57% -0.93% -0.65% -0.51% Fund by Portfolio Size (# stocks) 201 - 400 6 -0.45% -0.93% -1.79% -3.49% -3.49% -1.64% -1.93% -1.19% -0.99% Fund by Portfolio Size (# stocks) 401 - 700 2 -0.20% -0.69% 1.20% 0.25% 0.25% 5.08% 3.26% -0.46% -1.62% Fund by Portfolio Size (# stocks) >700 18 -0.04% 0.19% -0.56% -0.82% -0.82% -0.82% -0.55% -0.51% -0.55% -0.55% Fund by Turnover High Fund by Turnover Medium 3 0.47% 1.55% -0.03% 0.43% 0.43% -2.07% -1.61% -0.63% -0.45% -0.55% -0.51% -0.55% -0.51% -0.55% -0.51% -0.55% -0.51% -0.55% -0.51% -0.55% -0.51% -0.55% -0.51% -0.55% -0.51% -0.55% -0.51% -0.55% -0.55% -0.51% -0.55% -0.	Fund by Investment Style	Growth	30	-0.13%	-0.11%	-1.48%	-0.84%	-0.84%	-2.26%	-1.77%	-0.66%	-0.51%
Fund by Investment Style Index 22 -0.04% 0.19% -0.61% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% Fund by Manager Type Active 35 -0.22% -0.24% -1.36% -0.12% -0.12% -1.91% -1.61% -0.65% -0.51% Fund by Manager Type Passive 22 -0.04% 0.19% -0.61% -0.84% -0.84% -0.84% -0.59% -0.56% -0.60% -0.61% Fund by Portfolio Size (# stocks) 0 - 35 4 -0.81% -2.10% -2.16% -2.19% -2.19% -4.43% -4.72% -1.33% -1.13% Fund by Portfolio Size (# stocks) 36 - 75 111 -0.08% -0.84% -1.49% -1.02% -1.02% -0.79% -1.57% -0.19% -0.82% Fund by Portfolio Size (# stocks) 76 - 100 7 -0.22% 1.53% -1.51% 0.19% 0.19% -5.77% -1.76% 0.37% 0.82% Fund by Portfolio Size (# stocks) 101 - 200 9 0.05% 0.00% -0.86% 0.01% 0.01% -1.57% -0.93% -0.65% -0.51% Fund by Portfolio Size (# stocks) 201 - 400 6 -0.45% -0.93% -1.79% -3.49% -3.49% -1.64% -1.93% -1.19% -0.99% Fund by Portfolio Size (# stocks) 401 - 700 2 -0.20% -0.69% 1.20% 0.25% 0.25% 5.08% 3.26% -0.46% -1.62% Fund by Portfolio Size (# stocks) >700 18 -0.04% 0.19% -0.56% -0.82% -0.82% -0.82% -0.55% -0.51% -0.55% Fund by Turmover High Fund by Turmover Medium 3 0.47% 1.55% -0.03% 0.43% 0.43% -2.07% -1.61% -0.63% -0.45% Fund by Turmover Low 10 -0.43% -0.95% -3.51% -2.21% -2.21% -1.90% -1.98% -0.49% -0.51%	Fund by Investment Style	GARP										
Fund by Manager Type	Fund by Investment Style	Yield	4	-1.15%	-0.64%	-1.06%	0.73%	0.73%	-0.08%	-0.54%	-0.63%	-0.73%
Fund by Manager Type         Passive         22         -0.04%         0.19%         -0.61%         -0.84%         -0.59%         -0.56%         -0.60%         -0.61%           Fund by Portfolio Size (# stocks)         0 - 35         4         -0.81%         -2.10%         -2.16%         -2.19%         -2.19%         -4.43%         -4.72%         -1.33%         -1.13%           Fund by Portfolio Size (# stocks)         36 - 75         11         -0.08%         -0.84%         -1.49%         -1.02%         -1.02%         -0.79%         -1.57%         -0.19%         -0.82%           Fund by Portfolio Size (# stocks)         76 - 100         7         -0.22%         1.53%         -1.51%         0.19%         0.19%         -5.77%         -1.76%         0.37%         0.82%           Fund by Portfolio Size (# stocks)         101 - 200         9         0.05%         0.00%         -0.86%         0.01%         0.01%         -1.57%         -0.93%         -0.55%         -0.51%           Fund by Portfolio Size (# stocks)         201 - 400         6         -0.45%         -0.93%         -1.79%         -3.49%         -3.49%         -1.64%         -1.93%         -1.19%         -0.99%           Fund by Portfolio Size (# stocks)         401 - 700         2	Fund by Investment Style	Index	22	-0.04%	0.19%	-0.61%	-0.84%	-0.84%	-0.59%	-0.56%	-0.60%	-0.61%
Fund by Portfolio Size (# stocks)	Fund by Manager Type	Active	35	-0.22%	-0.24%	-1.36%	-0.12%	-0.12%	-1.91%	-1.61%	-0.65%	-0.51%
Fund by Portfolio Size (# stocks) 36 - 75 11 -0.08% -0.84% -1.49% -1.02% -1.02% -0.79% -1.57% -0.19% -0.82% Fund by Portfolio Size (# stocks) 76 - 100 7 -0.22% 1.53% -1.51% 0.19% 0.19% -5.77% -1.76% 0.37% 0.82% Fund by Portfolio Size (# stocks) 101 - 200 9 0.05% 0.00% -0.86% 0.01% 0.01% -1.57% -0.93% -0.65% -0.51% Fund by Portfolio Size (# stocks) 201 - 400 6 -0.45% -0.93% -1.79% -3.49% -3.49% -1.64% -1.93% -1.19% -0.99% Fund by Portfolio Size (# stocks) 401 - 700 2 -0.20% -0.69% 1.20% 0.25% 0.25% 5.08% 3.26% -0.46% -1.62% Fund by Portfolio Size (# stocks) >700 18 -0.04% 0.19% -0.56% -0.82% -0.82% -0.55% -0.51% -0.52% -0.55% Fund by Turnover High Fund by Turnover Medium 3 0.47% 1.55% -0.03% 0.43% 0.43% -2.07% -1.61% -0.63% -0.45% Fund by Turnover Low 10 -0.43% -0.95% -3.51% -2.21% -2.21% -1.90% -1.98% -0.49% -0.51%	Fund by Manager Type	Passive	22	-0.04%	0.19%	-0.61%	-0.84%	-0.84%	-0.59%	-0.56%	-0.60%	-0.61%
Fund by Portfolio Size (# stocks)         76 - 100         7         -0.22%         1.53%         -1.51%         0.19%         -5.77%         -1.76%         0.37%         0.82%           Fund by Portfolio Size (# stocks)         101 - 200         9         0.05%         0.00%         -0.86%         0.01%         0.01%         -1.57%         -0.93%         -0.65%         -0.51%           Fund by Portfolio Size (# stocks)         201 - 400         6         -0.45%         -0.93%         -1.79%         -3.49%         -3.49%         -1.64%         -1.93%         -1.19%         -0.99%           Fund by Portfolio Size (# stocks)         401 - 700         2         -0.20%         -0.69%         1.20%         0.25%         0.25%         5.08%         3.26%         -0.46%         -1.62%           Fund by Portfolio Size (# stocks)         >700         18         -0.04%         0.19%         -0.56%         -0.82%         -0.82%         -0.55%         -0.51%         -0.55%         -0.55%         -0.51%         -0.55%         -0.55%         -0.51%         -0.55%         -0.55%         -0.63%         -0.45%           Fund by Turnover         Medium         3         0.47%         1.55%         -0.03%         0.43%         0.43%         -2.07%         <	Fund by Portfolio Size (# stocks)	0 - 35	4	-0.81%	-2.10%	-2.16%	-2.19%	-2.19%	-4.43%	-4.72%	-1.33%	-1.13%
