

The Year so far... **Quant**

As we are in the middle of summer 2024, we take a look back at the first half of the year and take stock of the performance of various investment themes in the first six months of the year.

This part of the series takes a look at Solactive's quantitative index offering and the respective performance in the first half of 2024.

6.956

25.001_{H-647}

23.795

19.307

4.852

1.803

22.608

27.017

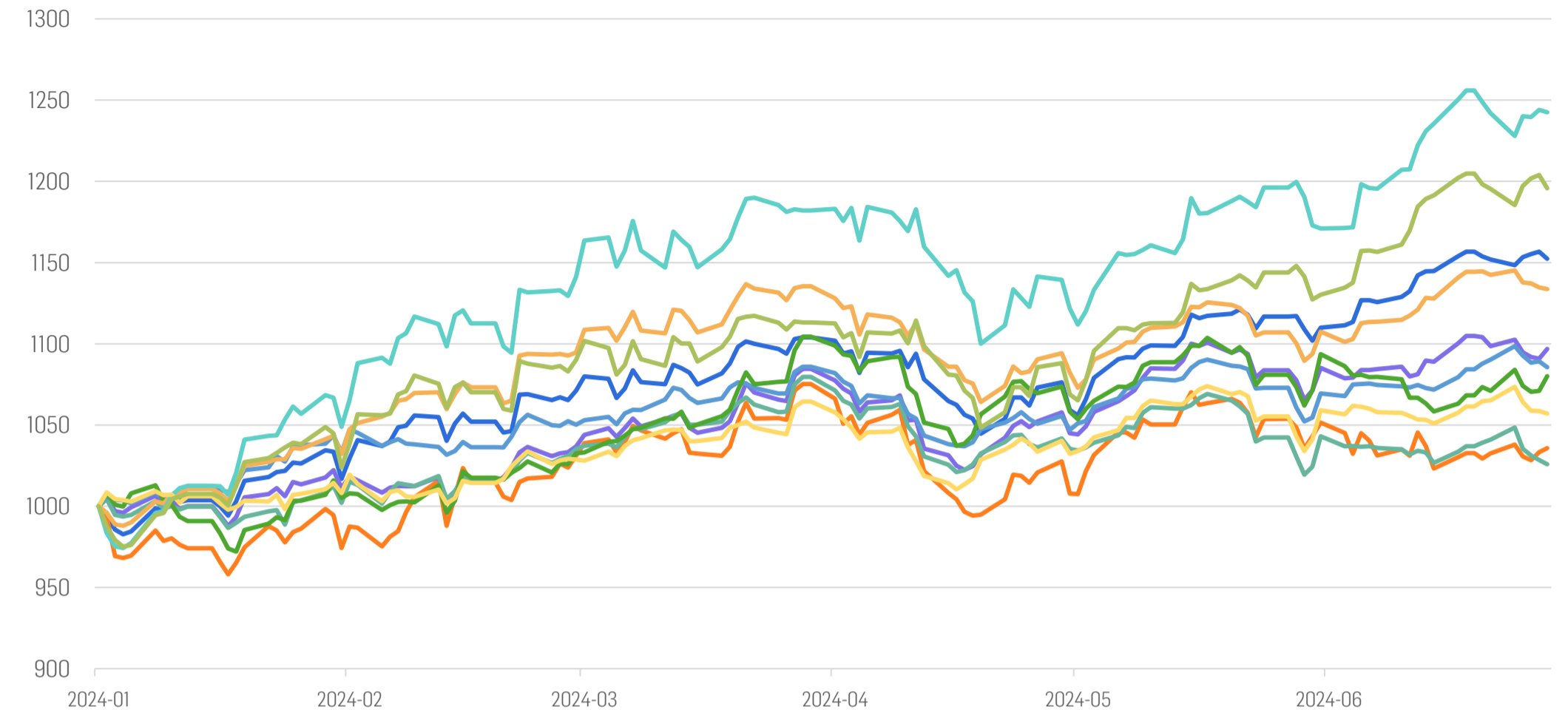
35.891

The year so far... Quant

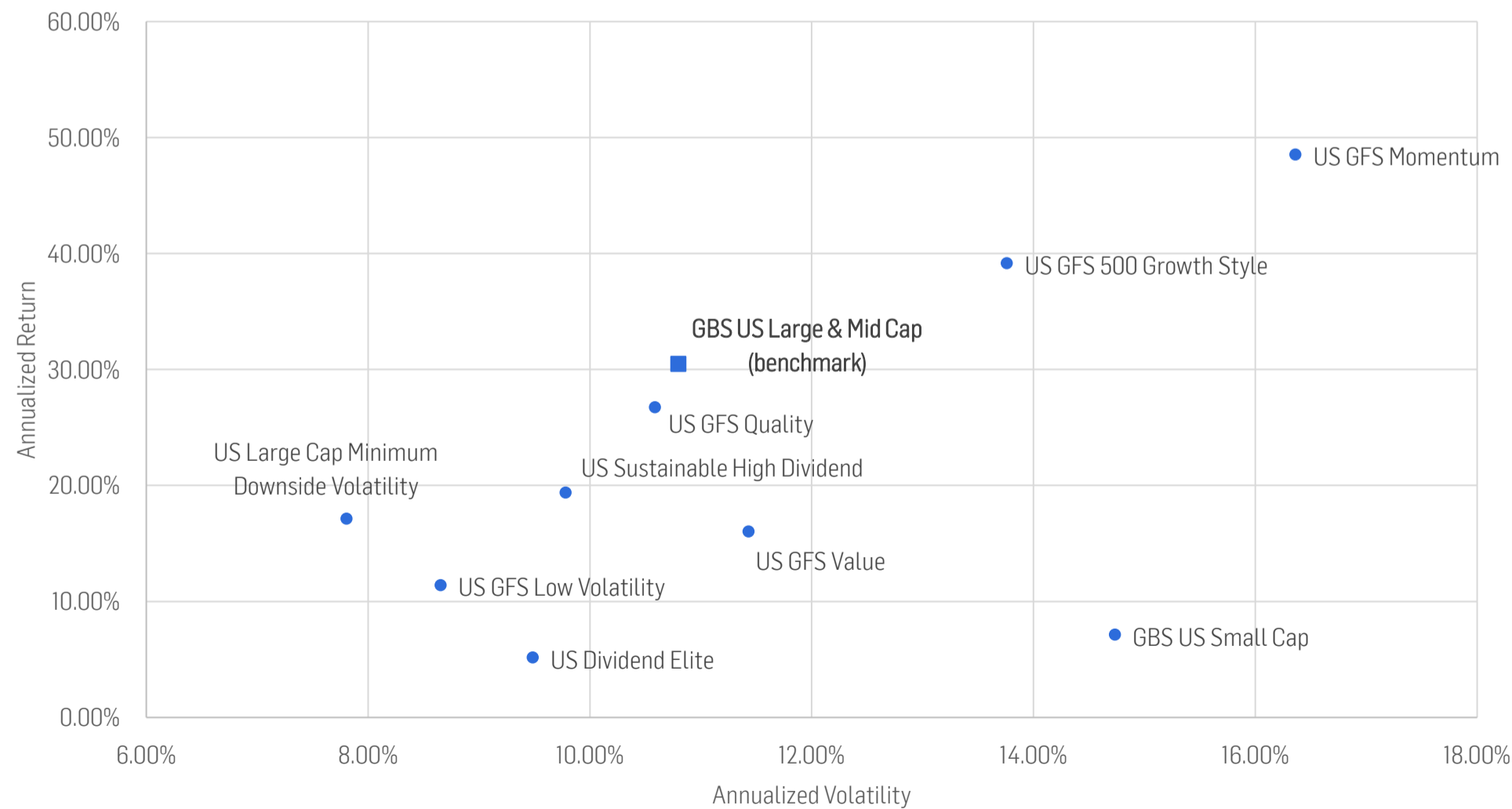
Looking at the year so far, Momentum is the clear winner in terms of performance. And not just in absolute terms but on a risk-adjusted basis as well. Momentum and Growth are the only strategies analyzed here that outperformed the benchmark in the first half of 2024. In fact, they outperformed the benchmark every month except for March and April. Noteworthy, these two months are at the same time the only months where more defensive investments like low risk, value, and dividend strategies did better than the benchmark.

Let's quickly talk about the elephaNVIDIA in the room (sorry...). Out of all indexes, the market's favorite stock is present only in the Momentum and the Growth indexes (and, of course, the benchmark). Now one might jump to the conclusion that this explains the strategies' strong performance compared to anything else. However, while definitely the main driver of return for all three strategies, its effect on Momentum almost seems marginal compared to Growth and the benchmark. A whopping 34% (Growth) and 29% (benchmark) of their overall performance comes from NVIDIA alone; compared to "only" 14% of Momentum's return.

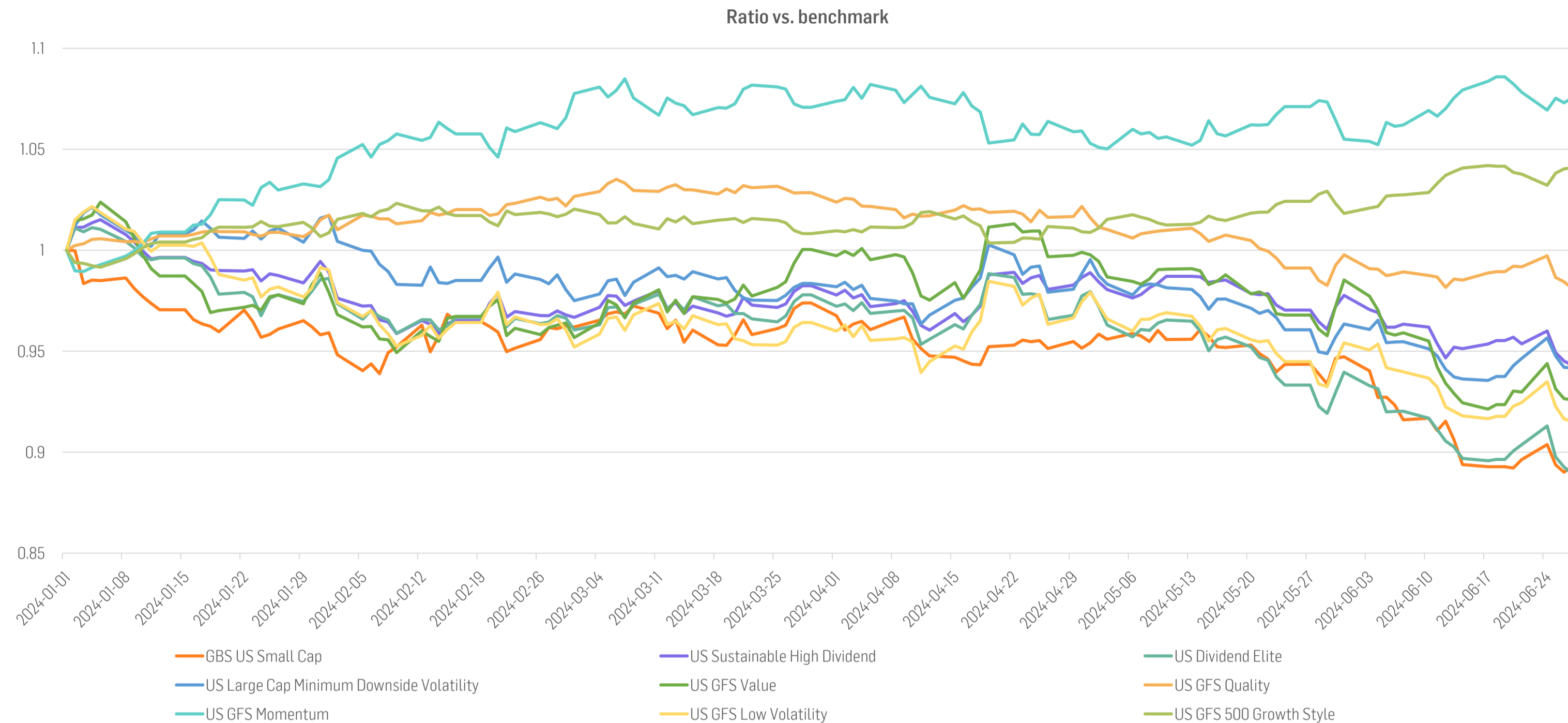
Before letting you dive into all the graphs, we want to highlight one more thing. Focusing entirely on its main objective, that is minimizing risk, minimum downside volatility did exceptionally well, too. Year-to-date, it realized an annualized volatility of 7.66% - almost 30% lower than the benchmark - putting it on the very left on the return vs. volatility chart; just where it belongs. Still, return per unit of risk is hard to beat if one was not long Nvidia.



- GBS US Large&Mid Cap (benchmark)
- GBS US Small Cap
- US Sustainable High Dividend
- US Dividend Elite
- US Large Cap Minimum Downside Volatility
- US GFS Value
- US GFS Quality
- US GFS Momentum
- US GFS Low Volatility
- US GFS 500 Growth Style



	GBS US Large & Mid Cap (benchmark)	GBS US Small Cap	US Sustainable High Dividend	US Dividend Elite	US Large Cap Minimum Downside Volatility	US GFS Value	US GFS Quality	US GFS Momentum	US GFS Low Volatility	US GFS 500 Growth Style
Return (annualized)	30.46%	7.14%	19.37%	5.16%	17.13%	16.02%	26.74%	48.52%	11.40%	39.16%
Volatility (annualized)	10.80%	14.74%	9.78%	9.49%	7.81%	11.43%	10.59%	16.36%	8.65%	13.76%
Max Drawdown	-5.38%	-7.53%	-5.75%	-5.58%	-4.51%	-6.09%	-6.38%	-7.55%	-5.07%	-6.17%
Sharpe Ratio	2.33	0.13	1.44	-	1.52	0.94	2.03	2.64	0.71	2.46
Tracking Error	-	5.69%	4.84%	5.77%	5.25%	6.83%	3.18%	4.68%	6.37%	2.71%