Fund by Portfolio Size (# stocks)         101 - 200         9         0.05%         0.00%         -0.86%         0.01%         -1.57%         -0.93%         -0.65%         -0.51%           Fund by Portfolio Size (# stocks)         201 - 400         6         -0.45%         -0.93%         -1.79%         -3.49%         -3.49%         -1.64%         -1.93%         -1.19%         -0.99%           Fund by Portfolio Size (# stocks)         401 - 700         2         -0.20%         -0.69%         1.20%         0.25%         0.25%         5.08%         3.26%         -0.46%         -1.62%           Fund by Portfolio Size (# stocks)         >700         18         -0.04%         0.19%         -0.56%         -0.82%         -0.82%         -0.55%         -0.51%         -0.52%         -0.55%           Fund by Turnover         High         -0.47%         1.55%         -0.03%         0.43%         0.43%         -2.07%         -1.61%         -0.63%         -0.45%           Fund by Turnover         Low         10         -0.43%         -0.95%         -3.51%         -2.21%         -2.21%         -1.90%         -1.98%         -0.49%         -0.51%	Fund by Portfolio Size (# stocks)	36 - 75	11	-0.08%	-0.84%	-1.49%	-1.02%	-1.02%	-0.79%	-1.57%	-0.19%	-0.82%
Fund by Portfolio Size (# stocks)         201 - 400         6         -0.45%         -0.93%         -1.79%         -3.49%         -3.49%         -1.64%         -1.93%         -1.19%         -0.99%           Fund by Portfolio Size (# stocks)         401 - 700         2         -0.20%         -0.69%         1.20%         0.25%         0.25%         5.08%         3.26%         -0.46%         -1.62%           Fund by Portfolio Size (# stocks)         >700         18         -0.04%         0.19%         -0.56%         -0.82%         -0.82%         -0.55%         -0.63%         -0.45%         -0.45%         -0.45%         -0.45%         -0.45%         -0.51%         -0.55%         -0.51%         -0.51%         -0.51%         -0.51%         -0.55%         -0.51%	Fund by Portfolio Size (# stocks)	76 - 100	7	-0.22%	1.53%	-1.51%	0.19%	0.19%	-5.77%	-1.76%	0.37%	0.82%
Fund by Portfolio Size (# stocks)       401 - 700       2       -0.20%       -0.69%       1.20%       0.25%       0.25%       5.08%       3.26%       -0.46%       -1.62%         Fund by Portfolio Size (# stocks)       >700       18       -0.04%       0.19%       -0.56%       -0.82%       -0.82%       -0.55%       -0.51%       -0.52%       -0.55%         Fund by Turnover       High       3       0.47%       1.55%       -0.03%       0.43%       0.43%       -2.07%       -1.61%       -0.63%       -0.45%         Fund by Turnover       Low       10       -0.43%       -0.95%       -3.51%       -2.21%       -2.21%       -1.90%       -1.98%       -0.49%       -0.51%	Fund by Portfolio Size (# stocks)	101 - 200	9	0.05%	0.00%	-0.86%	0.01%	0.01%	-1.57%	-0.93%	-0.65%	-0.51%
Fund by Portfolio Size (# stocks)         >700         18         -0.04%         0.19%         -0.56%         -0.82%         -0.82%         -0.55%         -0.51%         -0.52%         -0.55%           Fund by Turnover         High         Turnover         Medium         3         0.47%         1.55%         -0.03%         0.43%         0.43%         -2.07%         -1.61%         -0.63%         -0.45%           Fund by Turnover         Low         10         -0.43%         -0.95%         -3.51%         -2.21%         -2.21%         -1.90%         -1.98%         -0.49%         -0.51%	Fund by Portfolio Size (# stocks)	201 - 400	6	-0.45%	-0.93%	-1.79%	-3.49%	-3.49%	-1.64%	-1.93%	-1.19%	-0.99%
Fund by Turnover         High           Fund by Turnover         Medium         3         0.47%         1.55%         -0.03%         0.43%         0.43%         -2.07%         -1.61%         -0.63%         -0.45%           Fund by Turnover         Low         10         -0.43%         -0.95%         -3.51%         -2.21%         -2.21%         -1.90%         -1.98%         -0.49%         -0.51%	Fund by Portfolio Size (# stocks)	401 - 700	2	-0.20%	-0.69%	1.20%	0.25%	0.25%	5.08%	3.26%	-0.46%	-1.62%
Fund by Turnover         Medium         3         0.47%         1.55%         -0.03%         0.43%         -2.07%         -1.61%         -0.63%         -0.45%           Fund by Turnover         Low         10         -0.43%         -0.95%         -3.51%         -2.21%         -2.21%         -1.90%         -1.98%         -0.49%         -0.51%	Fund by Portfolio Size (# stocks)	>700	18	-0.04%	0.19%	-0.56%	-0.82%	-0.82%	-0.55%	-0.51%	-0.52%	-0.55%
Fund by Turnover Low 10 -0.43% -0.95% -3.51% -2.21% -2.21% -1.90% -1.98% -0.49% -0.51%	Fund by Turnover	High										
	Fund by Turnover	Medium	3	0.47%	1.55%	-0.03%	0.43%	0.43%	-2.07%	-1.61%	-0.63%	-0.45%
Fund by Turmover Very Low 42 -0.16% 0.08% -0.85% -0.75% -0.75% -0.79% -0.65% -0.62% -0.59%	Fund by Turnover	Low	10	-0.43%	-0.95%	-3.51%	-2.21%	-2.21%	-1.90%	-1.98%	-0.49%	-0.51%
	Fund by Turnover	Very Low	42	-0.16%	0.08%	-0.85%	-0.75%	-0.75%	-0.79%	-0.65%	-0.62%	-0.59%