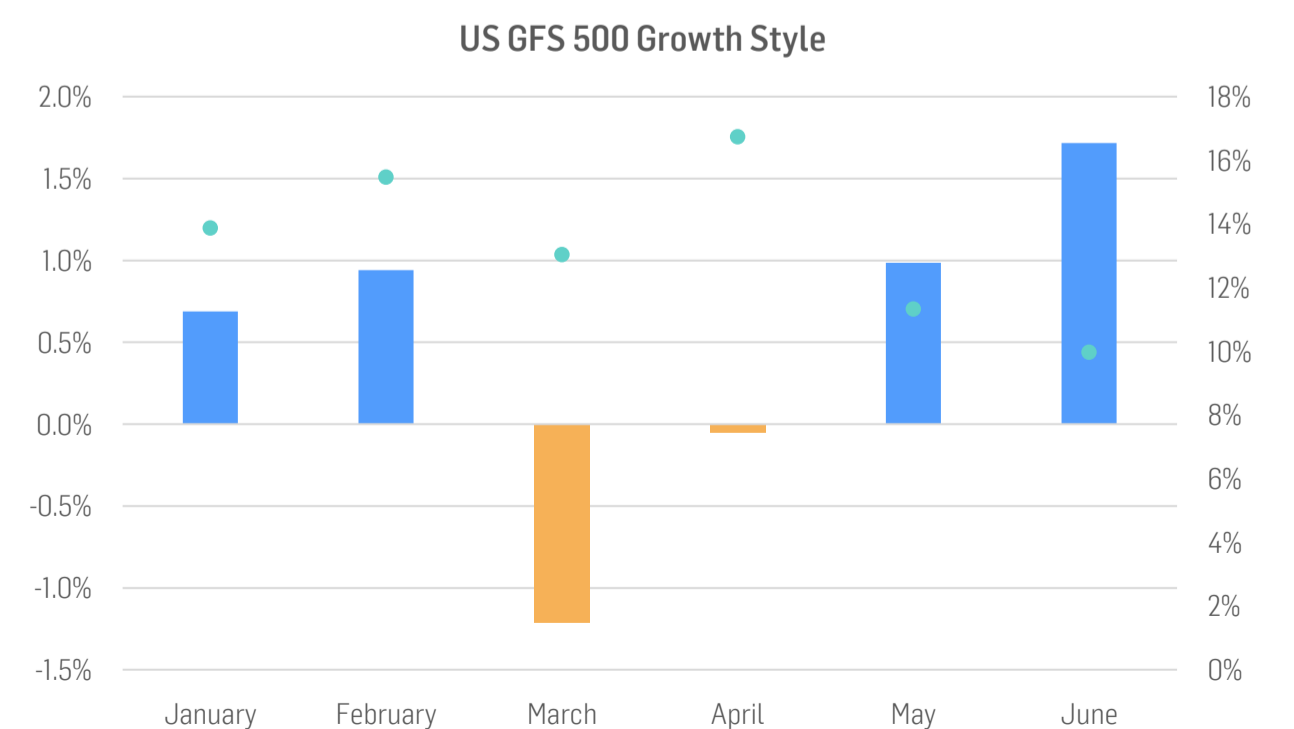
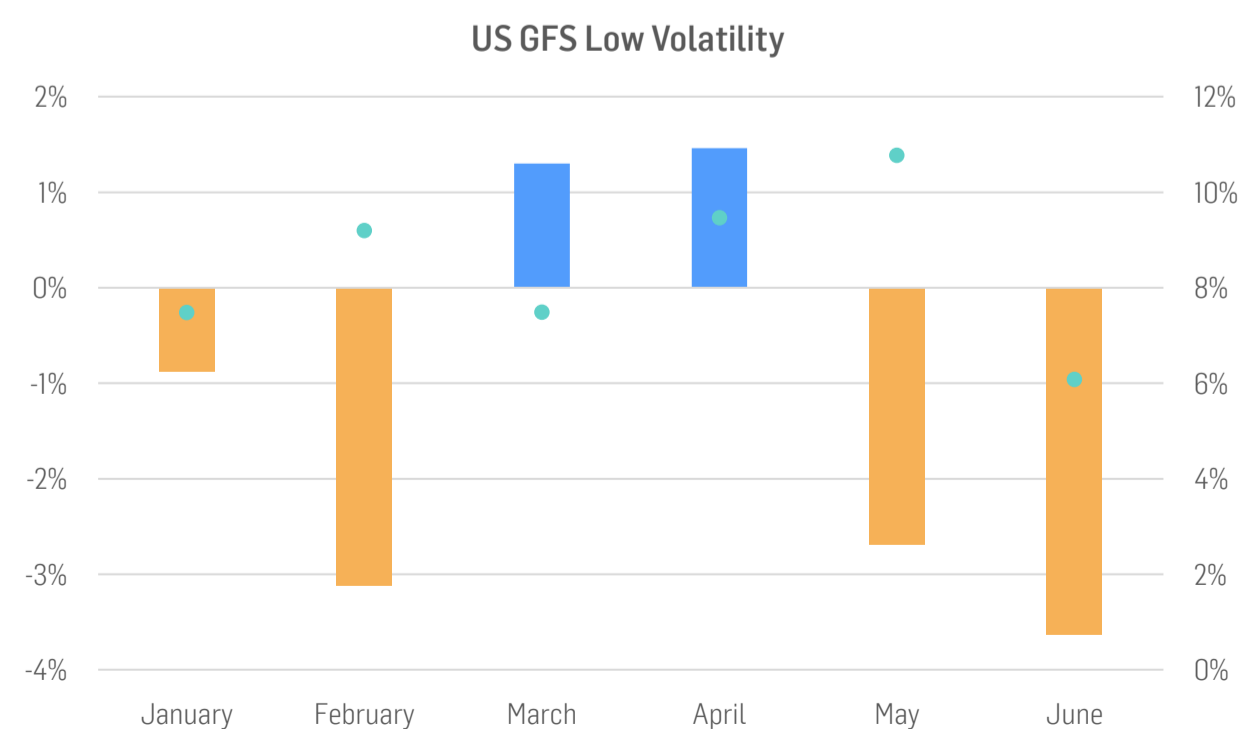
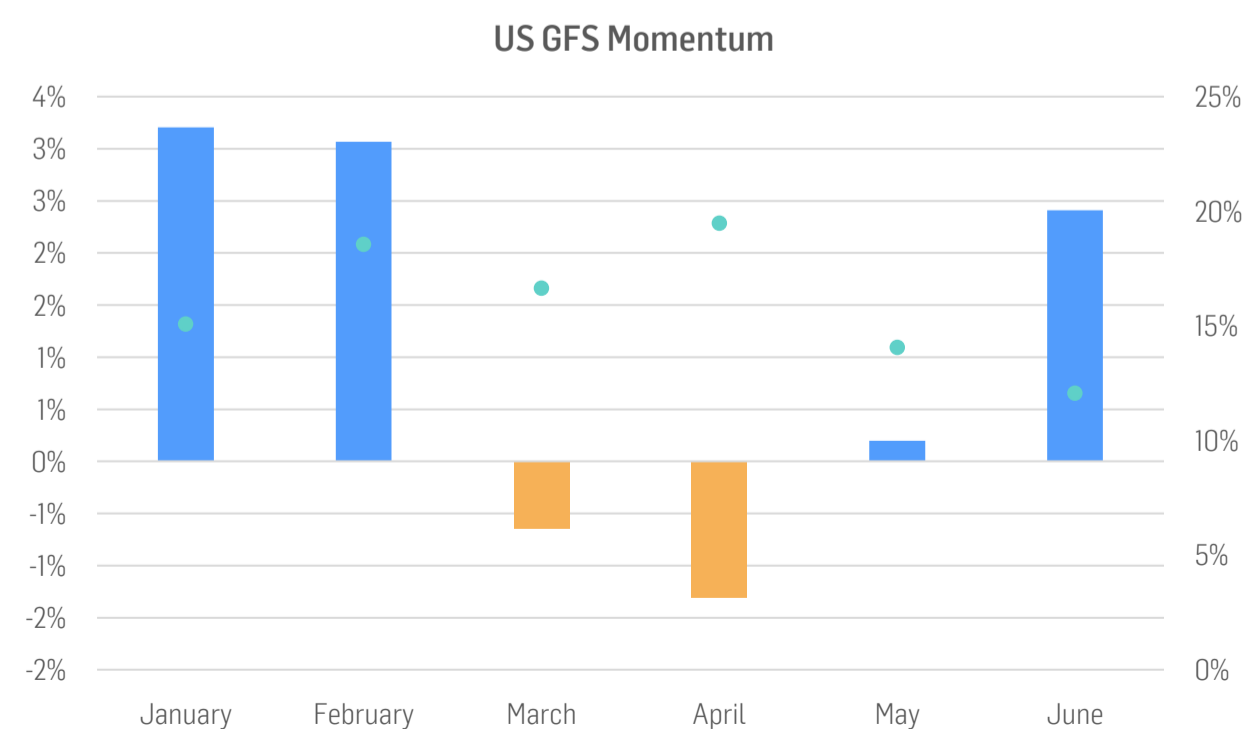
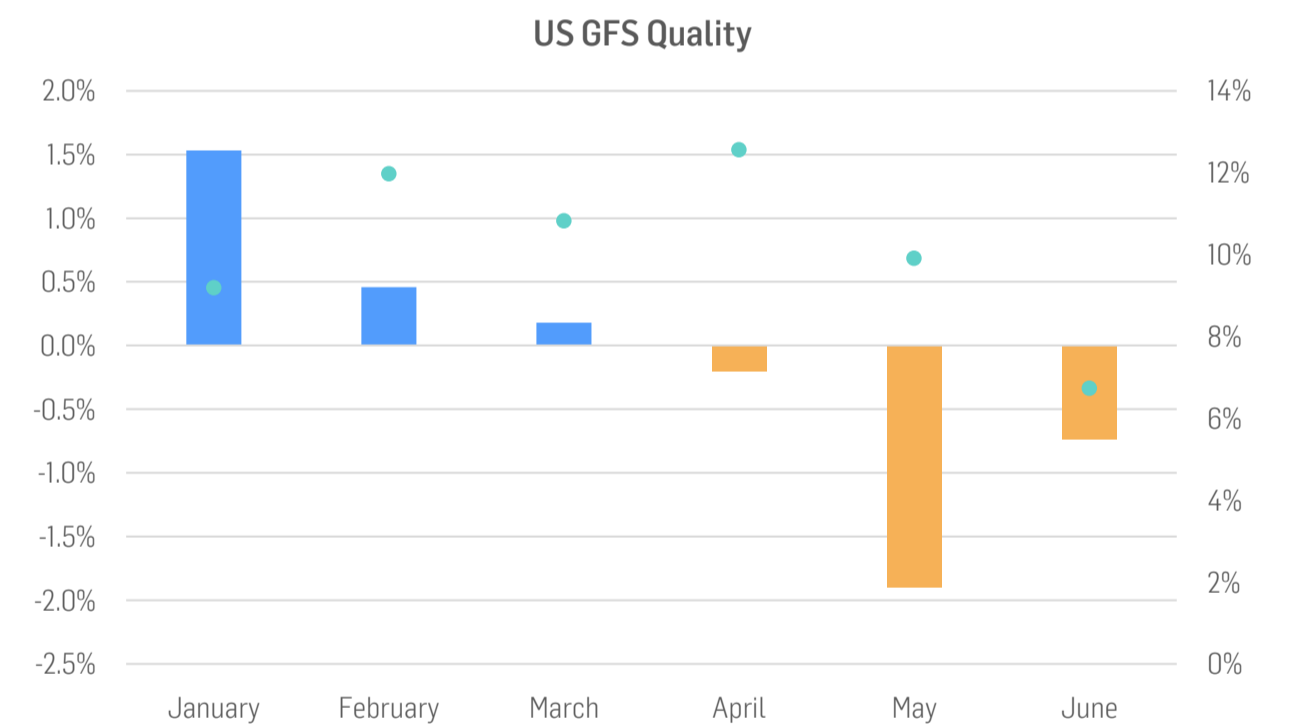
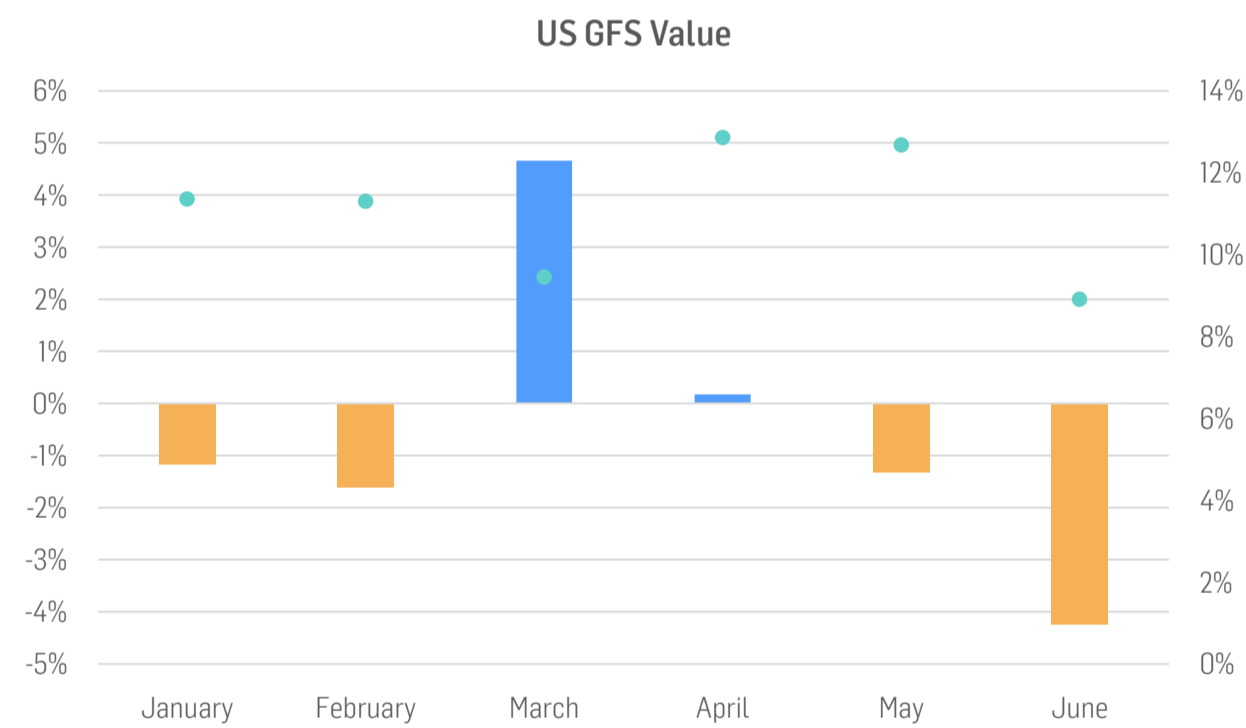
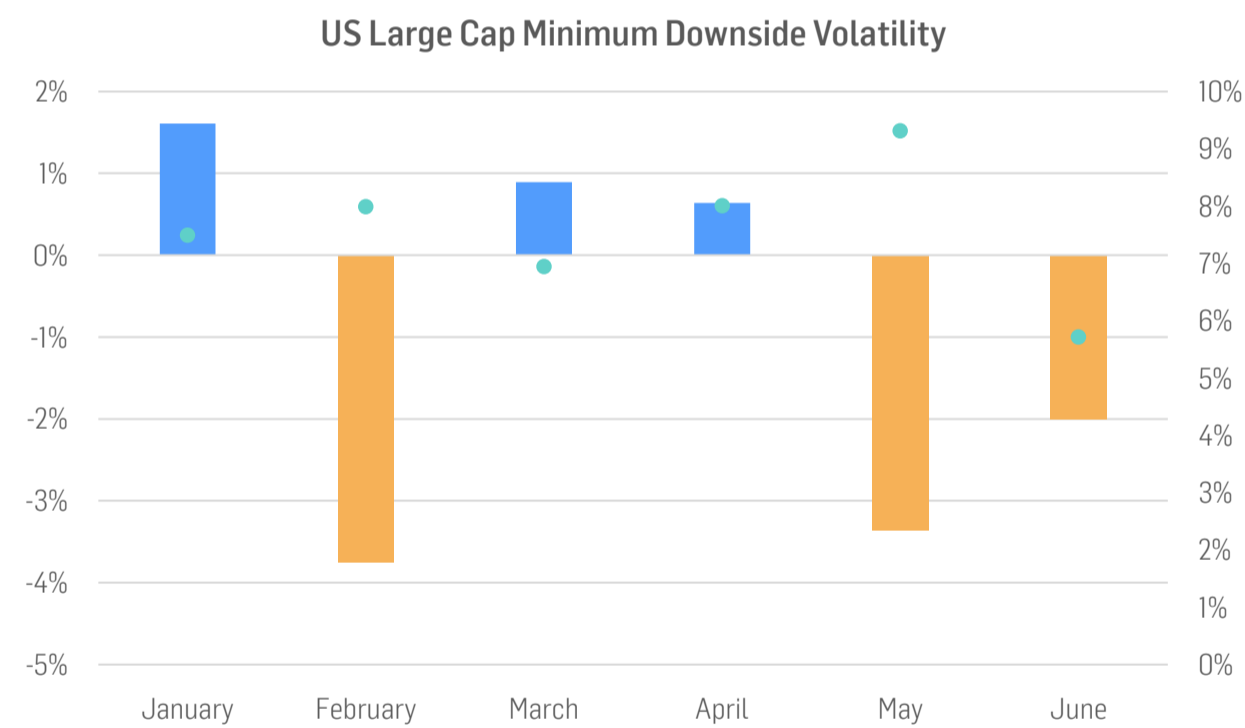
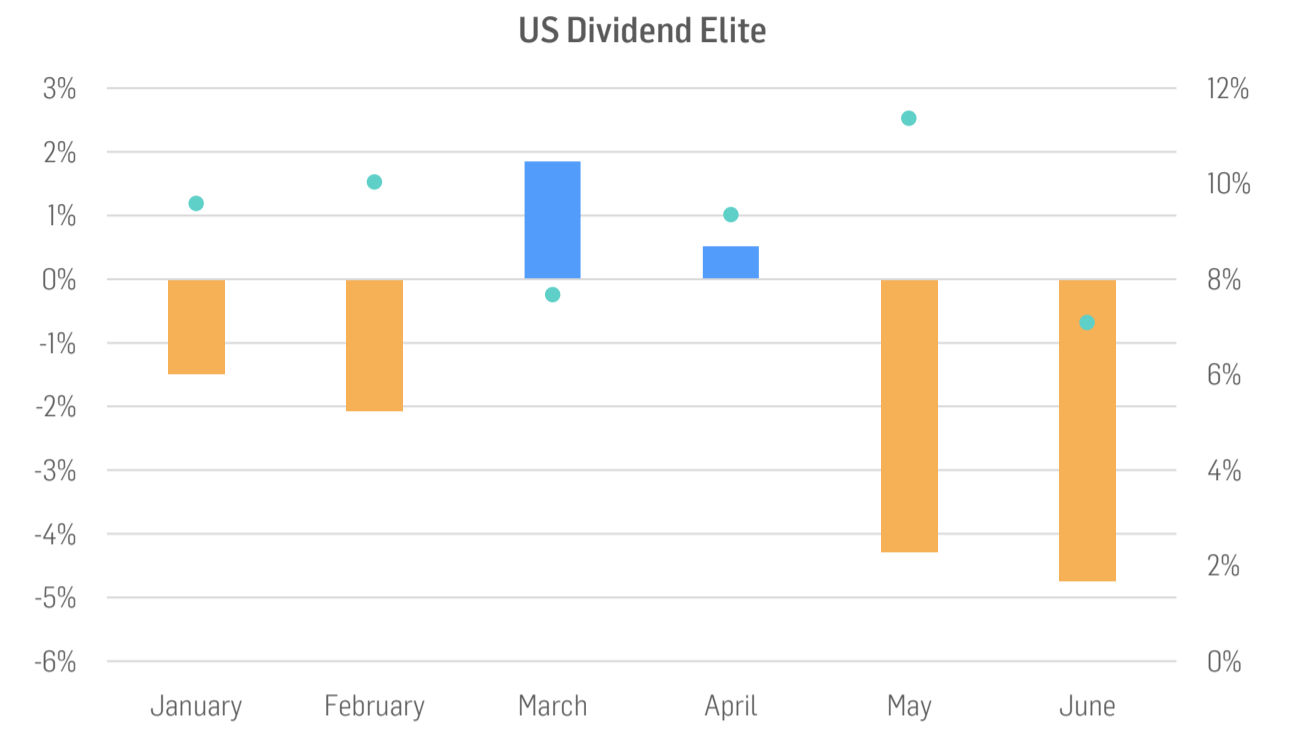
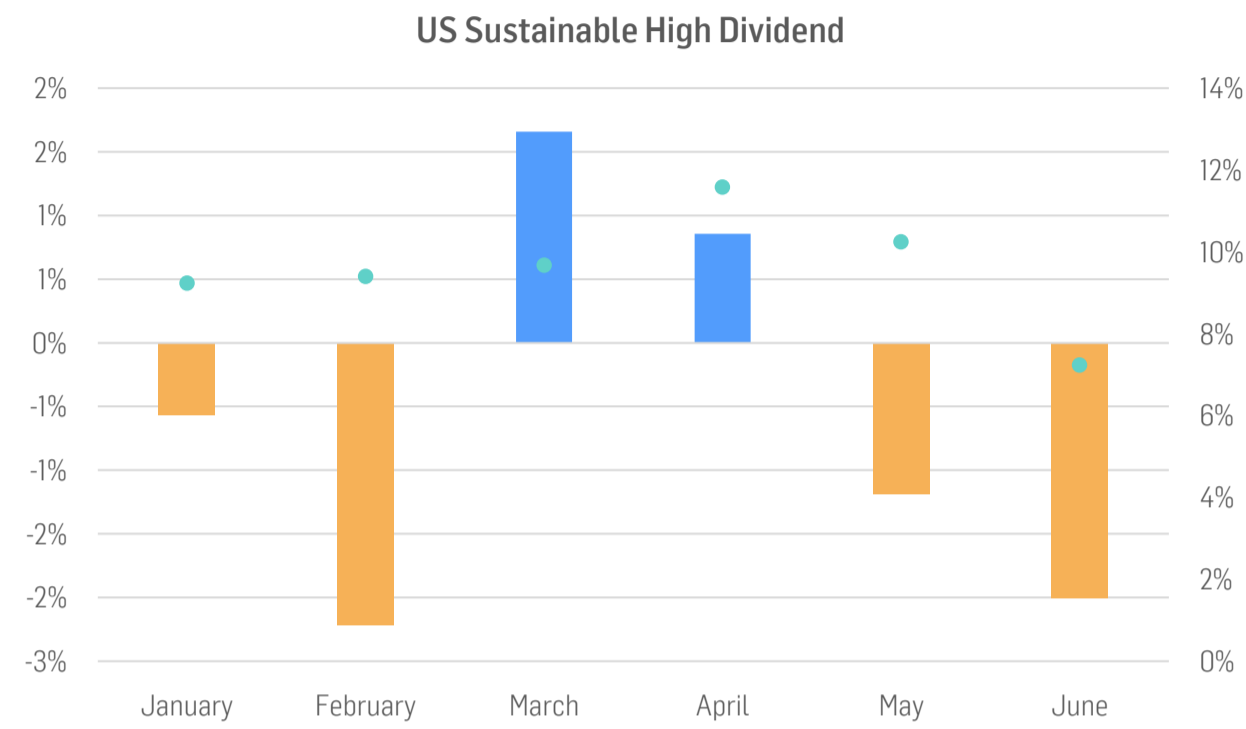
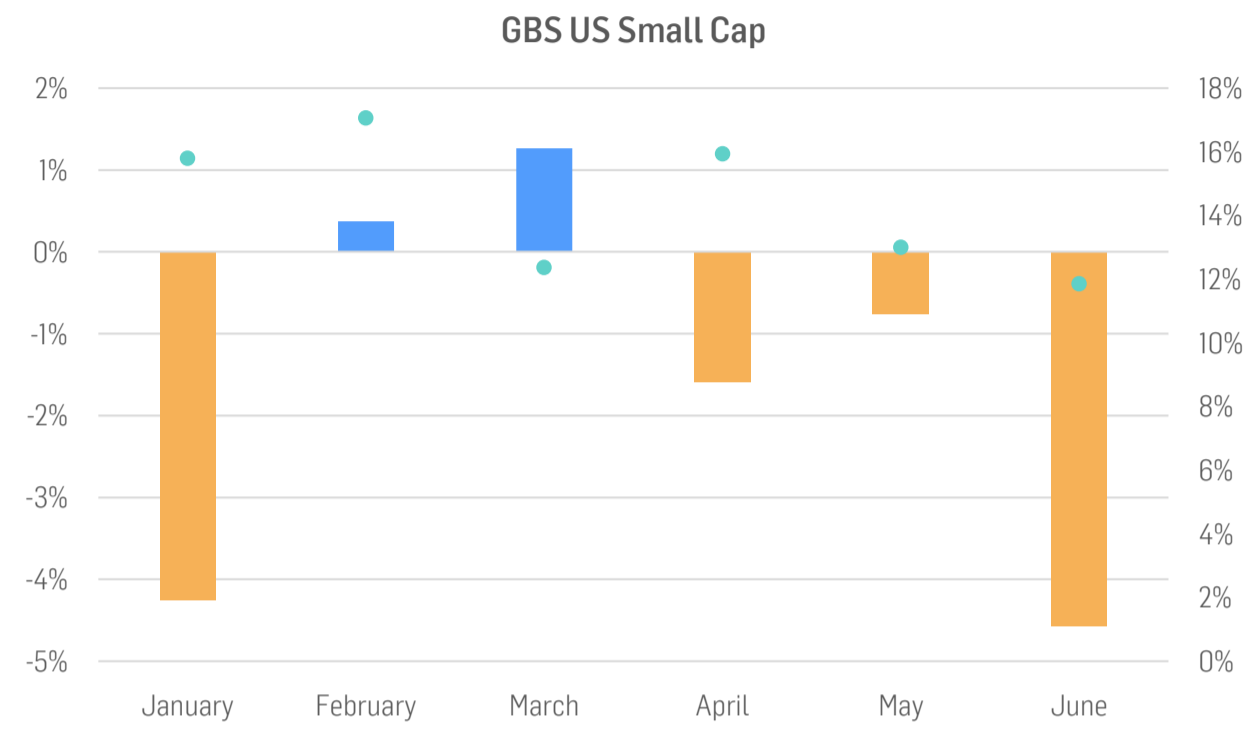


Absolute returns	1 month	3 month	YTD	Realized volatilities	1 month	3 month	YTD
US Large & Mid Cap (benchmark)	3.68%	4.58%	15.23%	US Large & Mid Cap (benchmark)	6.28%	10.51%	10.80%
US Small Cap	-0.90%	-2.86%	3.57%	US Small Cap	11.85%	13.92%	14.74%
US Sustainable High Dividend	1.67%	1.80%	9.69%	US Sustainable High Dividend	7.23%	10.04%	9.78%
US Dividend Elite	-1.07%	-4.24%	2.58%	US Dividend Elite	7.09%	9.47%	9.49%
US Large Cap Minimum Downside Volatility	1.67%	0.34%	8.56%	US Large Cap Minimum Downside Volatility	5.71%	7.99%	7.81%
US Value	-0.55%	-1.70%	8.01%	US Value	8.91%	11.74%	11.43%
US Quality	2.94%	0.50%	13.37%	US Quality	6.74%	10.26%	10.59%
US Momentum	6.09%	5.03%	24.26%	US Momentum	12.08%	15.83%	16.36%
US Low Volatility	0.05%	-0.06%	5.70%	US Low Volatility	6.08%	9.09%	8.65%
US 500 Growth Style	5.39%	7.49%	19.58%	US 500 Growth Style	9.98%	13.35%	13.76%