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return. Empty cell suggests no data is available for that period.



**Table 47: Median relative returns matrix: USA**Relative returns of all fund groups in the USA for various periods

Group	Sub-Group	<b>Fund Count</b>	1m	3m	6m	YTD	12m	2-yr*	3-yr*	4-yr*	5-yr*
Fund by ASR	0-20%	280	0.01%	-0.04%	-0.04%	-0.11%	-0.11%	-0.24%	-0.18%	-0.21%	-0.23%
Fund by ASR	21-40%	80	0.05%	-0.22%	-0.03%	-0.75%	-0.75%	-0.63%	-0.44%	-0.86%	-0.78%
Fund by ASR	41-60%	142	-0.02%	0.02%	-0.02%	-0.60%	-0.60%	-1.90%	-2.05%	-1.87%	-1.98%
Fund by ASR	61-80%	204	-0.01%	-0.32%	-0.31%	-2.36%	-2.36%	-1.08%	-0.87%	-1.02%	-1.02%
Fund by ASR	81-100%	203	-0.28%	-0.64%	-0.16%	-1.15%	-1.15%	-0.24%	0.01%	-0.29%	-0.13%
Fund by FUM(\$)	0 - \$750 m	198	-0.03%	-0.14%	-0.14%	-0.37%	-0.37%	-0.65%	-0.42%	-0.91%	-0.70%
Fund by FUM(\$)	\$750m - \$1bn	76	0.01%	-0.12%	-0.12%	-0.60%	-0.60%	-0.35%	-0.28%	-0.42%	-0.55%
Fund by FUM(\$)	\$1.0bn- 1.5bn	128	0.06%	-0.14%	-0.11%	-0.43%	-0.43%	-0.39%	-0.33%	-0.47%	-0.59%
Fund by FUM(\$)	\$1.5bn - \$2.0bn	95	0.00%	-0.10%	-0.07%	-0.37%	-0.37%	-0.60%	-0.68%	-0.66%	-0.56%
Fund by FUM(\$)	\$2.0bn - \$5.0bn	168	0.00%	-0.12%	-0.08%	-0.39%	-0.39%	-0.40%	-0.32%	-0.26%	-0.21%
Fund by FUM(\$)	\$5.0bn - \$10.0bn	116	-0.01%	-0.03%	-0.02%	-0.21%	-0.21%	-0.31%	-0.34%	-0.38%	-0.35%
Fund by FUM(\$)	>\$10.0bn	128	0.00%	-0.02%	0.00%	-0.08%	-0.08%	-0.10%	-0.13%	-0.13%	-0.19%
Fund by MCAP	Large Cap	725	0.02%	-0.07%	-0.03%	-0.34%	-0.34%	-0.52%	-0.40%	-0.60%	-0.57%
Fund by MCAP	Mid Cap	133	-0.33%	-0.14%	-0.09%	-0.11%	-0.11%	-0.08%	-0.04%	-0.04%	0.09%
Fund by MCAP	Small Cap	12	-0.02%	-0.10%	0.01%	-0.06%	-0.06%	2.17%	0.75%	-0.05%	-0.08%
Fund by MCAP	Multi Cap	39	0.01%	-0.10%	-0.19%	-0.30%	-0.30%	-0.24%	-0.37%	-0.18%	-0.20%
Fund by Investment Style	Value	116	-0.31%	-0.73%	1.10%	0.34%	0.34%	1.99%	1.50%	0.58%	0.42%
Fund by Investment Style	Growth	201	0.09%	-0.11%	-0.26%	-1.29%	-1.29%	-2.50%	-2.40%	-1.41%	-1.37%
Fund by Investment Style	GARP	191	-0.06%	-0.12%	-0.33%	-2.20%	-2.20%	-1.26%	-1.79%	-2.16%	-1.91%
Fund by Investment Style	Yield	44	-0.31%	-1.01%	-0.83%	-3.91%	-3.91%	0.13%	-0.25%	-0.68%	-0.87%
Fund by Investment Style	Index	357	0.01%	-0.04%	-0.03%	-0.13%	-0.13%	-0.24%	-0.18%	-0.21%	-0.23%
Fund by Manager Type	Active	552	-0.07%	-0.28%	-0.20%	-1.45%	-1.45%	-1.06%	-1.08%	-1.24%	-1.20%
Fund by Manager Type	Passive	357	0.01%	-0.04%	-0.03%	-0.13%	-0.13%	-0.24%	-0.18%	-0.21%	-0.23%
Fund by Portfolio Size (# stocks)	0-35	85	0.15%	0.01%	-0.06%	-0.33%	-0.33%	-0.76%	-0.78%	-1.46%	-0.81%
Fund by Portfolio Size (# stocks)	36 - 75	266	-0.05%	-0.09%	-0.20%	-0.54%	-0.54%	-1.19%	-1.16%	-1.08%	-0.99%
Fund by Portfolio Size (# stocks)	76 - 100	89	-0.28%	-0.55%	-0.16%	-1.29%	-1.29%	-0.36%	-0.34%	-0.52%	-0.41%
Fund by Portfolio Size (# stocks)	101 - 200	158	0.01%	-0.26%	-0.12%	-0.70%	-0.70%	-0.31%	-0.27%	-0.57%	-0.59%
Fund by Portfolio Size (# stocks)	201 - 400	109	0.04%	-0.03%	-0.03%	-0.03%	-0.03%	-0.17%	-0.16%	-0.17%	-0.21%
Fund by Portfolio Size (# stocks)	401 - 700	134	0.03%	-0.06%	-0.02%	-0.14%	-0.14%	-0.30%	-0.15%	-0.20%	-0.23%
Fund by Portfolio Size (# stocks)	>700	68	0.01%	0.00%	0.02%	-0.10%	-0.10%	-0.06%	-0.09%	-0.09%	-0.15%
Fund by Turnover	High	11	-0.20%	-1.15%	-0.38%	-2.85%	-2.85%	-2.74%	-1.56%	-1.27%	-2.72%
Fund by Turnover	Medium	68	-0.07%	-0.34%	0.12%	-0.57%	-0.57%	-0.62%	-0.43%	-0.92%	-0.73%
Fund by Turnover	Low	145	-0.07%	-0.19%	-0.09%	-0.57%	-0.57%	-1.07%	-0.40%	-0.75%	-0.60%
Fund by Turnover	Very Low	614	0.01%	-0.07%	-0.05%	-0.25%	-0.25%	-0.33%	-0.32%	-0.37%	-0.35%

 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ ^*relative\ annualized\ return.\ Empty\ cell\ suggests\ no\ data\ is\ available\ for\ that\ period.$ 



**Table 48: Median relative returns matrix: EUROPE** Relative returns of all fund groups in Europe for various periods

Group	Sub-Group	<b>Fund Count</b>	1m	3m	6m	YTD	12m	2-yr*	3-yr*	4-yr*	5-yr*
Fund by ASR	0-20%	114	-0.07%	-0.10%	-0.20%	-0.78%	-0.78%	-0.56%	-0.56%	-0.57%	-0.49%
Fund by ASR	21-40%	43	-0.28%	-0.56%	-0.64%	-1.39%	-1.39%	-1.26%	-1.10%	-0.94%	-1.17%
Fund by ASR	41-60%	59	0.05%	-0.38%	0.07%	-1.20%	-1.20%	-2.13%	-1.59%	-1.32%	-1.21%
Fund by ASR	61-80%	99	-0.08%	0.46%	-0.53%	-1.21%	-1.21%	-3.14%	-2.76%	-0.82%	-0.59%
Fund by ASR	81-100%	51	0.87%	-0.44%	-0.87%	-1.30%	-1.30%	-5.15%	-4.69%	-1.88%	-1.41%
Fund by FUM(\$)	0 - \$750 m	144	-0.07%	-0.25%	-0.32%	-1.25%	-1.25%	-1.70%	-1.63%	-1.23%	-1.16%
Fund by FUM(\$)	\$750m - \$1bn	53	0.05%	-0.09%	-0.36%	-1.08%	-1.08%	-1.68%	-1.55%	-0.79%	-0.77%
Fund by FUM(\$)	\$1.0bn- 1.5bn	62	0.01%	-0.11%	-0.11%	-0.58%	-0.58%	-0.68%	-0.82%	-0.48%	-0.22%
Fund by FUM(\$)	\$1.5bn - \$2.0bn	35	0.02%	0.03%	-0.16%	-0.38%	-0.38%	-0.91%	-0.98%	-0.61%	-0.36%
Fund by FUM(\$)	\$2.0bn - \$5.0bn	59	-0.07%	-0.09%	-0.23%	-0.61%	-0.61%	-0.73%	-0.71%	-0.59%	-0.55%
Fund by FUM(\$)	\$5.0bn - \$10.0bn	12	0.00%	-0.06%	-0.12%	-0.96%	-0.96%	-0.57%	-0.60%	-0.55%	-0.46%
Fund by FUM(\$)	>\$10.0bn	1	0.33%	0.75%	-0.22%	-0.77%	-0.77%	-0.75%	-0.47%	-0.64%	-0.49%
Fund by MCAP	Large Cap	304	-0.02%	-0.19%	-0.26%	-0.94%	-0.94%	-1.03%	-1.04%	-0.73%	-0.63%
Fund by MCAP	Mid Cap	15	-0.39%	0.15%	-0.26%	-1.26%	-1.26%	-2.85%	-3.33%	-1.08%	-0.65%
Fund by MCAP	Small Cap	2	0.65%	-1.48%	-2.69%	-0.79%	-0.79%	-5.63%	-4.47%	-3.01%	-2.77%
Fund by MCAP	Multi Cap	45	0.34%	0.32%	-0.04%	-0.75%	-0.75%	-1.34%	-1.19%	-0.69%	-0.56%
Fund by Investment Style	Value	13	0.60%	-1.46%	2.01%	2.67%	2.67%	1.09%	1.55%	-0.73%	-0.66%
Fund by Investment Style	Growth	195	0.08%	0.09%	-0.61%	-1.59%	-1.59%	-3.63%	-2.66%	-1.53%	-1.15%
Fund by Investment Style	GARP	4	0.36%	-1.74%	0.96%	-1.75%	-1.75%	-0.38%	1.51%	-0.15%	-0.65%
Fund by Investment Style	Yield	21	-0.47%	-0.29%	1.13%	-0.25%	-0.25%	0.17%	0.33%	-0.09%	-0.79%
Fund by Investment Style	Index	133	-0.06%	-0.18%	-0.22%	-0.78%	-0.78%	-0.60%	-0.59%	-0.59%	-0.51%
Fund by Manager Type	Active	233	0.07%	-0.05%	-0.35%	-1.34%	-1.34%	-2.86%	-2.41%	-1.27%	-1.12%
Fund by Manager Type	Passive	133	-0.06%	-0.18%	-0.22%	-0.78%	-0.78%	-0.60%	-0.59%	-0.59%	-0.51%
Fund by Portfolio Size (# stocks)	0-35	69	-0.30%	-0.31%	-0.45%	-0.90%	-0.90%	-1.37%	-1.01%	-0.92%	-0.78%
Fund by Portfolio Size (# stocks)	36 - 75	182	0.05%	0.03%	-0.26%	-1.08%	-1.08%	-2.14%	-1.63%	-0.72%	-0.58%
Fund by Portfolio Size (# stocks)	76 - 100	23	-0.07%	-0.11%	-0.48%	-1.05%	-1.05%	-0.63%	-0.90%	-0.86%	-1.15%
Fund by Portfolio Size (# stocks)	101 - 200	41	-0.08%	-0.41%	-0.22%	-1.06%	-1.06%	-0.80%	-1.65%	-1.35%	-1.32%
Fund by Portfolio Size (# stocks)	201 - 400	26	0.09%	0.15%	-0.05%	-0.58%	-0.58%	-0.89%	-0.58%	-0.53%	-0.44%
Fund by Portfolio Size (# stocks)	401 - 700	24	-0.01%	-0.09%	-0.13%	-0.83%	-0.83%	-0.60%	-0.60%	-0.56%	-0.37%
Fund by Portfolio Size (# stocks)	>700	1	0.33%	0.75%	-0.22%	-0.77%	-0.77%	-0.75%	-0.47%	-0.64%	-0.49%
Fund by Turnover	High	1	1.62%	0.71%	1.51%	-1.25%	-1.25%	3.51%	2.56%	4.88%	2.16%
Fund by Turnover	Medium	21	-0.53%	-0.50%	-0.87%	-3.78%	-3.78%	-2.95%	-1.94%	-2.12%	-1.70%
Fund by Turnover	Low	39	0.02%	-0.12%	-0.59%	-1.20%	-1.20%	-3.02%	-2.78%	-1.89%	-1.77%
Fund by Turnover	Very Low	263	0.02%	-0.09%	-0.23%	-0.82%	-0.82%	-0.94%	-0.92%	-0.63%	-0.56%

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return. Empty cell suggests no data is available for that period.



**Table 49: Median relative returns matrix: Japan** Relative returns of all fund groups in Japan for various periods

Group	Sub-Group	<b>Fund Count</b>	1m	3m	6m	YTD	12m	2-yr*	3-yr*	4-yr*	5-yr*
Fund by ASR	0-20%	43	-0.43%	-0.37%	-0.50%	0.03%	0.03%	-0.49%	-0.54%	-0.38%	-0.40%
Fund by ASR	21-40%	5	-0.29%	-1.13%	-1.41%	-2.41%	-2.41%	-1.65%	-1.25%	-0.79%	-0.91%
Fund by ASR	41-60%	1	-0.27%	-1.55%	-2.10%	-4.86%	-4.86%	-3.72%	-2.44%	-3.47%	-2.84%
Fund by ASR	61-80%	19	-0.33%	0.51%	-3.28%	-0.24%	-0.24%	-5.44%	-3.54%	-0.10%	0.57%
Fund by ASR	81-100%	10	-0.52%	-2.50%	-2.83%	0.57%	0.57%	-5.71%	-2.77%	0.29%	1.64%
Fund by FUM(\$)	0 - \$750 m	22	-0.20%	-0.04%	-1.38%	-1.40%	-1.40%	-1.71%	-1.24%	-0.93%	-0.54%
Fund by FUM(\$)	\$750m - \$1bn	10	-1.18%	-1.64%	-0.64%	0.82%	0.82%	3.86%	5.06%	3.15%	2.34%
Fund by FUM(\$)	\$1.0bn- 1.5bn	13	-0.19%	-0.21%	-1.07%	-0.24%	-0.24%	-0.49%	-0.29%	-0.39%	-0.27%
Fund by FUM(\$)	\$1.5bn - \$2.0bn	8	-0.66%	-0.43%	-1.20%	-0.16%	-0.16%	-0.70%	-0.60%	-0.45%	-0.45%
Fund by FUM(\$)	\$2.0bn - \$5.0bn	18	-0.20%	-0.31%	-0.95%	0.07%	0.07%	-0.57%	-0.65%	-0.37%	-0.41%
Fund by FUM(\$)	\$5.0bn - \$10.0bn	2	-0.38%	-0.44%	-0.65%	0.49%	0.49%	-0.20%	-0.20%	-0.24%	-0.31%
Fund by FUM(\$)	>\$10.0bn	5	-0.43%	-0.48%	-0.32%	0.37%	0.37%	-0.22%	-0.27%	-0.33%	-0.34%
Fund by MCAP	Large Cap	71	-0.35%	-0.37%	-1.09%	-0.24%	-0.24%	-0.75%	-0.65%	-0.44%	-0.37%
Fund by MCAP	Mid Cap	6	-1.12%	-1.48%	0.20%	0.47%	0.47%	-0.26%	-0.14%	-0.22%	-0.35%
Fund by MCAP	Small Cap										
Fund by MCAP	Multi Cap	1	-1.55%	0.21%	-3.28%	5.66%	5.66%	3.70%	0.18%	1.28%	0.57%
Fund by Investment Style	Value	2	-3.48%	-0.72%	4.95%	29.63%	29.63%	18.56%	19.22%	5.54%	3.86%
Fund by Investment Style	Growth	5	-0.27%	-1.54%	-4.60%	2.09%	2.09%	-8.78%	-6.44%	-1.92%	-1.49%
Fund by Investment Style	GARP	29	-0.27%	-0.05%	-2.18%	-1.18%	-1.18%	-1.76%	-1.31%	-0.71%	-0.16%
Fund by Investment Style	Yield										
Fund by Investment Style	Index	42	-0.41%	-0.40%	-0.54%	-0.01%	-0.01%	-0.46%	-0.54%	-0.38%	-0.42%
Fund by Manager Type	Active	36	-0.30%	-0.13%	-2.14%	-0.82%	-0.82%	-2.73%	-1.58%	-0.55%	0.10%
Fund by Manager Type	Passive	42	-0.41%	-0.40%	-0.54%	-0.01%	-0.01%	-0.46%	-0.54%	-0.38%	-0.42%
Fund by Portfolio Size (# stocks)	0-35	5	1.17%	2.04%	-4.60%	-0.95%	-0.95%	-7.46%	-6.44%	-1.92%	-1.49%
Fund by Portfolio Size (# stocks)	36 - 75	27	-0.33%	-0.30%	-1.83%	-0.37%	-0.37%	-0.99%	-1.73%	-0.47%	-0.26%
Fund by Portfolio Size (# stocks)	76 - 100	6	-1.80%	-0.39%	-0.97%	7.37%	7.37%	1.03%	1.40%	1.53%	2.06%
Fund by Portfolio Size (# stocks)	101 - 200	3	0.17%	-1.13%	-1.35%	-1.55%	-1.55%	-1.65%	-0.29%	-0.40%	-0.28%
Fund by Portfolio Size (# stocks)	201 - 400	24	-0.44%	-0.50%	-0.36%	-0.07%	-0.07%	-0.63%	-0.54%	-0.41%	-0.43%
Fund by Portfolio Size (# stocks)	401 - 700	7	-0.62%	-0.20%	-1.09%	0.00%	0.00%	-0.66%	-0.62%	-0.27%	-0.26%
Fund by Portfolio Size (# stocks)	>700	6	-0.35%	-0.40%	-0.70%	0.30%	0.30%	-0.30%	-0.24%	-0.22%	-0.31%
Fund by Turnover	High										
Fund by Turnover	Medium	6	-0.39%	-2.03%	-3.35%	-0.72%	-0.72%	-4.58%	-3.70%	-2.11%	-1.21%
Fund by Turnover	Low	2	-1.15%	2.13%	0.62%	14.31%	14.31%	4.81%	9.42%	2.45%	2.94%
Fund by Turnover	Very Low	62	-0.34%	-0.33%	-1.02%	-0.12%	-0.12%	-0.59%	-0.58%	-0.39%	-0.38%

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return. Empty cell suggests no data is available for that period.