Excess returns & volatility per strategy for each month

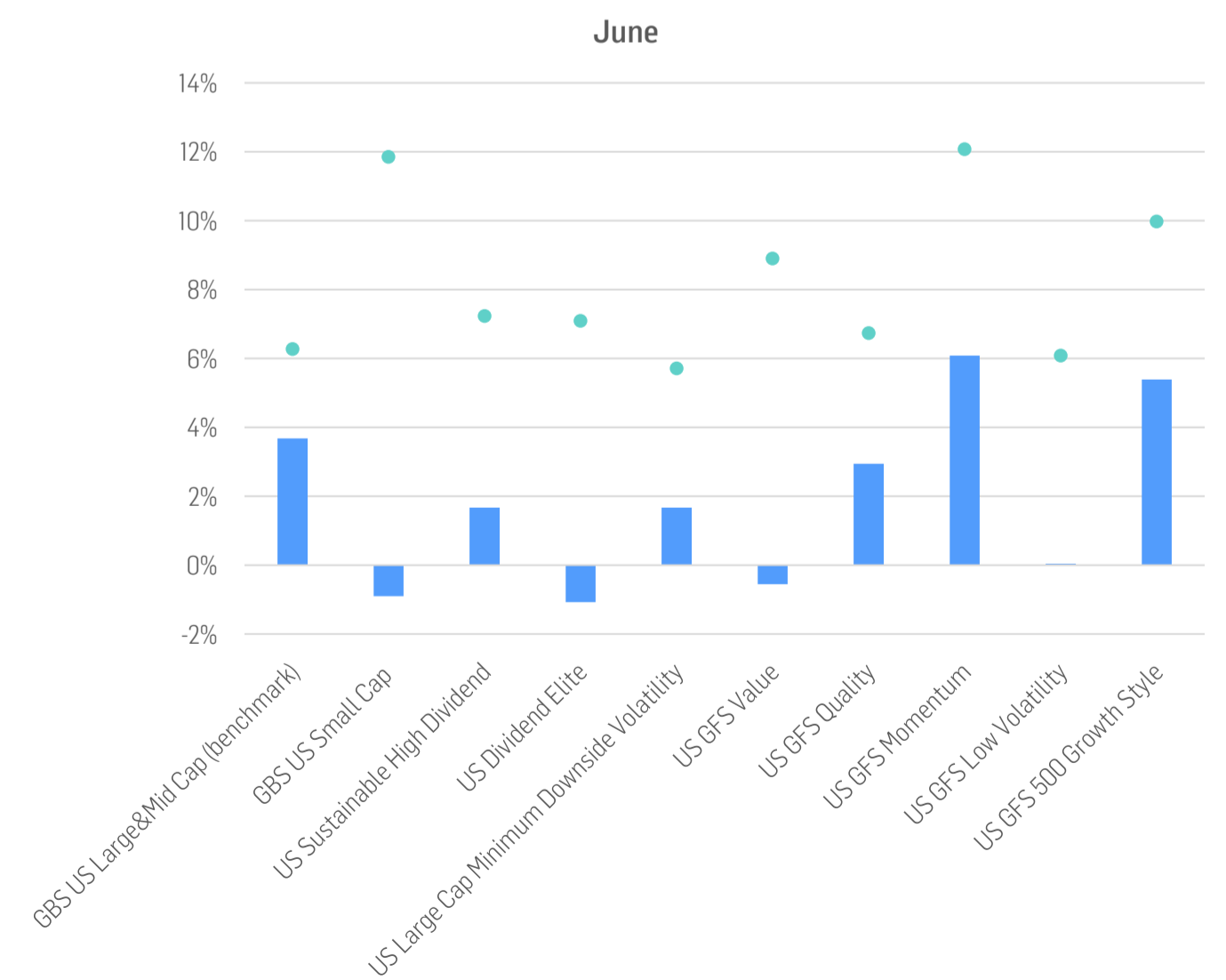
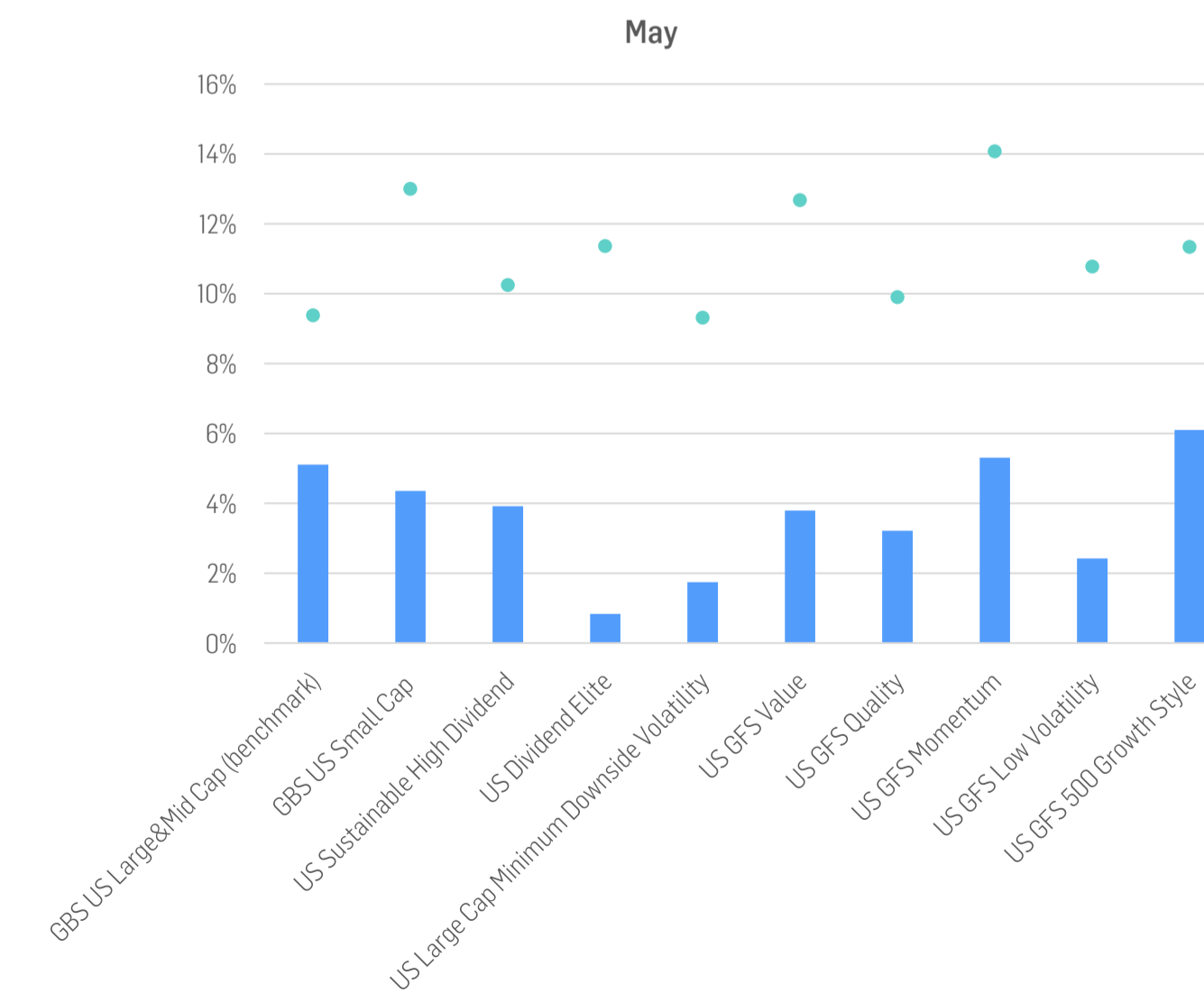
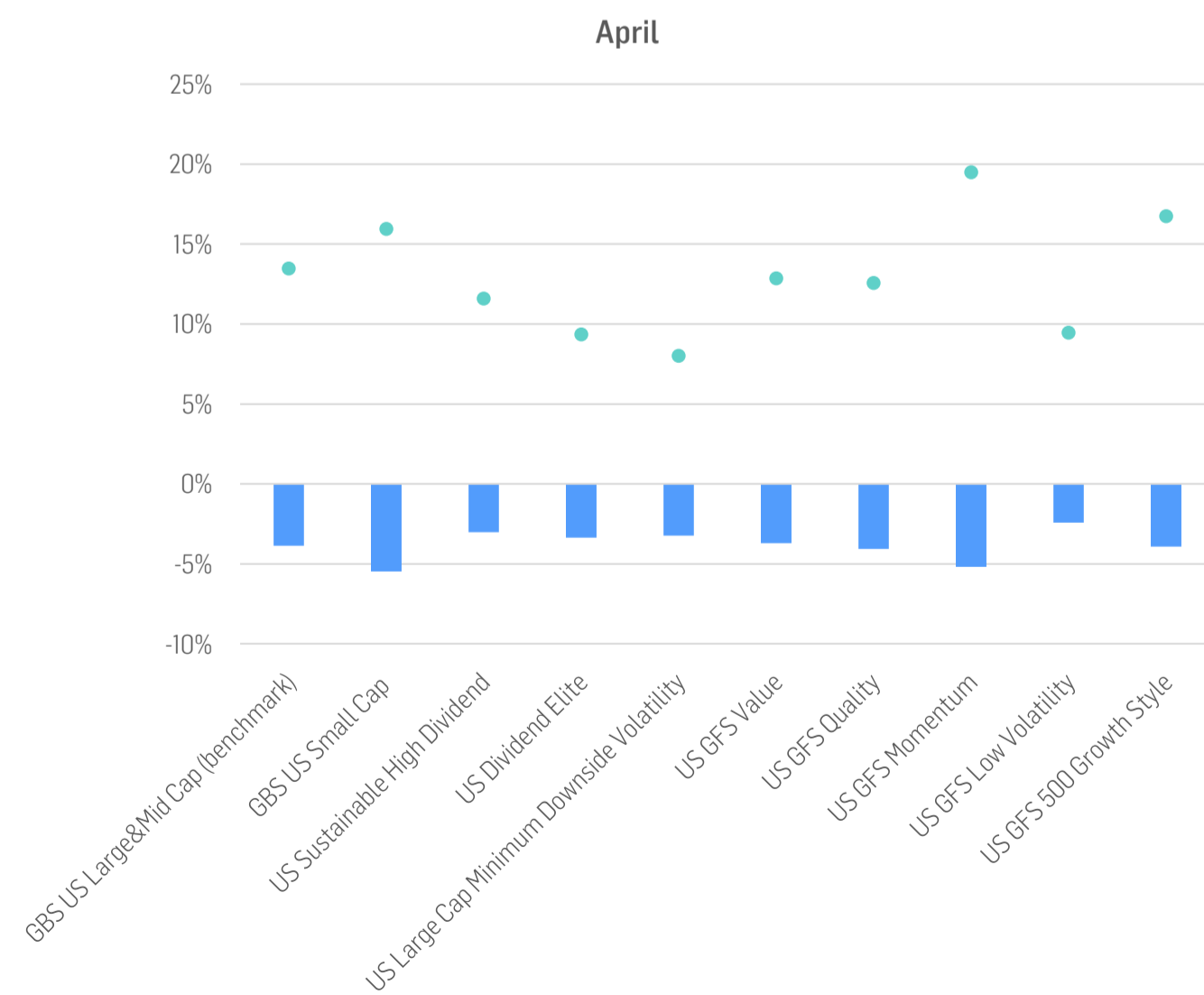
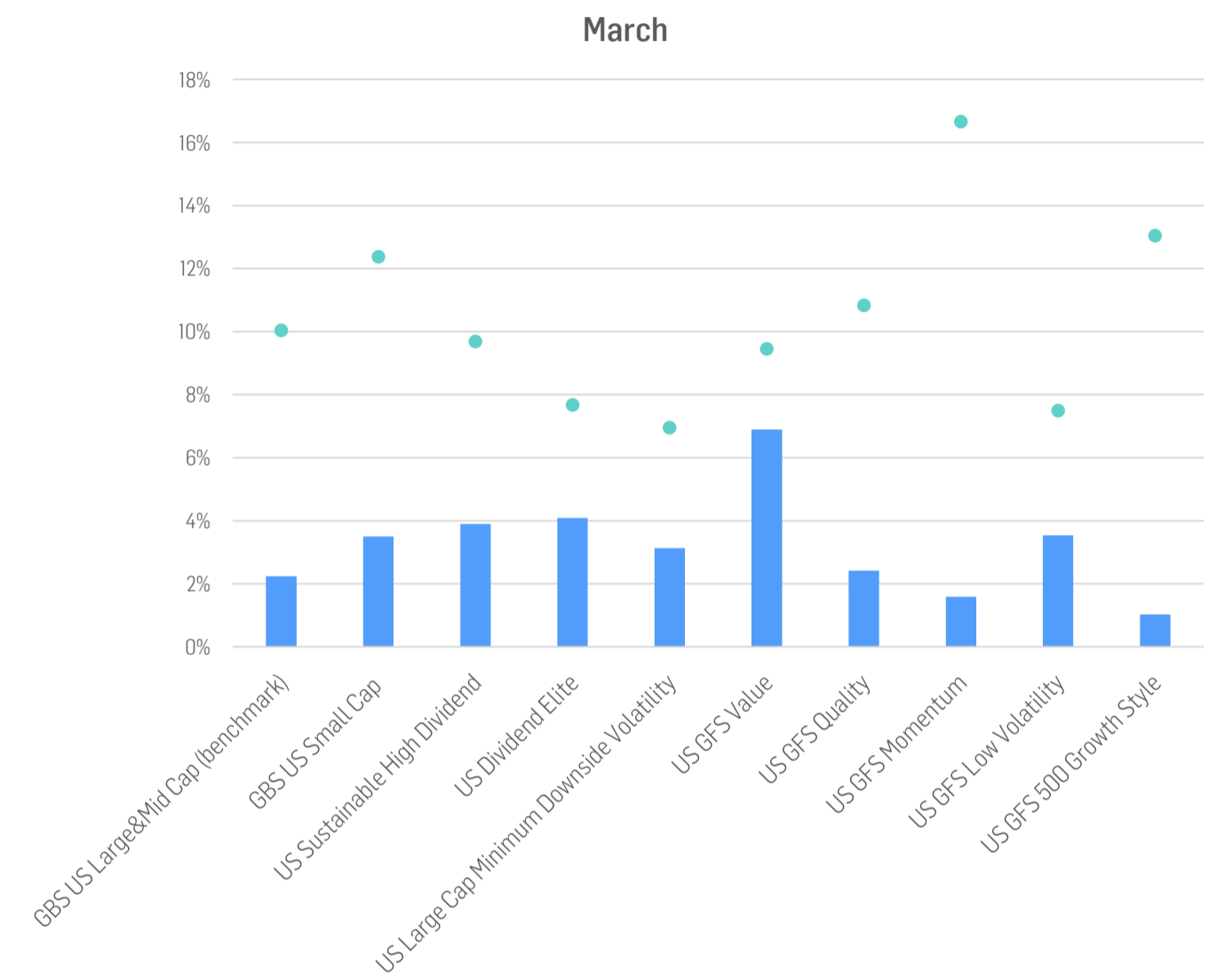
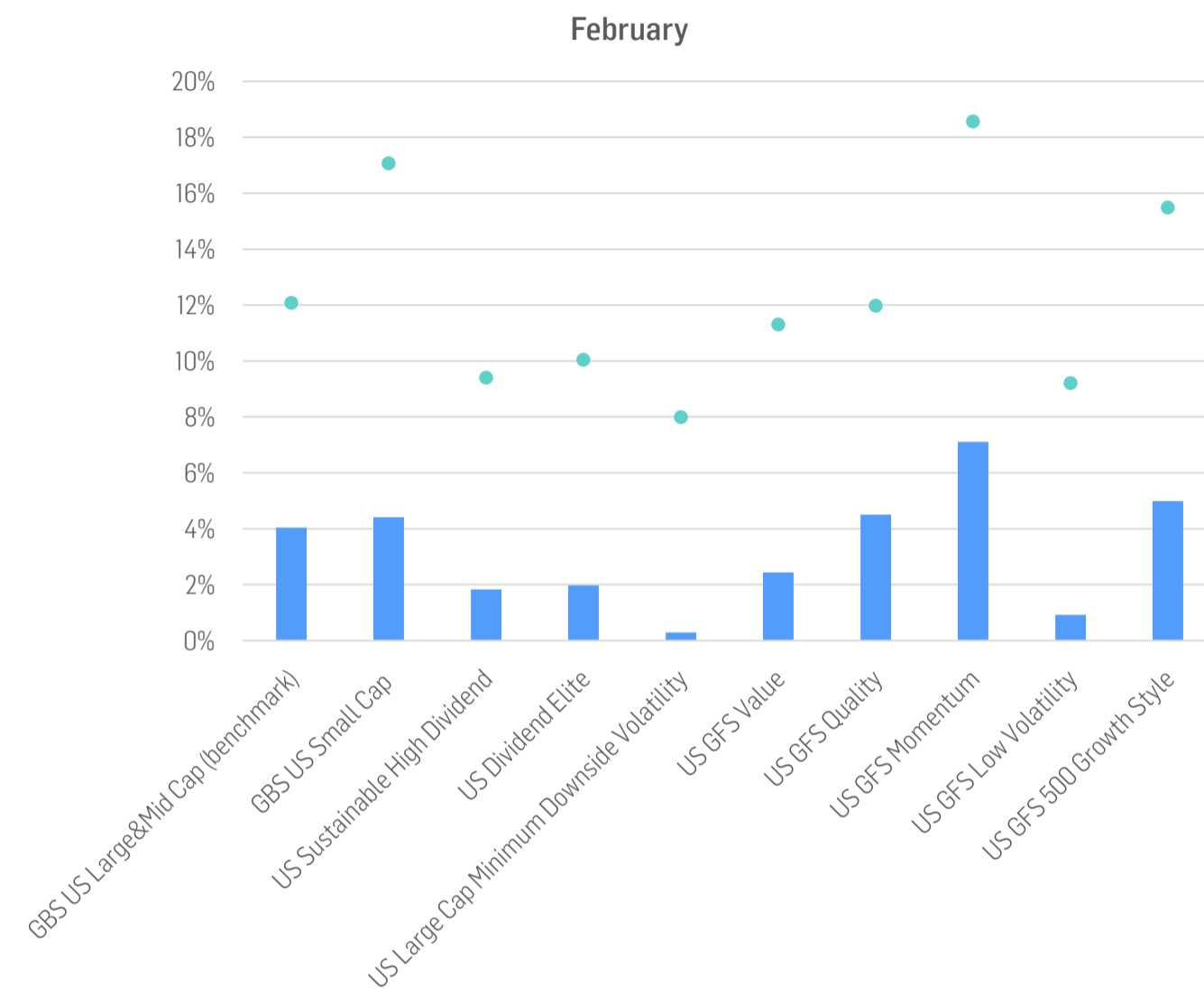
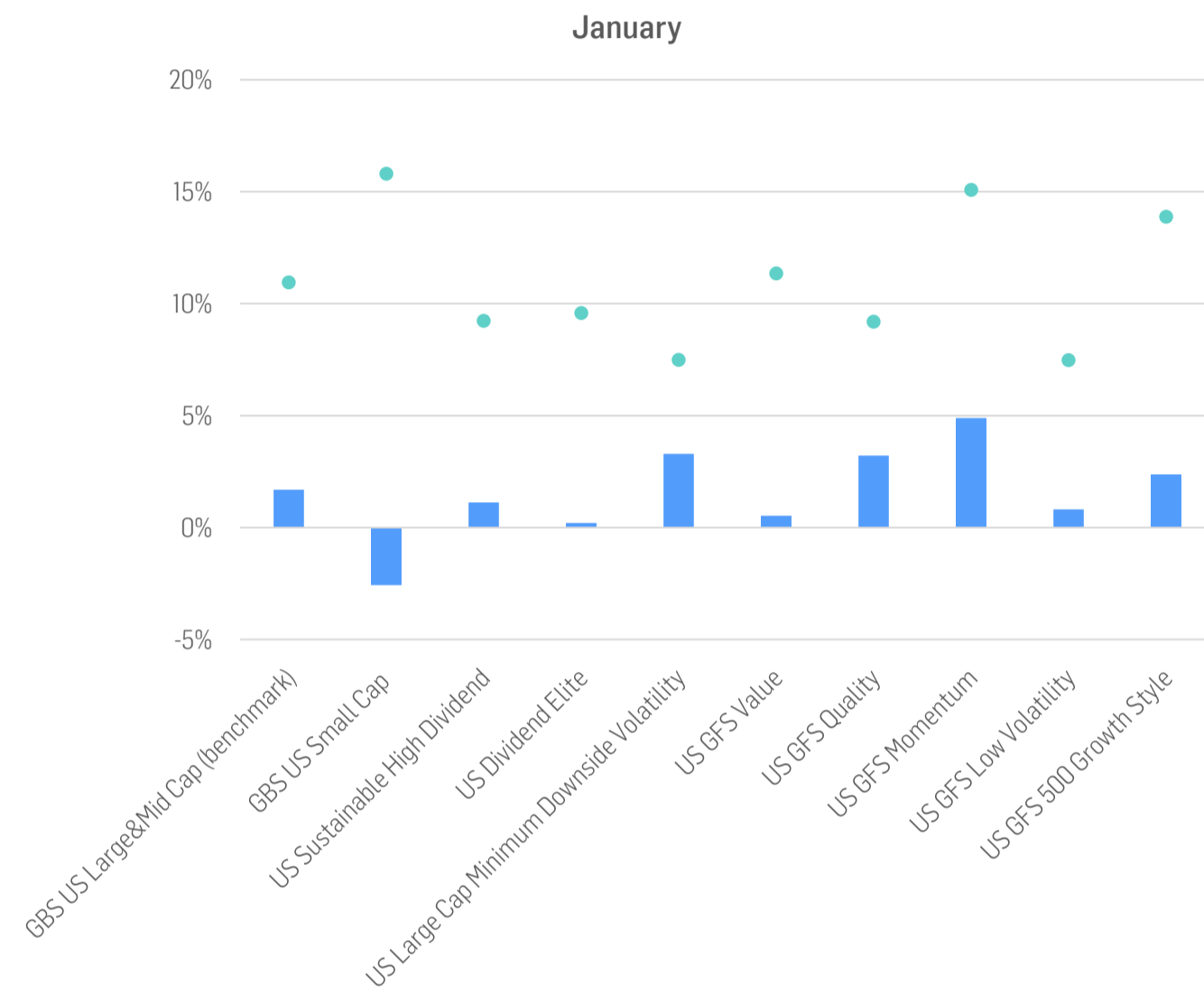
Excess return

Volatility



Returns & volatility per month for each strategy

Return
Volatility

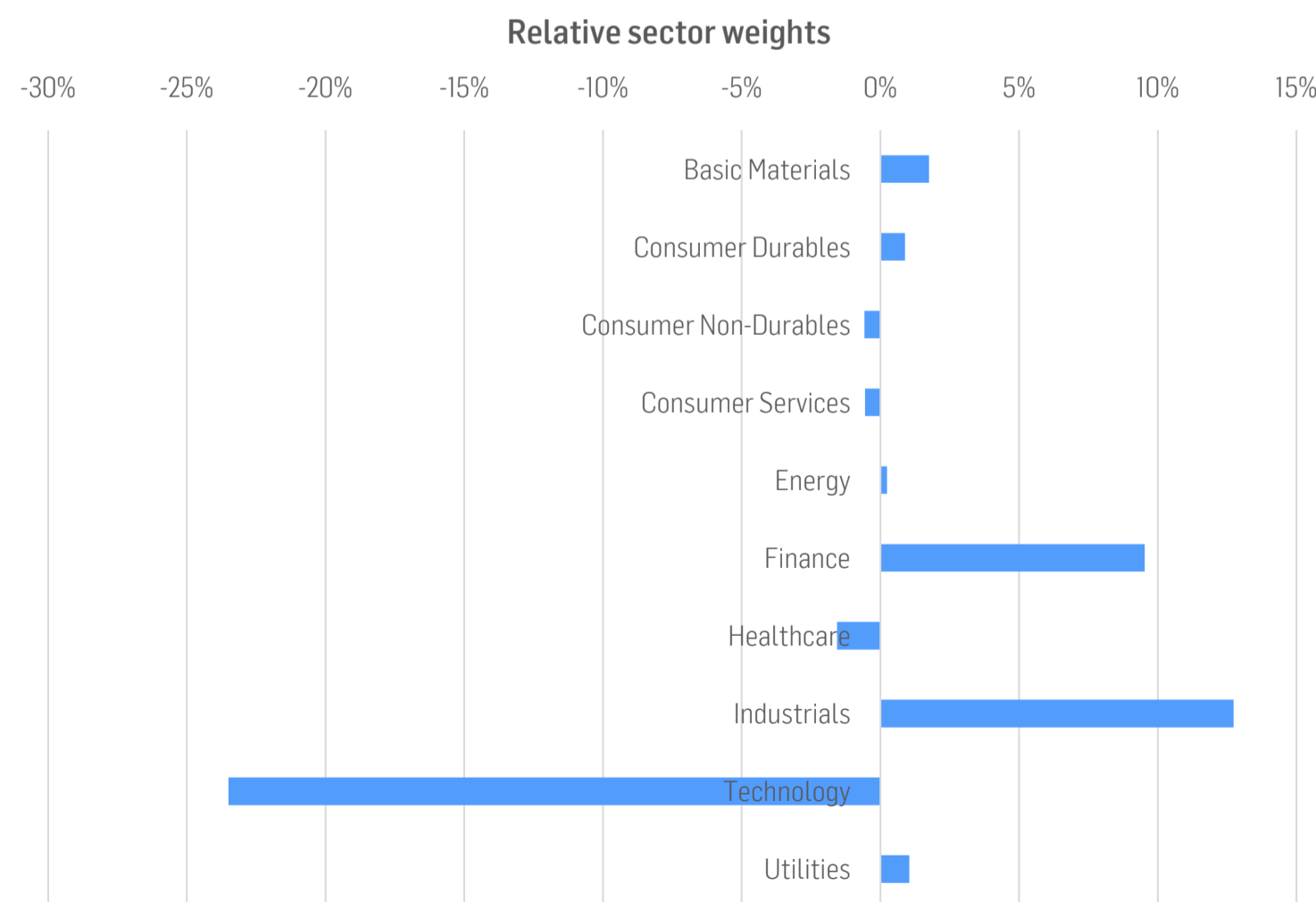
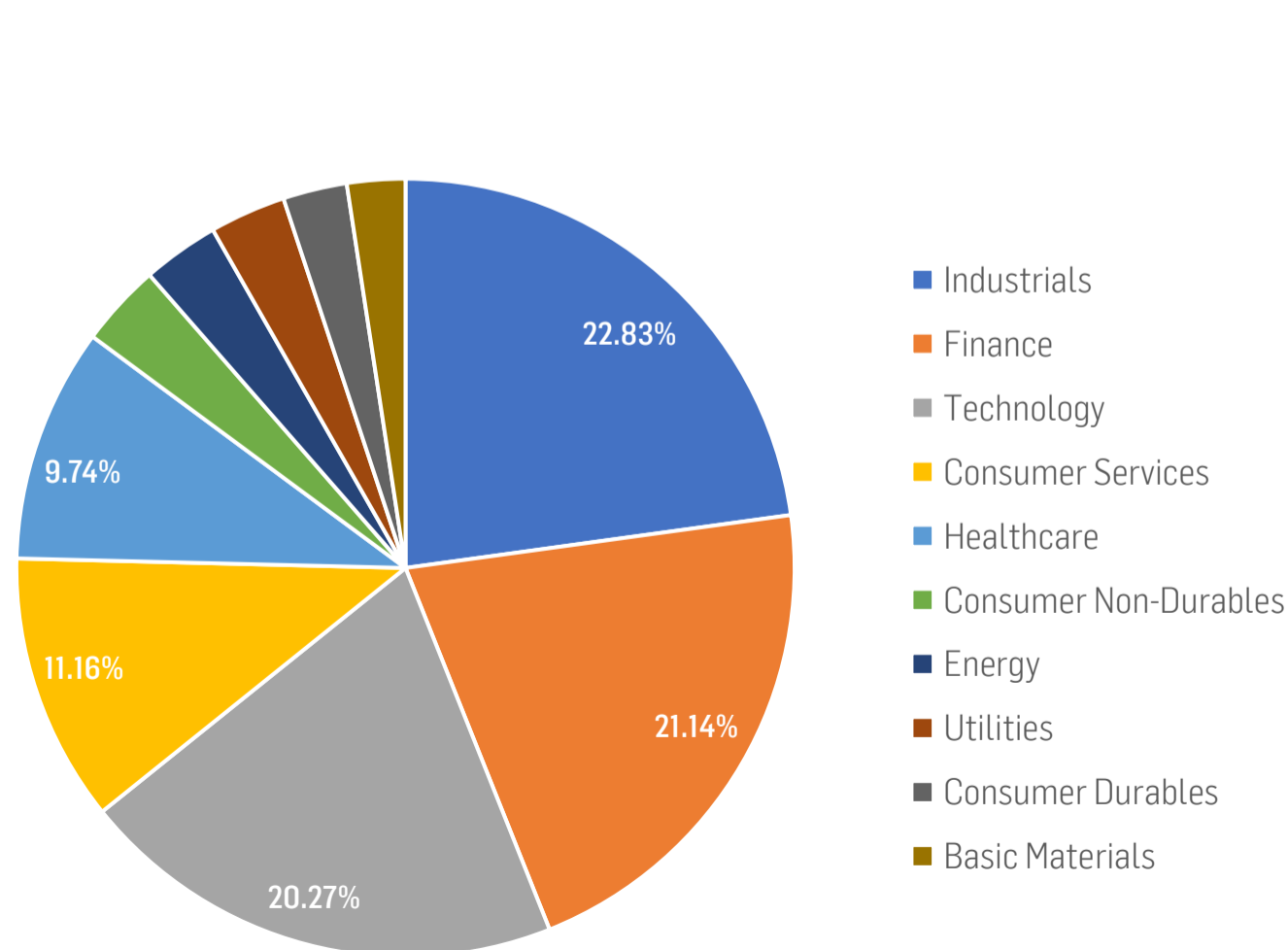
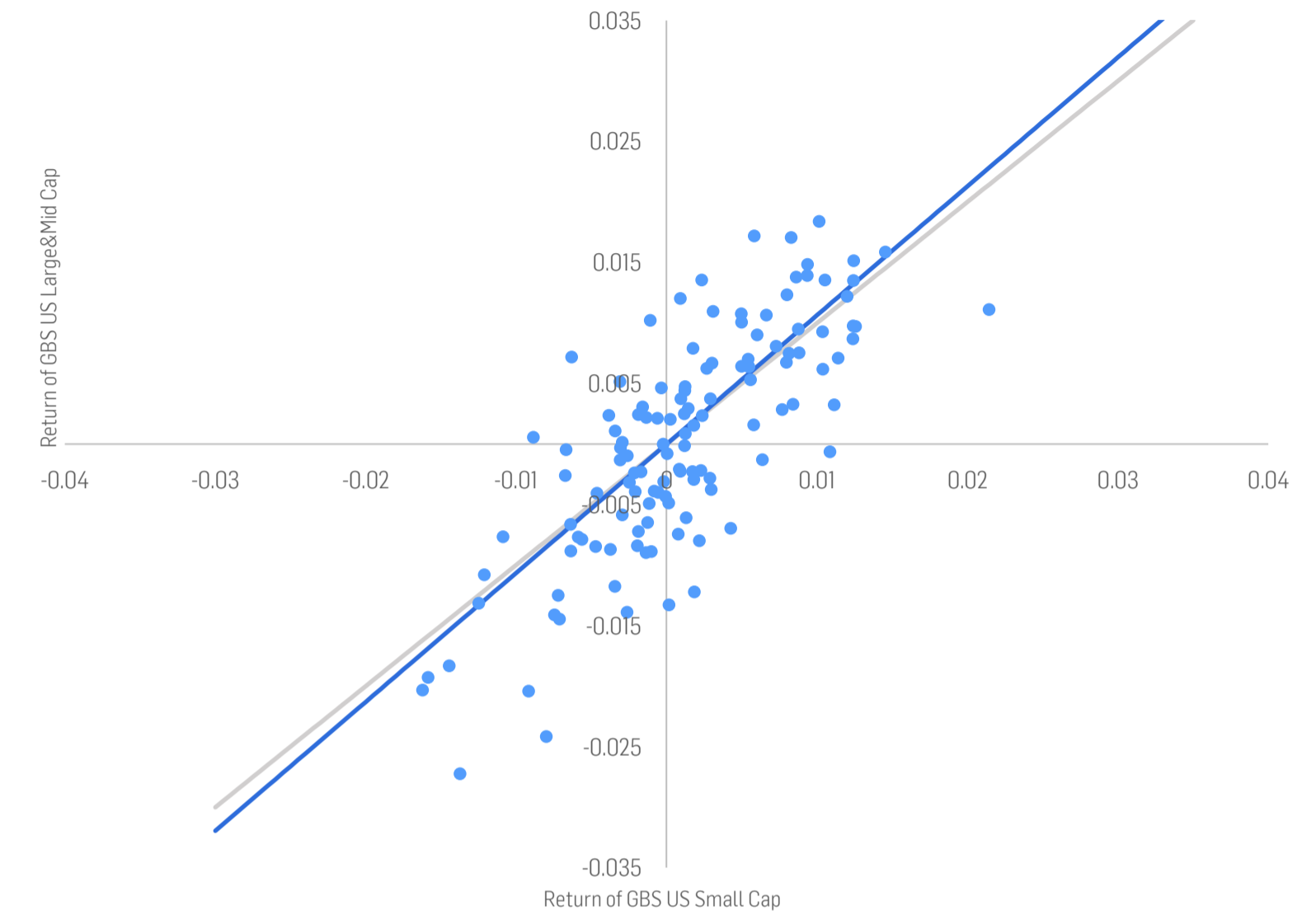
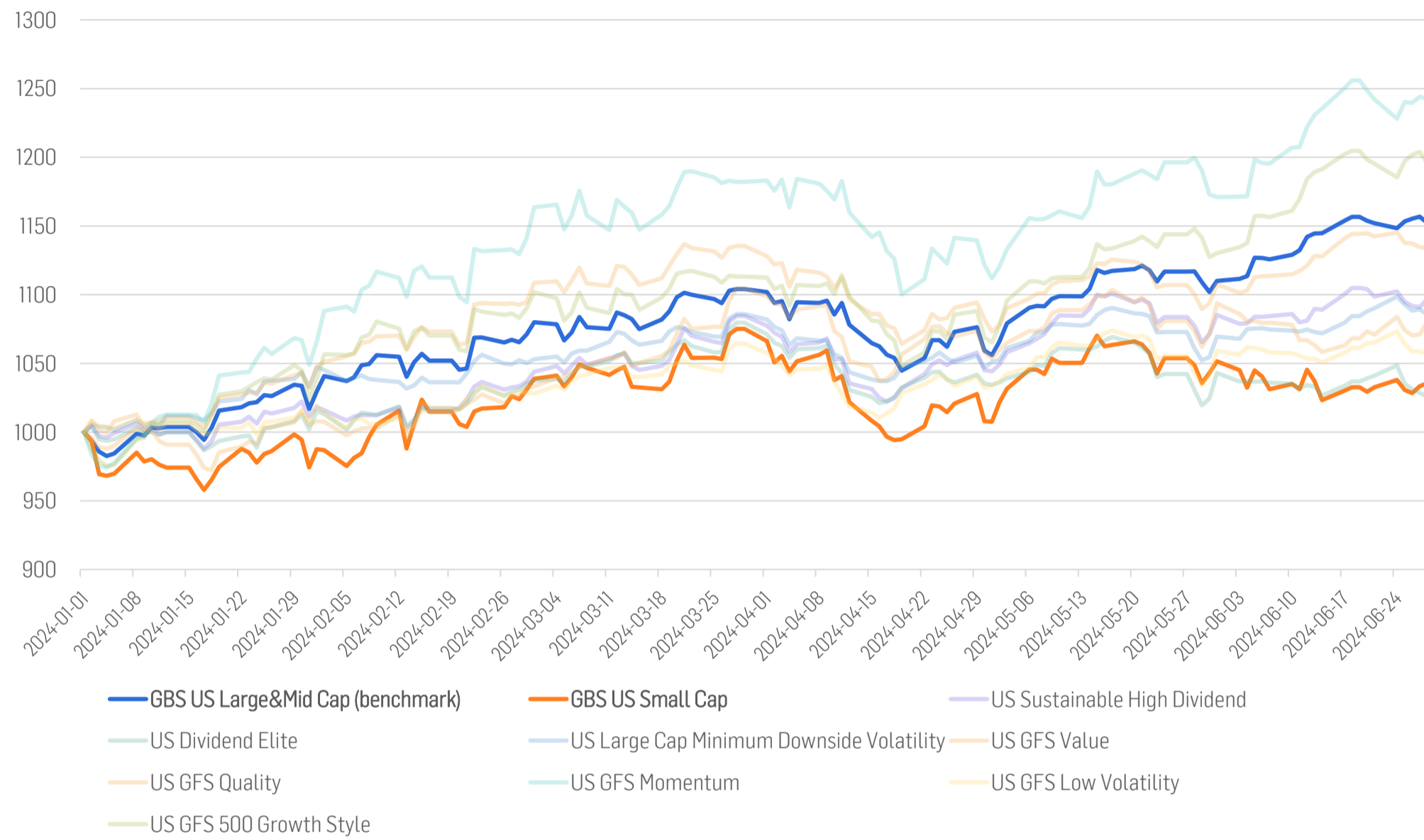


Return correlations & excess return correlations

	GBS US Large & Mid Cap (benchmark)	GBS US Small Cap	US Sustainable High Dividend	US Dividend Elite	US Large Cap Minimum Downside Volatility	US GFS Value	US GFS Quality	US GFS Momentum	US GFS Low Volatility	US GFS 500 Growth Style
GBS US Large & Mid Cap (benchmark)	1.00									
GBS US Small Cap	0.78	1.00								
US Sustainable High Dividend	0.71	0.79	1.00							
US Dividend Elite	0.57	0.74	0.87	1.00						
US Large Cap Minimum Downside Volatility	0.60	0.59	0.80	0.87	1.00					
US GFS Value	0.50	0.74	0.89	0.86	0.72	1.00				
US GFS Quality	0.90	0.73	0.76	0.66	0.67	0.55	1.00			
US GFS Momentum	0.91	0.61	0.49	0.30	0.34	0.25	0.83	1.00		
US GFS Low Volatility	0.43	0.59	0.83	0.93	0.91	0.82	0.52	0.12	1.00	
US GFS 500 Growth Style	0.97	0.65	0.52	0.36	0.42	0.27	0.83	0.95	0.20	1.00

	GBS US Small Cap	US Sustainable High Dividend	US Dividend Elite	US Large Cap Minimum Downside Volatility	US GFS Value	US GFS Quality	US GFS Momentum	US GFS Low Volatility	US GFS 500 Growth Style
GBS US Small Cap	1.00								
US Sustainable High Dividend	0.43	1.00							
US Dividend Elite	0.42	0.85	1.00						
US Large Cap Minimum Downside Volatility	0.13	0.76	0.87	1.00					
US GFS Value	0.53	0.90	0.85	0.71	1.00				
US GFS Quality	0.09	0.46	0.47	0.44	0.35	1.00			
US GFS Momentum	-0.30	-0.66	-0.78	-0.76	-0.69	-0.11	1.00		
US GFS Low Volatility	0.29	0.86	0.94	0.94	0.82	0.42	-0.82	1.00	
US GFS 500 Growth Style	-0.47	-0.93	-0.94	-0.84	-0.95	-0.43	0.77	-0.93	1.00

The index intends to track the performance of the small cap segment covering approximately the largest 85% - 99% of the free-float market capitalization in the United States.