**Table 50: Median relative returns matrix: Asia Pac ex-Japan** Relative returns of all fund groups in Asia Pac ex-Japan for various periods

Group	Sub-Group	<b>Fund Count</b>	1m	3m	6m	YTD	12m	2-yr*	3-yr*	4-yr*	5-yr*
Fund by ASR	0-20%	62	-0.07%	-0.23%	-0.52%	-0.83%	-0.83%	-0.63%	-0.54%	-0.65%	-0.62%
Fund by ASR	21-40%	9	0.14%	-0.15%	-0.92%	-0.29%	-0.29%	-0.35%	-0.17%	-0.28%	-0.37%
Fund by ASR	41-60%	33	-0.89%	-1.38%	-1.52%	-1.65%	-1.65%	-2.18%	-1.73%	-0.78%	-0.72%
Fund by ASR	61-80%	77	-0.88%	-1.79%	-4.06%	-5.54%	-5.54%	-4.37%	-2.90%	-1.44%	0.16%
Fund by ASR	81-100%	14	0.96%	1.08%	-1.78%	0.69%	0.69%	-1.32%	3.82%	3.04%	1.44%
Fund by FUM(\$)	0 - \$750 m	62	-0.19%	-0.64%	-1.59%	-2.33%	-2.33%	-1.76%	-0.93%	-0.85%	-0.55%
Fund by FUM(\$)	\$750m - \$1bn	22	-0.42%	-0.10%	-0.60%	0.33%	0.33%	-0.61%	-0.11%	-0.31%	-0.07%
Fund by FUM(\$)	\$1.0bn- 1.5bn	37	-0.53%	-0.90%	-1.17%	-1.43%	-1.43%	-1.57%	-0.28%	-0.14%	-0.14%
Fund by FUM(\$)	\$1.5bn - \$2.0bn	15	-0.50%	-0.22%	-1.01%	-1.55%	-1.55%	-0.96%	-1.07%	-0.94%	-0.88%
Fund by FUM(\$)	\$2.0bn - \$5.0bn	44	-0.51%	-1.20%	-1.38%	-1.68%	-1.68%	-1.58%	-1.15%	-0.91%	-0.50%
Fund by FUM(\$)	\$5.0bn - \$10.0bn	13	-0.42%	-0.64%	-1.05%	-0.34%	-0.34%	-0.57%	-0.48%	-0.67%	-0.50%
Fund by FUM(\$)	>\$10.0bn	2	-0.07%	-0.07%	-0.13%	-0.33%	-0.33%	-0.05%	-0.14%	-0.24%	-0.27%
Fund by MCAP	Large Cap	167	-0.39%	-0.64%	-1.17%	-1.55%	-1.55%	-1.40%	-0.70%	-0.67%	-0.54%
Fund by MCAP	Mid Cap	9	-0.66%	-1.21%	-1.83%	-4.90%	-4.90%	-1.55%	-1.89%	-2.19%	-1.40%
Fund by MCAP	Small Cap										
Fund by MCAP	Multi Cap	19	-0.25%	0.05%	-0.36%	0.31%	0.31%	-1.33%	-0.14%	1.90%	1.34%
Fund by Investment Style	Value	1	0.45%	-1.03%	-2.13%	0.46%	0.46%	4.86%	6.08%	1.49%	0.62%
Fund by Investment Style	Growth	80	-0.75%	-0.68%	-2.43%	-2.80%	-2.80%	-2.85%	-1.89%	-1.50%	-1.17%
Fund by Investment Style	GARP	40	-0.85%	-1.63%	-3.98%	-6.00%	-6.00%	-3.63%	-2.14%	-0.09%	0.44%
Fund by Investment Style	Yield	3	0.81%	-1.25%	-1.67%	-1.43%	-1.43%	8.69%	9.16%	2.05%	1.98%
Fund by Investment Style	Index	71	-0.06%	-0.19%	-0.48%	-0.72%	-0.72%	-0.60%	-0.51%	-0.63%	-0.56%
Fund by Manager Type	Active	124	-0.79%	-1.23%	-2.97%	-3.79%	-3.79%	-3.20%	-1.86%	-0.66%	-0.12%
Fund by Manager Type	Passive	71	-0.06%	-0.19%	-0.48%	-0.72%	-0.72%	-0.60%	-0.51%	-0.63%	-0.56%
Fund by Portfolio Size (# stocks)	0-35	21	-0.52%	-0.38%	-1.08%	-0.34%	-0.34%	-1.50%	-0.47%	-0.80%	-0.55%
Fund by Portfolio Size (# stocks)	36 - 75	106	-0.65%	-1.20%	-2.59%	-3.51%	-3.51%	-2.79%	-1.31%	-1.12%	-0.45%
Fund by Portfolio Size (# stocks)	76 - 100	11	-1.22%	-2.15%	-4.04%	-7.18%	-7.18%	-4.75%	-2.25%	0.05%	0.29%
Fund by Portfolio Size (# stocks)	101 - 200	25	-0.24%	-0.22%	-0.43%	-0.26%	-0.26%	-0.64%	-0.41%	-0.31%	-0.31%
Fund by Portfolio Size (# stocks)	201 - 400	14	-0.02%	-0.21%	-0.40%	-0.67%	-0.67%	-0.42%	-0.32%	-0.44%	-0.47%
Fund by Portfolio Size (# stocks)	401 - 700	6	-0.10%	-0.30%	-0.43%	-0.37%	-0.37%	-0.45%	-0.41%	-0.44%	-0.53%
Fund by Portfolio Size (# stocks)	>700	12	-0.02%	0.08%	-0.86%	-1.13%	-1.13%	-0.71%	-0.69%	-0.71%	-0.71%
Fund by Turnover	High	1	-0.39%	-0.97%	-3.38%	-7.04%	-7.04%	-10.47%	-7.62%	-3.91%	-4.72%
Fund by Turnover	Medium	7	0.29%	0.13%	-1.94%	-3.10%	-3.10%	-4.39%	0.02%	-0.62%	-0.19%
Fund by Turnover	Low	26	-0.74%	-1.07%	-3.39%	-3.38%	-3.38%	-3.83%	-2.79%	-0.95%	-0.40%
Fund by Turnover	Very Low	148	-0.43%	-0.57%	-1.16%	-1.41%	-1.41%	-1.30%	-0.64%	-0.63%	-0.48%

Source : BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return. Empty cell suggests no data is available for that period.



**Table 51: Median relative returns matrix: Emerging Markets**Relative returns of all fund groups in Emerging Marketsfor various periods