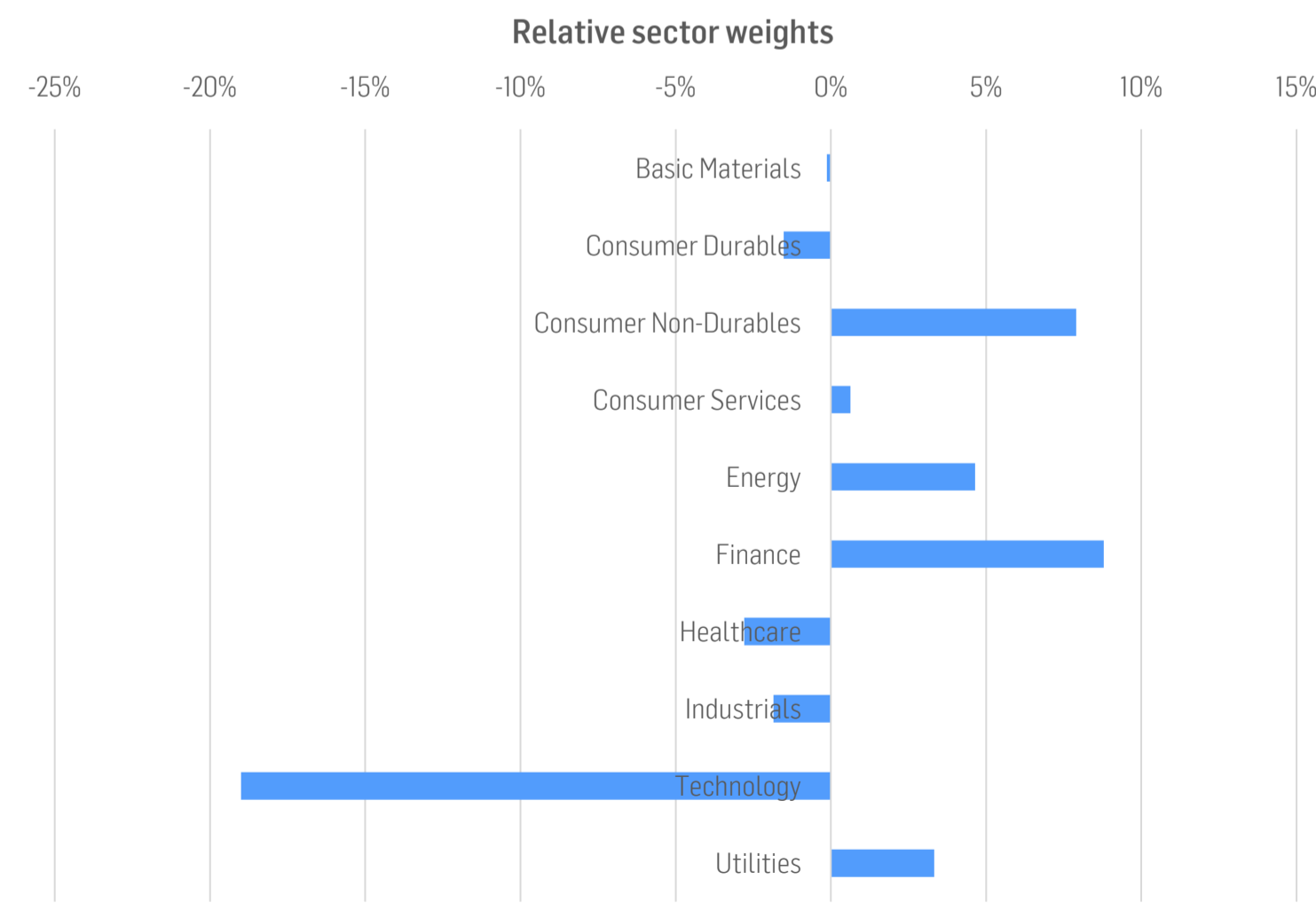
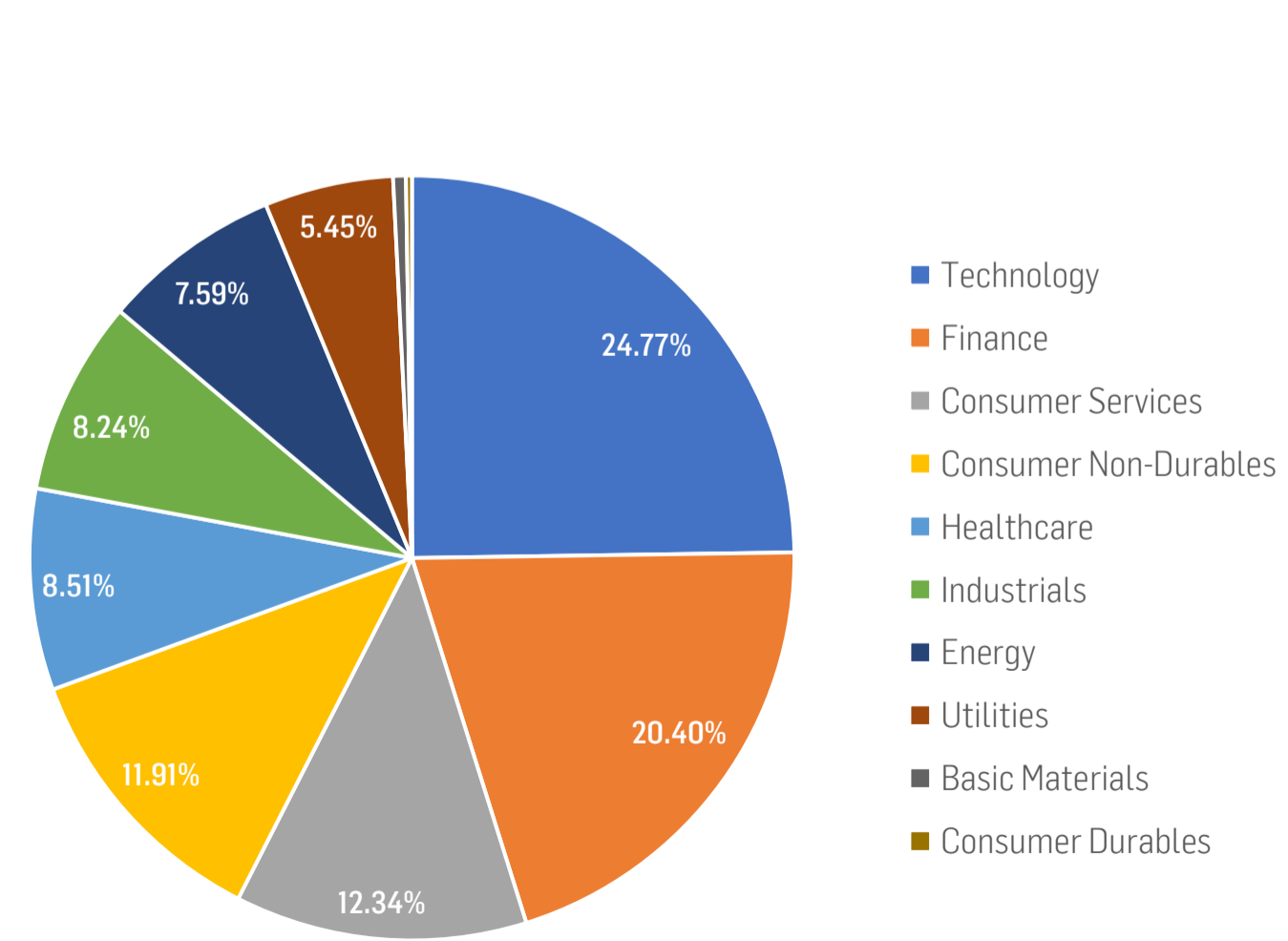
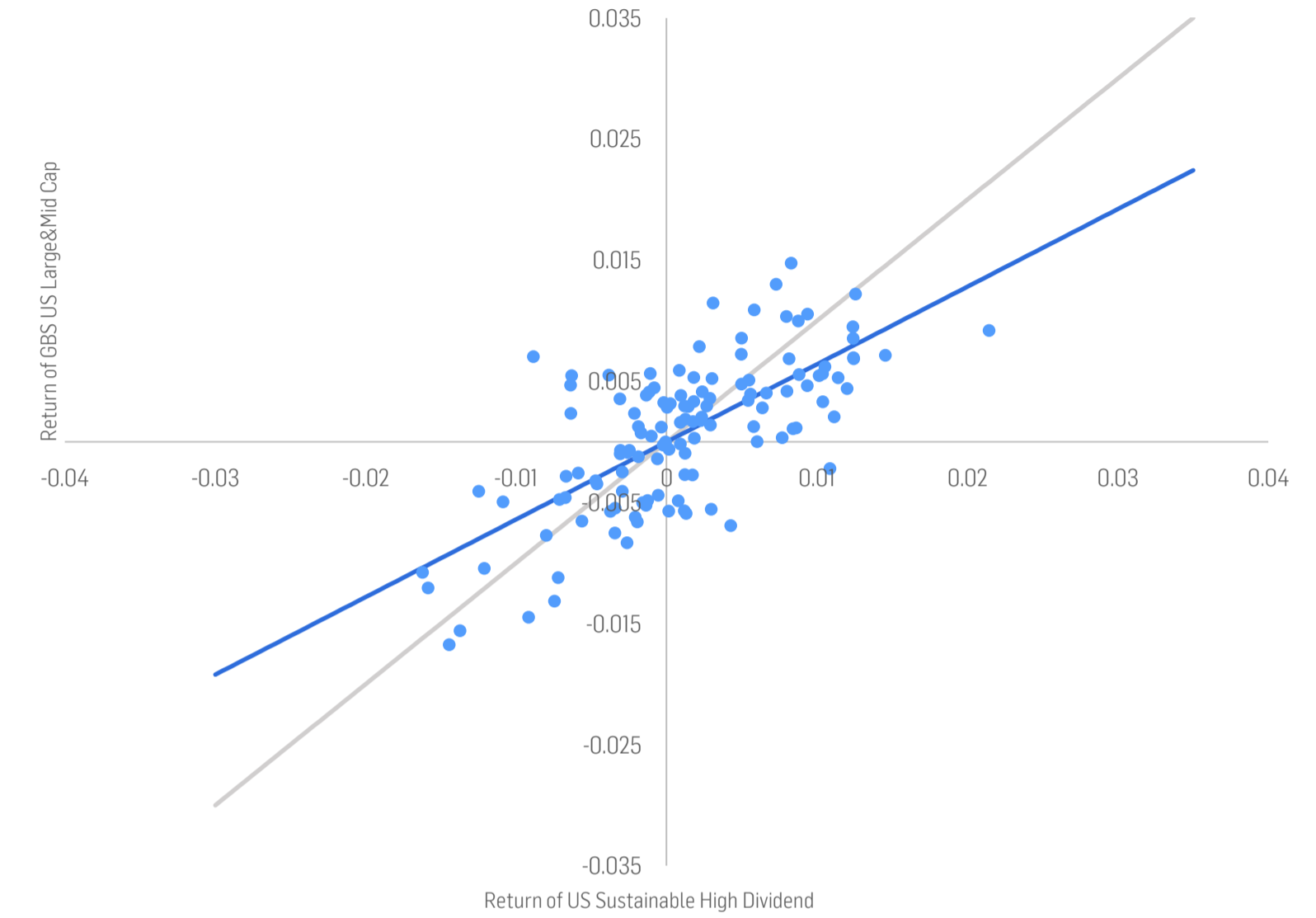
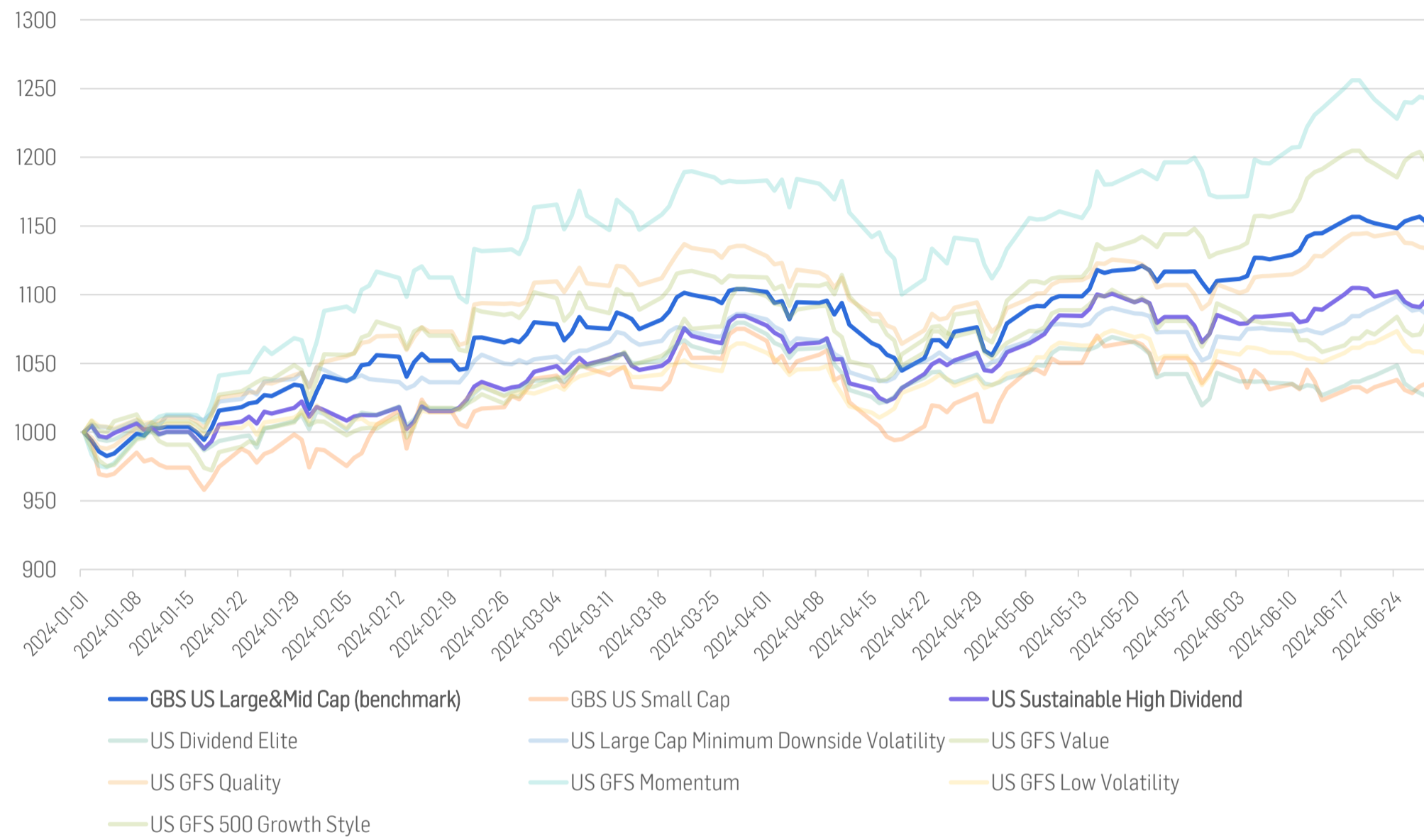


Top 5 Holdings

Monolithic Power Systems Inc	0.64%
Howmet Aerospace Inc	0.52%
Vertiv Holdings Co	0.49%
Vistra Corp	0.49%
Targa Resources Corp	0.47%

Profile – US Sustainable High Dividend

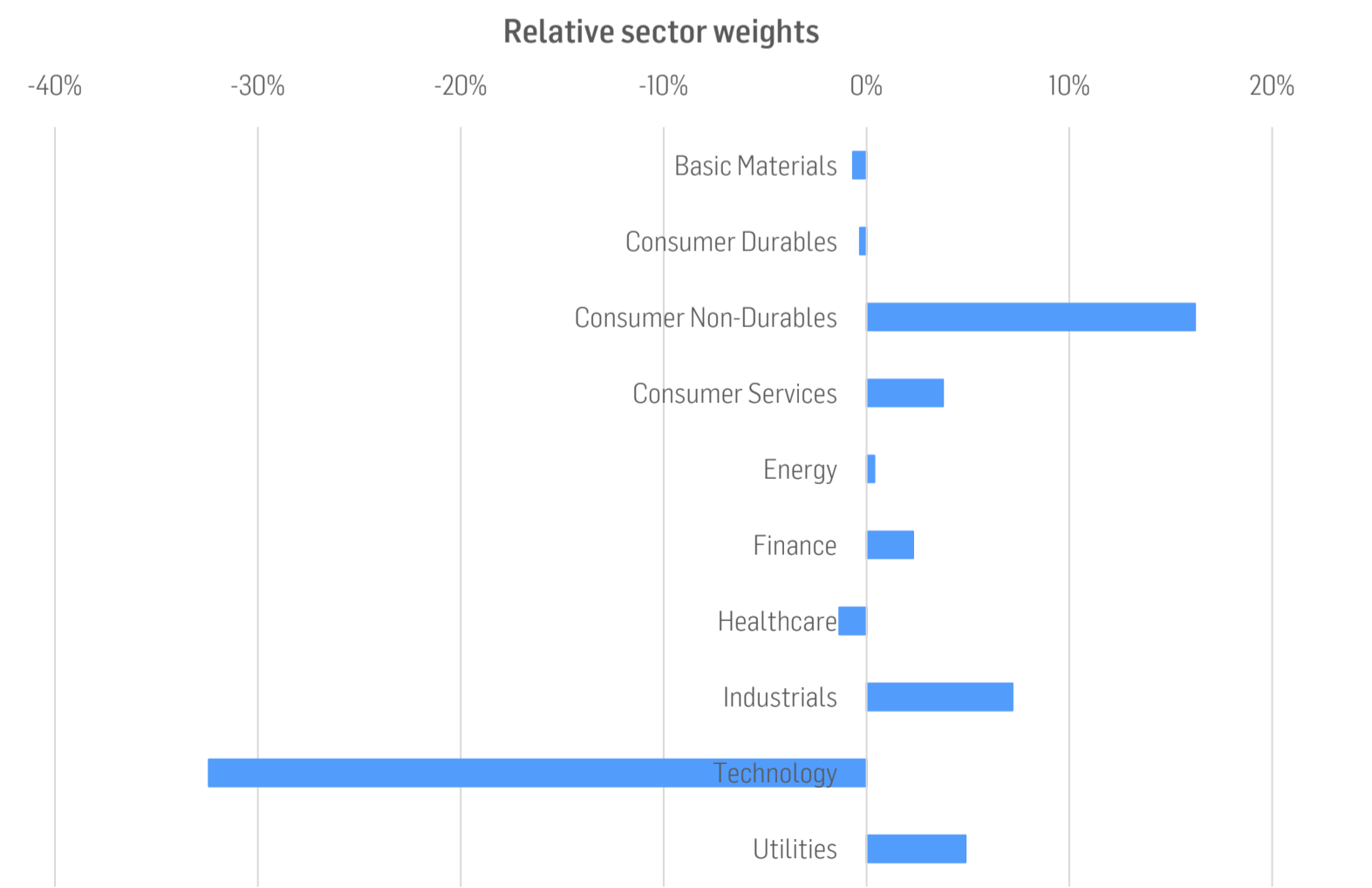
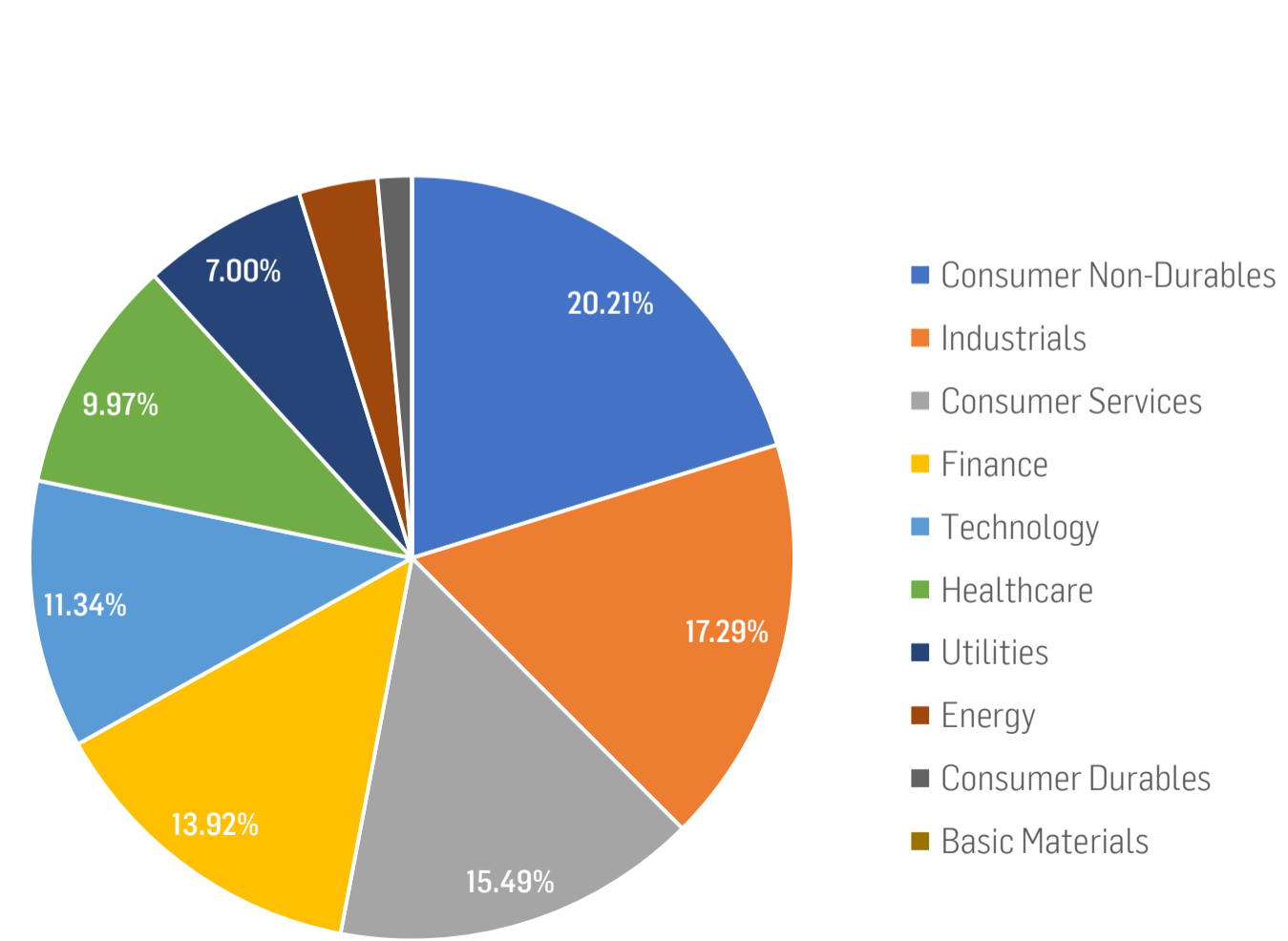
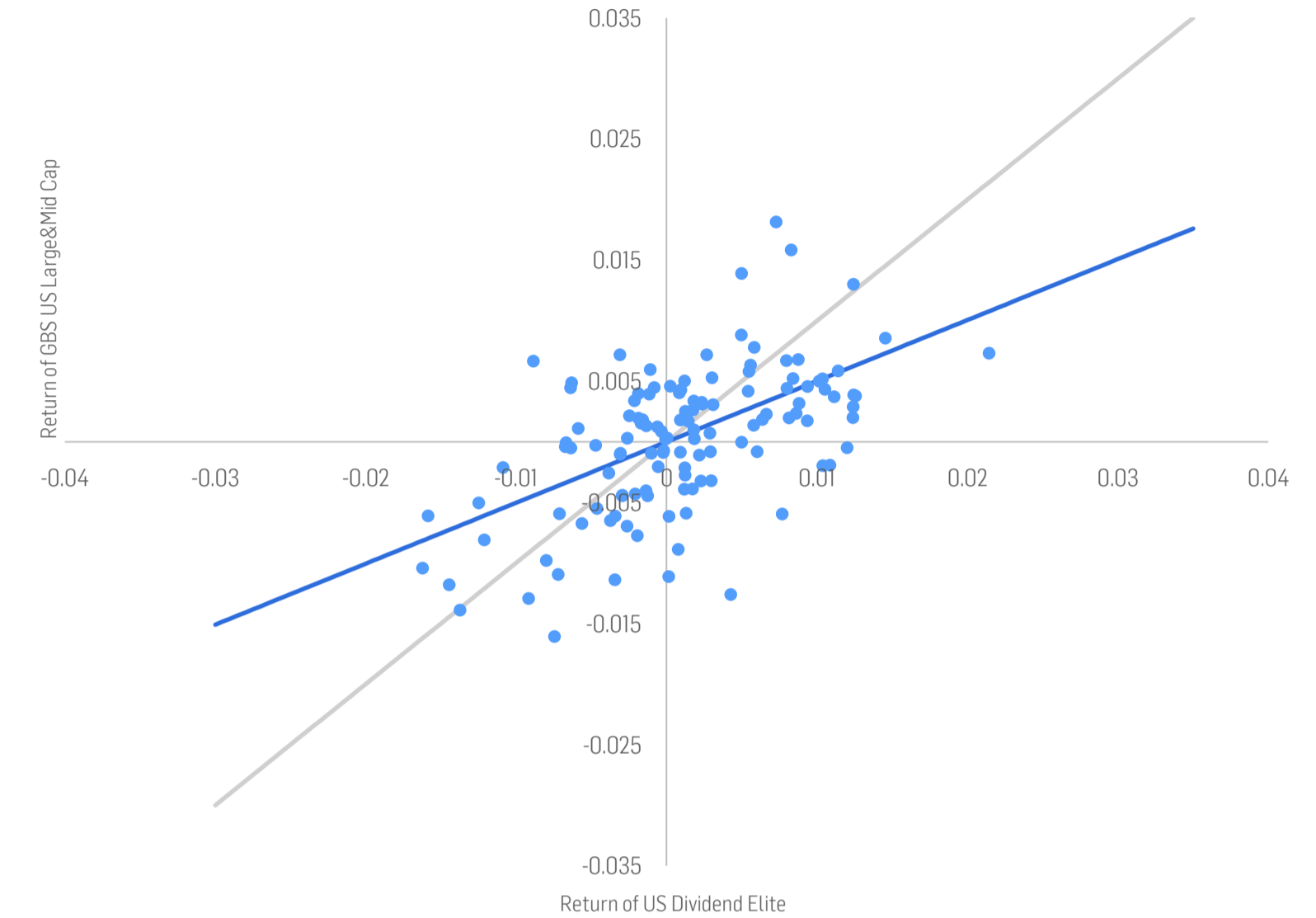
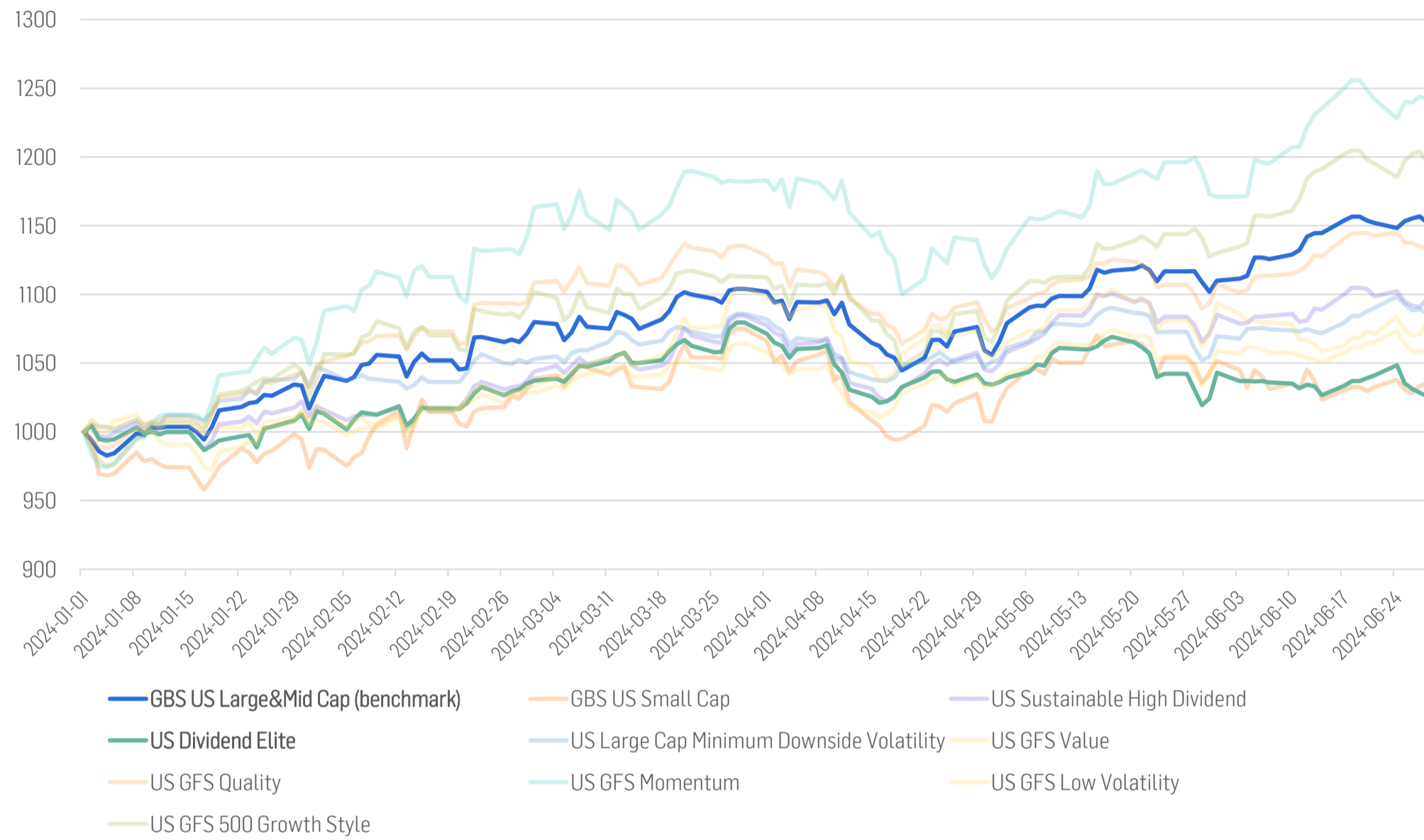
The index aims to provide exposure to equities with a high dividend yield and the capacity to sustain these dividend payouts going forward for various segments of the global stock market.



Top 5 Holdings

Broadcom Inc	7.67%
Jpmorgan Chase & Co	6.10%
Exxon Mobil Corp	4.80%
Procter & Gamble Co	4.04%
Costco Wholesale Corp	3.91%

The index aims to provide exposure to equities with a long history of stable and increasing dividend payments for various segments of the global stock market.