Group	Sub-Group	<b>Fund Count</b>	1m	3m	6m	YTD	12m	2-yr*	3-yr*	4-yr*	5-yr*
Fund by ASR	0-20%	40	-0.17%	-0.21%	-0.87%	-0.91%	-0.91%	-0.79%	-0.75%	-0.84%	-0.74%
Fund by ASR	21-40%	9	-0.29%	0.00%	-0.36%	0.72%	0.72%	1.28%	0.56%	-0.05%	-0.24%
Fund by ASR	41-60%	25	-0.14%	-0.41%	-1.08%	-0.47%	-0.47%	-0.56%	-0.15%	-0.26%	-0.47%
Fund by ASR	61-80%	69	-0.25%	-0.16%	-2.63%	-1.81%	-1.81%	-3.58%	-3.79%	-1.72%	-0.45%
Fund by ASR	81-100%	17	0.68%	-0.06%	-0.95%	2.71%	2.71%	0.22%	-0.58%	1.72%	1.43%
Fund by FUM(\$)	0 - \$750 m	54	-0.16%	-0.26%	-1.61%	-0.79%	-0.79%	-1.10%	-1.14%	-1.25%	-0.74%
Fund by FUM(\$)	\$750m - \$1bn	18	0.02%	-0.15%	-1.62%	-0.31%	-0.31%	-1.45%	-1.91%	-1.39%	-0.48%
Fund by FUM(\$)	\$1.0bn- 1.5bn	30	-0.38%	-0.19%	-0.74%	-1.13%	-1.13%	-1.02%	-0.80%	-0.80%	-0.17%
Fund by FUM(\$)	\$1.5bn - \$2.0bn	12	-0.08%	-0.15%	-1.79%	1.23%	1.23%	-0.45%	-0.60%	-0.96%	-0.37%
Fund by FUM(\$)	\$2.0bn - \$5.0bn	33	-0.11%	-0.22%	-1.32%	-0.79%	-0.79%	-1.11%	-0.93%	-0.93%	-0.67%
Fund by FUM(\$)	\$5.0bn - \$10.0bn	10	-0.38%	-0.23%	-2.71%	-1.31%	-1.31%	-1.32%	-1.21%	-1.09%	-0.71%
Fund by FUM(\$)	>\$10.0bn	4	-0.24%	-0.06%	-0.82%	-0.79%	-0.79%	-0.67%	-0.66%	-0.69%	-0.66%
Fund by MCAP	Large Cap	151	-0.19%	-0.20%	-1.40%	-0.98%	-0.98%	-1.13%	-1.02%	-1.05%	-0.59%
Fund by MCAP	Mid Cap	2	-1.16%	-1.63%	-3.39%	-1.48%	-1.48%	-0.39%	-1.50%	-1.41%	-1.36%
Fund by MCAP	Small Cap										
Fund by MCAP	Multi Cap	8	-0.15%	-0.20%	-0.25%	1.09%	1.09%	0.52%	0.25%	0.24%	-0.14%
Fund by Investment Style	Value	30	0.07%	-0.31%	-0.80%	2.24%	2.24%	1.28%	1.66%	0.24%	0.22%
Fund by Investment Style	Growth	62	-0.24%	-0.24%	-2.67%	-2.36%	-2.36%	-4.08%	-4.25%	-1.60%	-0.43%
Fund by Investment Style	GARP	12	-0.37%	-0.38%	-1.21%	-0.29%	-0.29%	-1.27%	-2.11%	-1.12%	-0.32%
Fund by Investment Style	Yield	2	0.80%	1.25%	3.23%	9.77%	9.77%	7.40%	8.49%	1.72%	1.06%
Fund by Investment Style	Index	55	-0.24%	-0.20%	-0.96%	-0.79%	-0.79%	-0.83%	-0.72%	-0.86%	-0.77%
Fund by Manager Type	Active	106	-0.19%	-0.26%	-1.88%	-0.68%	-0.68%	-1.90%	-1.83%	-1.28%	-0.21%
Fund by Manager Type	Passive	55	-0.24%	-0.20%	-0.96%	-0.79%	-0.79%	-0.83%	-0.72%	-0.86%	-0.77%
Fund by Portfolio Size (# stocks)	0-35	5	-0.77%	-0.04%	-1.29%	-1.66%	-1.66%	-3.41%	-2.65%	-1.06%	-0.65%
Fund by Portfolio Size (# stocks)	36 - 75	50	-0.03%	-0.12%	-2.35%	-0.96%	-0.96%	-3.46%	-3.80%	-1.52%	-0.22%
Fund by Portfolio Size (# stocks)	76 - 100	16	-0.40%	-1.76%	-3.38%	-3.37%	-3.37%	-3.53%	-4.30%	-3.40%	-1.98%
Fund by Portfolio Size (# stocks)	101 - 200	22	-0.32%	0.21%	-1.97%	-0.68%	-0.68%	-2.27%	-1.16%	-1.06%	-0.43%
Fund by Portfolio Size (# stocks)	201 - 400	17	0.18%	-0.35%	-0.79%	-0.66%	-0.66%	-0.81%	-0.61%	-0.42%	-0.44%
Fund by Portfolio Size (# stocks)	401 - 700	15	-0.06%	-0.31%	-1.51%	-0.47%	-0.47%	-0.19%	0.12%	-0.29%	-0.28%
Fund by Portfolio Size (# stocks)	>700	36	-0.15%	-0.20%	-0.74%	-0.64%	-0.64%	-0.57%	-0.63%	-0.74%	-0.67%
Fund by Turnover	High	4	-0.31%	-0.28%	-1.05%	-1.05%	-1.05%	-0.65%	-0.66%	-0.88%	-0.87%
Fund by Turnover	Medium	10	-0.40%	-0.57%	-1.90%	-1.43%	-1.43%	-2.50%	-3.76%	-1.05%	0.01%
Fund by Turnover	Low	28	-0.29%	-0.41%	-1.88%	-0.81%	-0.81%	-2.08%	-2.10%	-1.57%	-0.59%
Fund by Turnover	Very Low	114	-0.18%	-0.18%	-1.32%	-0.79%	-0.79%	-0.98%	-0.94%	-1.00%	-0.50%

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. \* relative annualized return. Empty cell suggests no data is available for that period.



# Summary Table: Proportion of Funds Outperforming

**Table 52: Proportion of Funds Outperforming their Benchmark**Hit rate of funds

			Q	% of Fund	ls Outpe	rforming						
Group	Sub-Group	# Funds	FUM \$US billions	1m	3m	6m	YTD	12m	2-yr	3-yr	4-yr	5-yr
Fund by ASR	0-20%	633	6,673	45%	34%	28%	25%	25%	10%	13%	10%	9%
Fund by ASR 21-40%		169	590	53%	34%	42%	33%	33%	25%	29%	25%	23%
Fund by ASR 41-60%		298	1,535	46%	44%	46%	41%	41%	25%	24%	22%	23%
Fund by ASR	-		2,364	44%	44%	35%	36%	36%	26%	26%	32%	40%
Fund by ASR	81-100%	478	1,206	59%	47%	36%	37%	37%	34%	36%	37%	41%
Fund by FUM(\$)	0 - \$750 m	519	260	45%	39%	31%	30%	30%	20%	22%	20%	24%
Fund by FUM(\$)	\$750m - \$1bn	232	202	50%	43%	32%	33%	33%	25%	26%	27% 29%	
Fund by FUM(\$)	\$1.0bn- 1.5bn	356	439	53%	40%	34%	34%	34%	28%	29%	30%	32%
Fund by FUM(\$)	\$1.5bn - \$2.0bn	216	373	51%	46%	38%	38%	38%	25%	24%	26%	29%
Fund by FUM(\$)	\$2.0bn - \$5.0bn	451	1,386	49%	39%	36%	34%	34%	20%	24%	28%	30%
Fund by FUM(\$)	\$5.0bn - \$10.0bn	195	1,334	45%	42%	36%	34%	34%	22%	19%	21%	23%
Fund by FUM(\$)	>\$10.0bn	185	8,378	48%	42%	44%	35%	35%	24%	24%	22%	20%
Fund by MCAP	Large Cap	1841	11,477	50%	41%	35%	33%	33%	21%	22%	22%	25%
Fund by MCAP	Mid Cap	174	591	30%	34%	39%	43%	43%	36%	43%	42%	46%
Fund by MCAP	Small Cap	17	33	47%	35%	35%	31%	31%	38%	38%	31%	31%
Fund by MCAP	Multi Cap	122	270	53%	48%	40%	36%	36%	29%	29%	38%	37%
Fund by Investment Style	Value	188	536	49%	31%	55%	55%	55%	70%	67%	52%	52%
Fund by Investment Style	Growth	775	3,069	53%	52%	34%	36%	36%	17%	19%	28%	35%
Fund by Investment Style	GARP	316	1,254	44%	42%	36%	30%	30%	22%	23%	24%	26%
Fund by Investment Style Yield		99	404	40%	29%	34%	30%	30%	54%	43%	41%	38%
Fund by Investment Style Index		775	7,100	47%	34%	31%	27%	27%	14%	17%	14%	13%
Fund by Manager Type Active		1379	5,272	49%	45%	37%	37%	37%	28%	28%	31%	36%
Fund by Manager Type Passive		775	7,100	47%	34%	31%	27%	27%	14%	17%	14%	13%
Fund by Portfolio Size (# stocks)	0-35	232	495	50%	43%	31%	34%	34%	21%	20%	22%	24%
Fund by Portfolio Size (# stocks)	36 - 75	792	2,221	50%	46%	35%	36%	36%	23%	23%	29%	34%
Fund by Portfolio Size (# stocks)	76 - 100	200	614	36%	32%	27%	25%	25%	28%	28%	28%	30%
Fund by Portfolio Size (# stocks)	101 - 200	287	1,670	47%	37%	36%	33%	33%	25%	28%	25%	27%
Fund by Portfolio Size (# stocks)	201 - 400	230	1,996	50%	40%	37%	40%	40%	24%	26%	23%	21%
Fund by Portfolio Size (# stocks)	401 - 700	208	2,933	51%	32%	42%	31%	31%	18%	27%	18%	22%
Fund by Portfolio Size (# stocks)	>700	205	2,443	52%	44%	36%	29%	29%	20%	18%	18%	13%
Fund by Turnover	High	21	42	43%	29%	29%	29%	29%	10%	24%	10%	15%
Fund by Turnover	Medium	139	344	44%	40%	42%	38%	38%	27%	29%	29%	33%
Fund by Turnover	Low	305	1,441	47%	43%	38%	37%	37%	28%	29%	29%	31%
Fund by Turnover	Very Low	1532	9,618	50%	41%	35%	33%	33%	23%	24%	25%	27%
Fund by Region	Global (DM+EM)	181	1,425	65%	61%	33%	37%	37%	19%	16%	27%	31%
Fund by Region			681	64%	42%	35%	27%	27%	17%	19%	19%	21%
Fund by Region	EAFE	207 57	642	46%	54%	11%	35%	35%	18%	20%	28%	27%
Fund by Region	USA	909	7,946	50%	39%	45%	37%	37%	29%	30%	27%	27%
Fund by Region	Europe	366	535	49%	42%	35%	26%	26%	15%	15%	19%	24%
Fund by Region	Japan	78	301	24%	24%	15%	47%	47%	23%	22%	23%	28%
Fund by Region	APXJ	195	369	29%	31%	19%	28%	28%	19%	29%	30%	35%
Fund by Region	EM	161	464	38%	38%	20%	34%	34%	28%	26%	26%	32%
All Funds				49%	41%	35%	34%	34%	23%	24%	25%	27%

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. 0% means no funds outperformed their benchmark and empty cell suggests no data is available.



# **Summary Table: Spread of returns**

#### Table 53: Spread of returns (difference between 75th and 25th percentile)

Difference between the returns of the top and bottom quartile of funds by performance

				Spread of	Returns	(differe	nce betw	een 75th	and 25tl	n percent	tile)	
Group	Sub-Group	# Funds	FUM \$US billions	1m	3m	6m	YTD	12m	2-yr	3-yr	4-yr	5-yr
Fund by ASR	.SR 0-20% 633 6,673 0.31% 0.		0.36%	0.48%	0.86%	0.86%	0.60%	0.55%	0.53%	0.53%		
Fund by ASR 21-40%		169	590	0.95%	1.17%	1.52%	2.84%	2.84%	1.87%	1.80%	1.61%	1.61%
Fund by ASR 41-60%		298	1,535	0.92%	1.81%	2.58%	6.67%	6.67%	3.73%	3.82%	2.75%	2.75%
Fund by ASR	61-80%	574	2,364	1.43%	2.73%	3.93%	7.54%	7.54%	5.40%	4.67%	3.31%	3.31%
Fund by ASR	81-100%	478	1,206	2.76%	3.74%	4.63%	9.39%	9.39%	7.62%	7.27%	4.35%	4.35%
Fund by FUM(\$)	0-\$750 m	519	260	1.10%	2.18%	2.54%	5.33%	5.33%	4.76%	3.98%	2.59%	2.59%
Fund by FUM(\$)	\$750m - \$1bn	232	202	1.04%	2.23%	2.17%	5.29%	5.29%	3.76%	3.91%	2.62%	2.62%
Fund by FUM(\$)	\$1.0bn- 1.5bn	356	439	1.24%	1.86%	2.29%	4.30%	4.30%	3.63%	3.25%	1.88%	1.88%
Fund by FUM(\$)	\$1.5bn - \$2.0bn	216	373	1.47%	1.84%	2.47%	4.94%	4.94%	3.73%	3.23%	2.34%	2.34%
Fund by FUM(\$)	\$2.0bn - \$5.0bn	451	1,386	1.05%	1.35%	2.00%	3.43%	3.43%	3.48%	2.95%	1.99%	1.99%
Fund by FUM(\$)	\$5.0bn - \$10.0bn	195	1,334	0.86%	1.10%	1.55%	3.72%	3.72%	2.14%	2.21%	1.67%	1.67%
Fund by FUM(\$)	>\$10.0bn	185	8,378	0.50%	0.51%	1.04%	1.46%	1.46%	0.93%	1.24%	0.86%	0.86%
Fund by MCAP	Large Cap	1841	11,477	1.00%	1.60%	2.02%	4.48%	4.48%	3.54%	3.28%	1.96%	1.96%
Fund by MCAP	Mid Cap	174	591	1.44%	1.89%	2.26%	3.05%	3.05%	2.68%	2.20%	2.11%	2.11%
Fund by MCAP	Small Cap	17	33	1.46%	2.90%	2.40%	1.44%	1.44%	3.84%	4.08%	0.83%	0.83%
Fund by MCAP	Multi Cap	122	270	1.58%	2.49%	2.48%	4.08%	4.08%	6.98%	4.22%	1.93%	1.93%
Fund by Investment Style	Value	188	536	1.80%	2.52%	3.69%	6.35%	6.35%	4.24%	4.46%	3.34%	3.34%
Fund by Investment Style	Growth	775	3,069	1.58%	2.88%	3.46%	6.96%	6.96%	5.60%	5.32%	3.41%	3.41%
Fund by Investment Style	GARP	316	1,254	1.24%	2.25%	3.27%	7.41%	7.41%	4.28%	4.09%	2.86%	2.86%
Fund by Investment Style	Yield	99	404	1.56%	2.74%	3.41%	10.99%	10.99%	3.36%	2.71%	4.19%	4.19%
Fund by Investment Style	Index	775	7,100	0.43%	0.49%	0.60%	1.06%	1.06%	0.74%	0.66%	0.62%	0.62%
Fund by Manager Type	Active	1379	5,272	1.54%	2.71%	3.51%	7.31%	7.31%	5.48%	5.01%	3.36%	3.36%
Fund by Manager Type	Passive	775	7,100	0.43%	0.49%	0.60%	1.06%	1.06%	0.74%	0.66%	0.62%	0.62%
Fund by Portfolio Size (# stocks)	0-35	232	495	1.90%	2.88%	3.07%	6.91%	6.91%	5.89%	5.73%	2.77%	2.77%
Fund by Portfolio Size (# stocks)	36 - 75	792	2,221	1.49%	2.81%	3.59%	7.32%	7.32%	5.27%	4.65%	3.06%	3.06%
Fund by Portfolio Size (# stocks)	76 - 100	200	614	1.20%	2.23%	2.76%	6.24%	6.24%	5.20%	4.45%	3.15%	3.15%
Fund by Portfolio Size (# stocks)	101 - 200	287	1,670	0.75%	1.45%	1.95%	3.47%	3.47%	2.22%	2.22%	1.77%	1.77%
Fund by Portfolio Size (# stocks)	201 - 400	230	1,996	0.82%	0.99%	1.17%	2.08%	2.08%	1.35%	1.31%	1.07%	1.07%
Fund by Portfolio Size (# stocks)	401 - 700	208	2,933	0.52%	0.53%	0.61%	1.34%	1.34%	0.81%	0.82%	0.66%	0.66%
Fund by Portfolio Size (# stocks)	>700	205	2,443	0.45%	0.58%	0.87%	1.23%	1.23%	0.79%	0.67%	0.55%	0.55%
Fund by Turnover	High	21	42	1.30%	1.23%	3.02%	10.06%	10.06%	3.80%	4.46%	4.42%	4.42%
Fund by Turnover	Medium	139	344	1.43%	2.58%	3.35%	6.93%	6.93%	4.46%	4.19%	3.14%	3.14%
Fund by Turnover	Low	305	1,441	1.38%	2.49%	3.06%	6.28%	6.28%	5.40%	5.06%	2.87%	2.87%
Fund by Turnover	Fund by Turnover Very Low		9,618	0.99%	1.48%	1.91%	3.91%	3.91%	3.08%	2.84%	1.75%	1.75%
Fund by Region	Fund by Region Global (DM+EM)		1,425	1.28%	2.40%	2.64%	4.39%	4.39%	6.14%	5.41%	2.37%	2.37%
Fund by Region	Global (DM)	207	681	1.30%	2.13%	2.46%	6.56%	6.56%	3.46%	3.77%	2.66%	2.66%
Fund by Region	EAFE	57	642	0.73%	1.35%	1.27%	2.66%	2.66%	2.49%	1.84%	1.07%	1.07%
Fund by Region	USA	909	7,946	0.95%	1.36%	1.67%	4.38%	4.38%	2.69%	2.54%	2.05%	2.05%
Fund by Region	Europe	366	535	0.94%	1.55%	1.60%	3.05%	3.05%	4.09%	3.13%	1.70%	1.70%
Fund by Region	Japan	78	301	0.71%	1.11%	1.86%	2.81%	2.81%	1.58%	1.52%	1.26%	1.26%
Fund by Region	APXJ	195	369	1.34%	2.20%	3.89%	6.11%	6.11%	4.35%	3.58%	2.19%	2.19%
Fund by Region	EM	161	464	0.78%	1.55%	2.49%	4.52%	4.52%	4.12%	4.22%	1.50%	1.50%

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices. Empty cell suggests no data is available for that period.



# Methodology

In this report we analyse relative returns of large long-only equity funds which declare portfolio holdings on a regular basis (frequency differs by fund, but is typically monthly or quarterly), manage more than US\$500m in any one region, for which we have identified and have access to their benchmark, and which have a ready-made "fund price" available from various data sources (Factset, Bloomberg). The table below summarizes the total number of funds, their funds under management and number of unique benchmarks used in this analysis.

#### **Table 54: Summary Stats for Fund Returns**

Information on the funds used in this analysis

Number of Funds	Total FUM (\$US millions)	<b>Unique Benchmarks</b>
2154	13,763,648	479
C D-fA Cl-b-l O		

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

BofA GLOBAL RESEARCH

#### **Table 55: Average and Median Fund characteristics**

Aggregate ASR, FUM, # stocks statistics

	Average	Median
ASR	48.90%	58.89%
FUM	5,743	1,455
# of stocks	299	81

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

BofA GLOBAL RESEARCH

We divide funds by type based on various characteristics, including Region, Investment Style, Active / Passive, Active Share Ratio (ASR), Funds Under Management (FUM), Market Cap of Stocks, Portfolio Size (# of stocks in the fund), and Turnover.

For each period of return we currently include in the report (1m, 3m, 6m, 12m, Year-to-date, 2yr, 3yr) we only include funds which were in our analysis and have price return for the entire period in question. We calculate relative returns of each fund for each period. Relative return is defined as the difference between a fund's return and the benchmark return. We calculate Median, Top Quartile, and Bottom Quartile relative returns across all funds for each group of fund in the analysis.

The data in this report is based on the most recent month-end data. The number of funds may change each month based on data availability and an annual refresh of the funds included in this analysis.

These "Benchmark Indices" are managed by MSCI, S&P, FTSE and Country Indices such as NSE, CNX among others.



# **Table 56: Definitions** Fund Group definitions

#	Group	Definition
1	Region	Based on the region of the Benchmark. E.g. Funds benchmarked to MSCI All Country World Index are classified as Global (DM+EM), while
		Funds benchmarked to MSCI World are classified as Global (DM).
2	Investment Style	Determined by Factset.
3	Active/Passive	Determined by Factset.
4	Active Share Ratio (ASR)	We calculate the Active Share Ratio (ASR) as the sum of the absolute value of the differences of the weight of each holding in the manager's
		portfolio versus the weight of each holding in the benchmark index and then dividing by two.
5	Funds Under Management (FU	We calculate FUM as the total value of a fund's holding as of the latest month-end in USD.
6	Market Cap of Stocks	Determined by Factset.
7	Portfolio Size (# stocks)	We count the number of stocks within each fund.
8	Turnover	Determined by Factset.

 $Source: BofA\ Global\ Quantitative\ Strategy, Factset, Bloomberg, Benchmark\ Indices.\ \ The\ group\ definitions\ may\ vary\ from\ the\ fund's\ own\ definition/description.$ 



# **Global Quant Publications**

#### Monthly reports schedule

#### Day 1: Contenders & Defenders

A popular visual stock selection model. For each stock, this report graphically shows how consensus earnings expectations have changed over the long term versus the market, and whether recent earnings revisions appear to have been reflected in relative share price performance. Popular ways of using this analysis include 1) reviewing the Contenders (buys) and Defenders (Sells) lists, 2) perusing individual stock charts, 3) monitoring region, country and sector themes using the "quadrant charts", and 4) reviewing stock rankings. Regional versions are published monthly in these linked reports for Global Contenders & Defenders and Asia Pac ex-Japan Contenders & Defenders.

#### Day 1: Global Performance Monitor

The above linked monthly report analysing the performance of global regions, countries, sectors and identifying the major stock contributors to global equity market performance.

#### Day 2/3: Quantessential Style

Style rotation. Different investment styles outperform at various stages of the cycle. This investment style analysis relates performance of seven Quantessential Styles (Value, Growth, Quality, Risk, Momentum, Dividend and Size) to trends in global macro data. Popular uses include 1) when to buy "Deep Value", "Growthiest of Growth", and other styles, 2) identifying stocks with various style characteristics, 3) monitoring style performance, and 4) explaining out/under-performance due to style tilts. Regional versions are published in these linked monthly reports for Global Quantessential Style and Asia Pac ex-Japan Quantessential Style.

#### **Week 1: Global Fund Performance Monitor**

The above linked monthly report analysing the relative returns of large long-only equity funds in order to help fund managers understand how returns have been affected by fund characteristics. Funds are grouped by Region, Investment Style, Active/Passive, Active Share Ratio, Funds Under Management, Stock Size, Number of Stocks, and Portfolio Turnover.

#### Week 2: Global Wave

The Global Wave (report link above) quantifies turning points and multi-year trends in global economic activity. The direction of the global cycle influences equity market performance, regional allocation, country allocation, style allocation, and stock selection. The Bunkers are stocks for a downturn and the Boosters are stocks for an upturn.

#### Week 2: NewsAlpha

The above linked monthly report: 1) quantifies alpha opportunities using news for both short-term and long-term investors, 2) Leverages big data – a) to identify the most significant news events, b) to highlight which stocks are driven by news and c) to create an indicator- The Global News Pulse - to monitor trends in news sentiment globally.

#### Week 2: Positioning in Stocks

Quantifies how large investors are positioned in terms of stocks, regions, countries and sectors. Popular uses include 1) identifying extreme positioning for contrarian trade ideas, and 2) identifying developing trends in investor positioning. Regional versions are published in these linked monthly reports for <u>Global Positioning in Stocks</u> and <u>Pacific Positioning</u>.

#### Week 3: Global ProductPaedia

In the above linked monthly report, we identify investment trends based on products as an alternative approach to analysing equity markets by sector, industry, country, region,



or style. We have categorized 50,000 stocks globally into 350 Product Groups based on product revenue exposure. We have also mapped 510,000 relationships between companies, customers, and suppliers, which would help monitor significant changes in supply chain dynamics.



# **Disclosures**

### **Important Disclosures**

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. VOLATILITY RISK RATINGS, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. INVESTMENT RATINGS reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

# Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster<sup>R1</sup>

Buy ≥ 10% ≤ 70% Neutral ≥ 0% ≤ 30% Underperform N/A ≥ 20%

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. Coverage Cluster is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

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