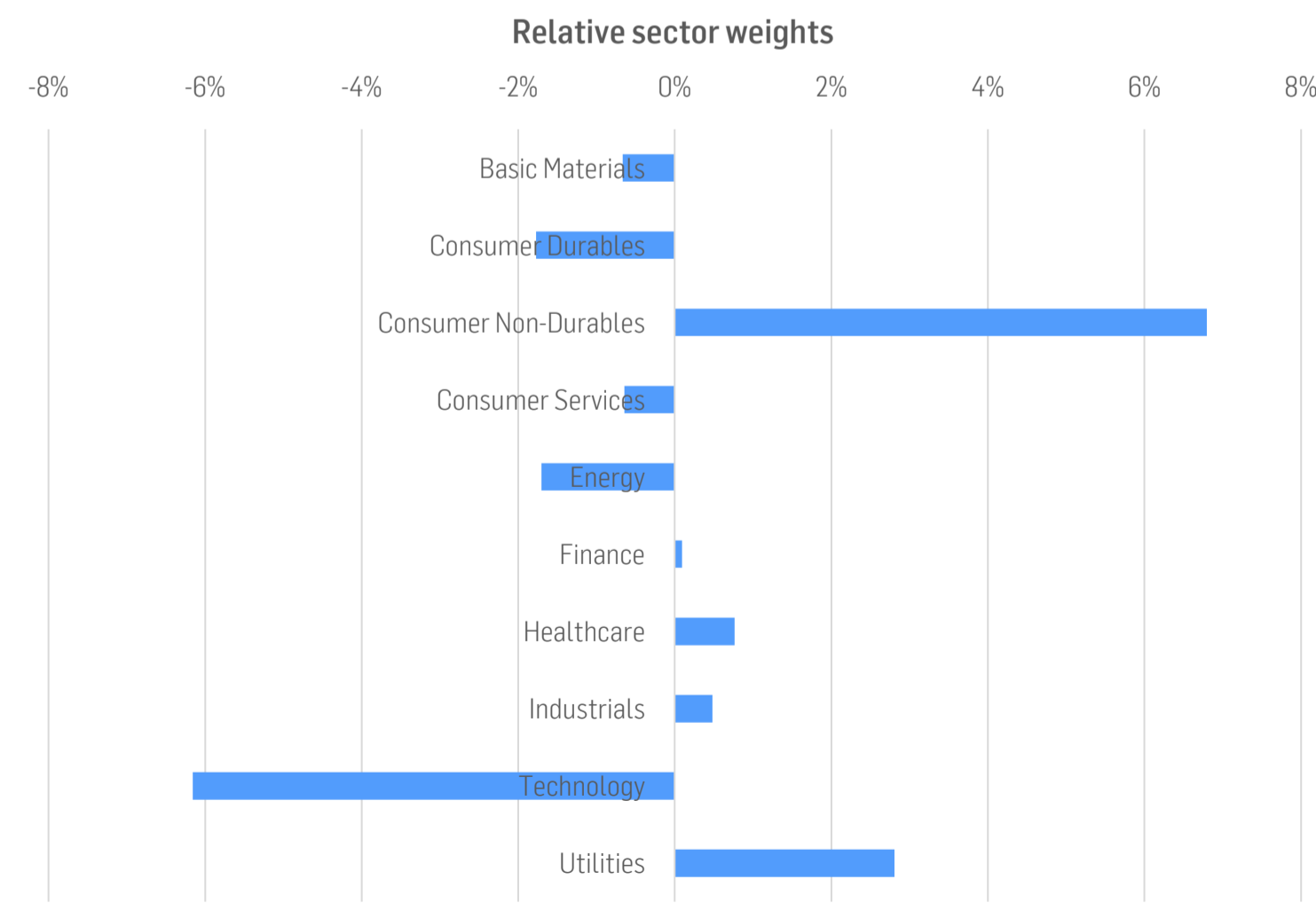
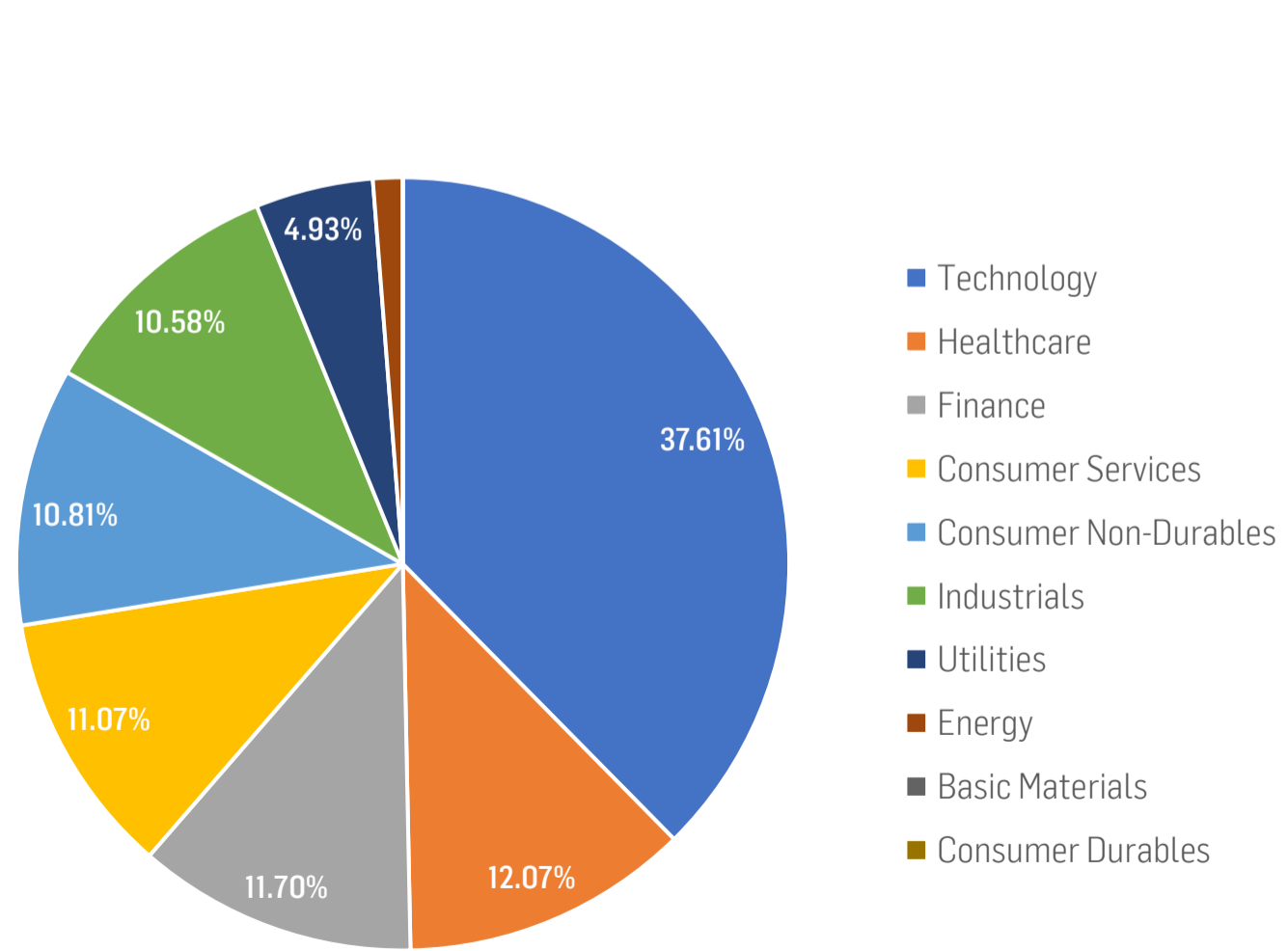
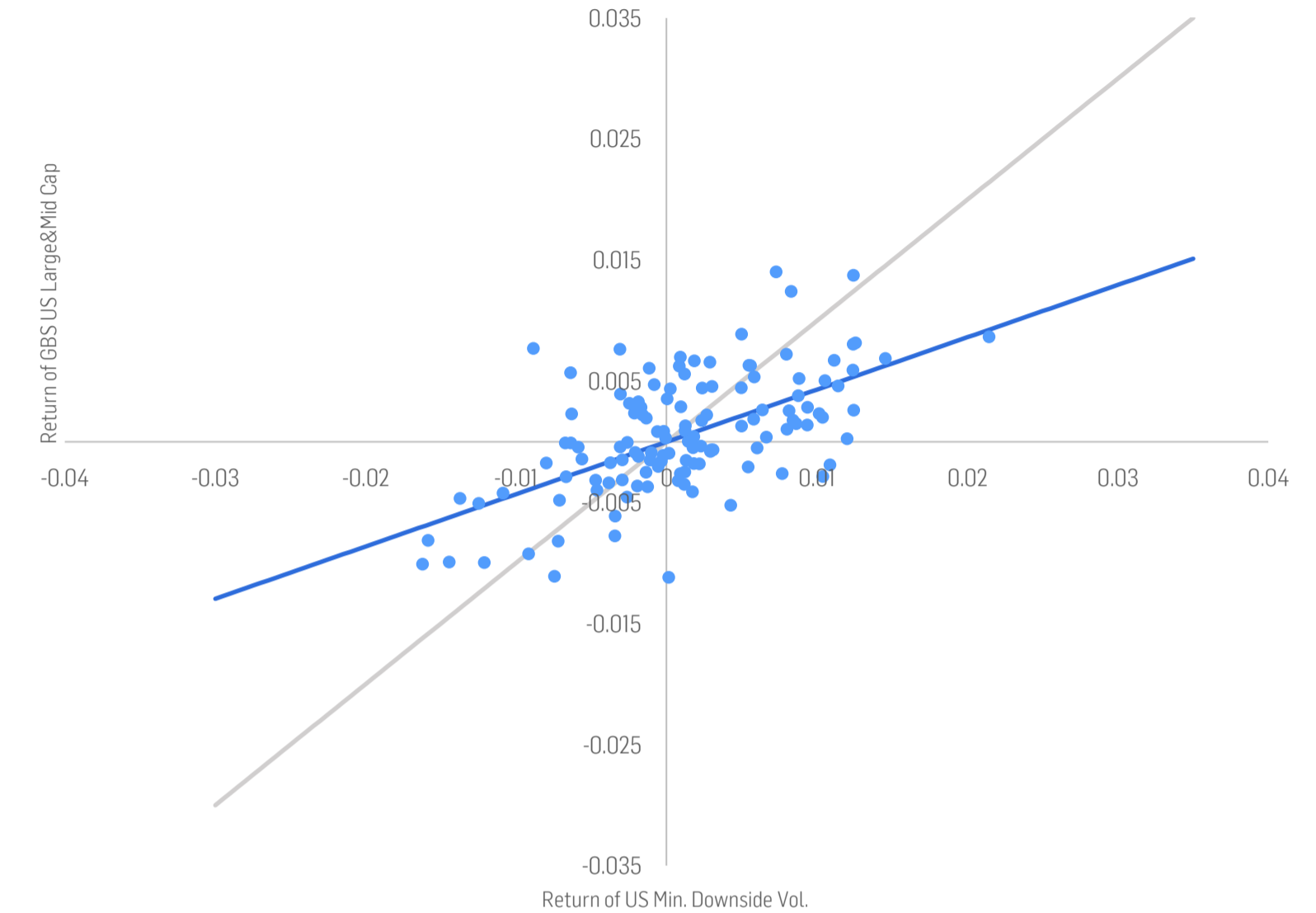
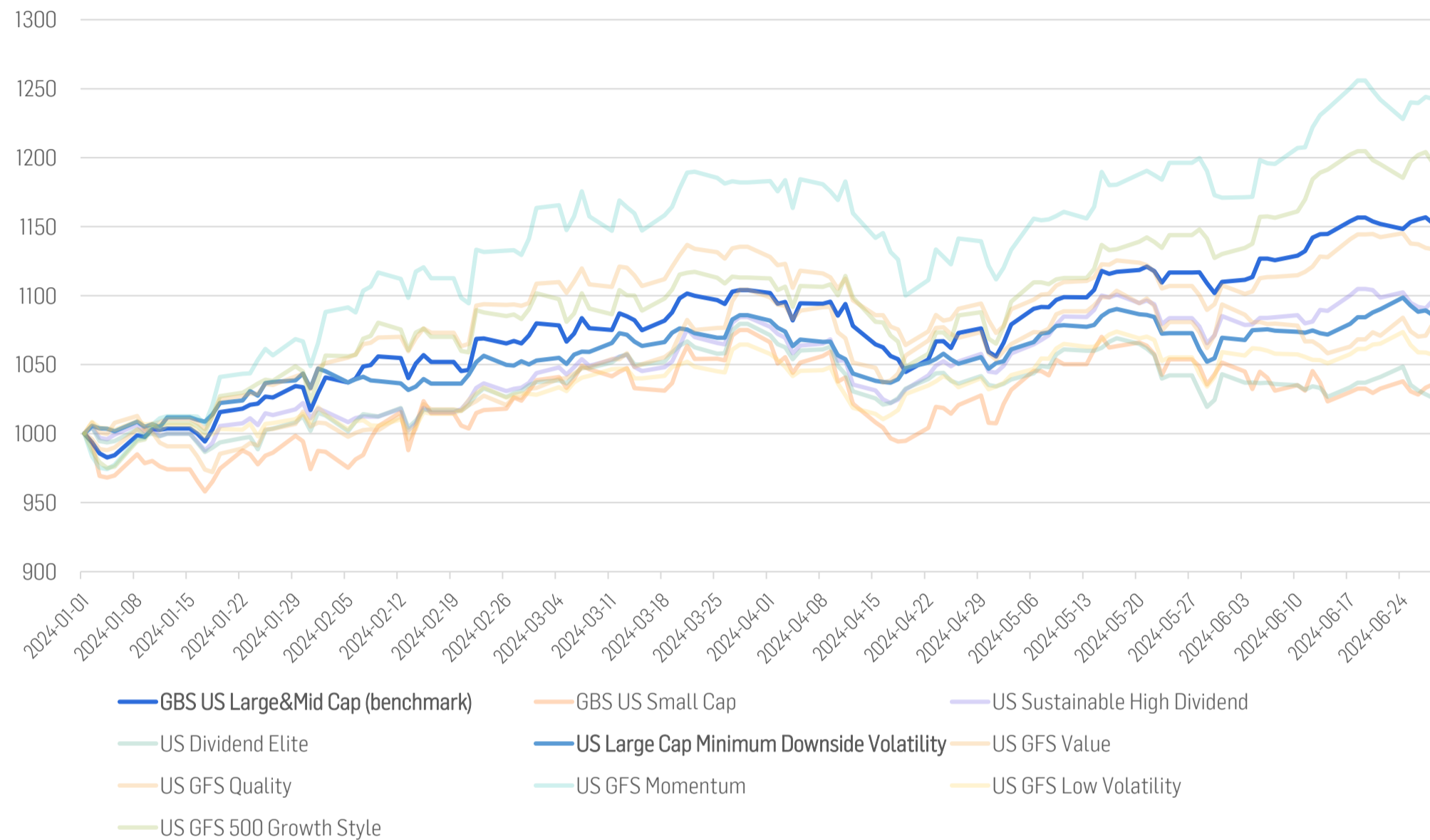


Top 5 Holdings

Eli Lilly & Co	2.03%
Essex Property Trust Inc	1.98%
Walmart Inc	1.96%
Nextera Energy Inc	1.91%
Colgate-Palmolive Co	1.91%

Profile – US Large Cap Minimum Downside Volatility

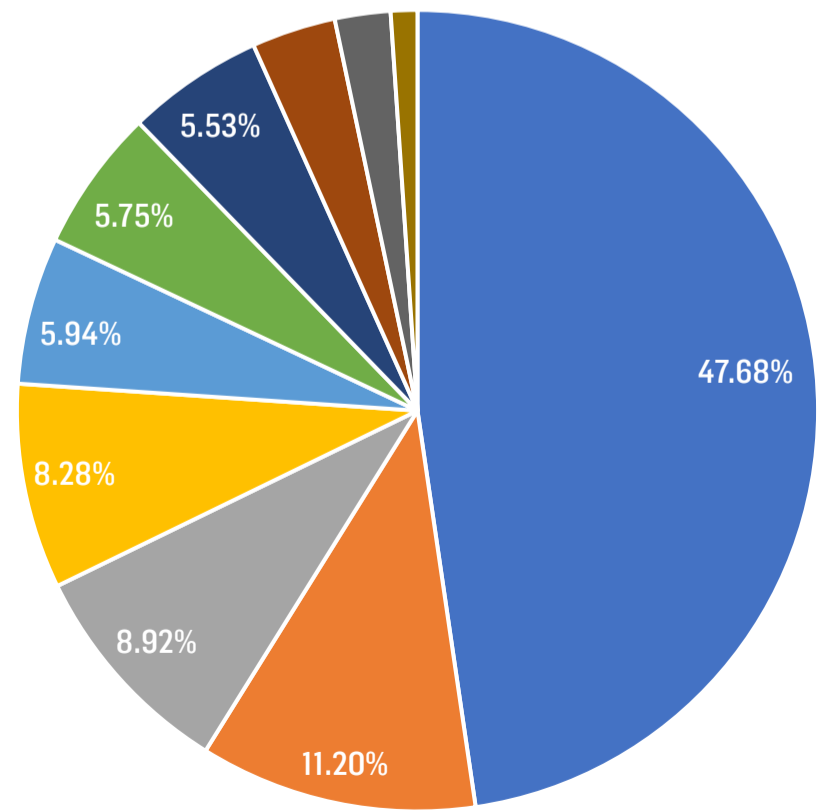
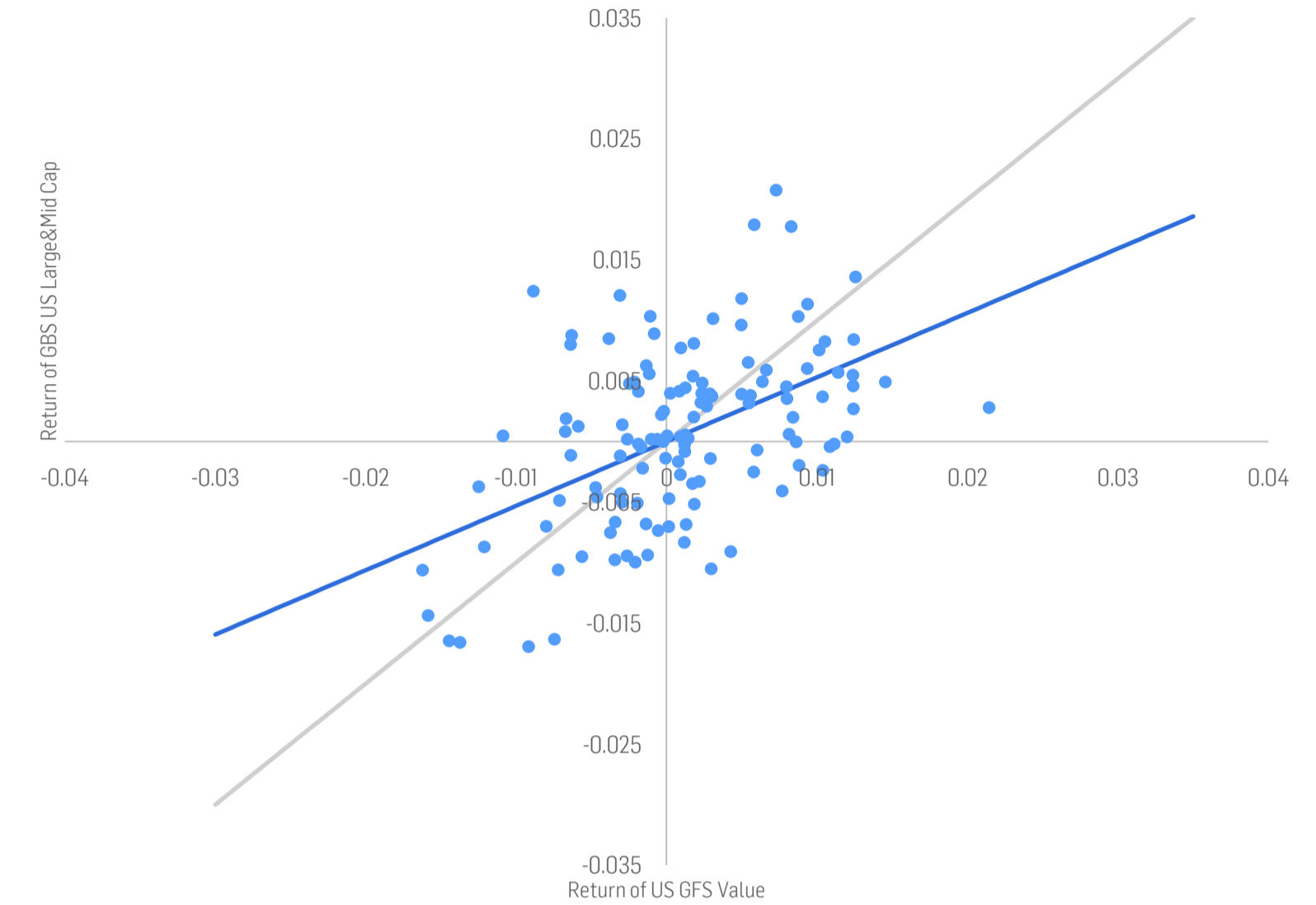
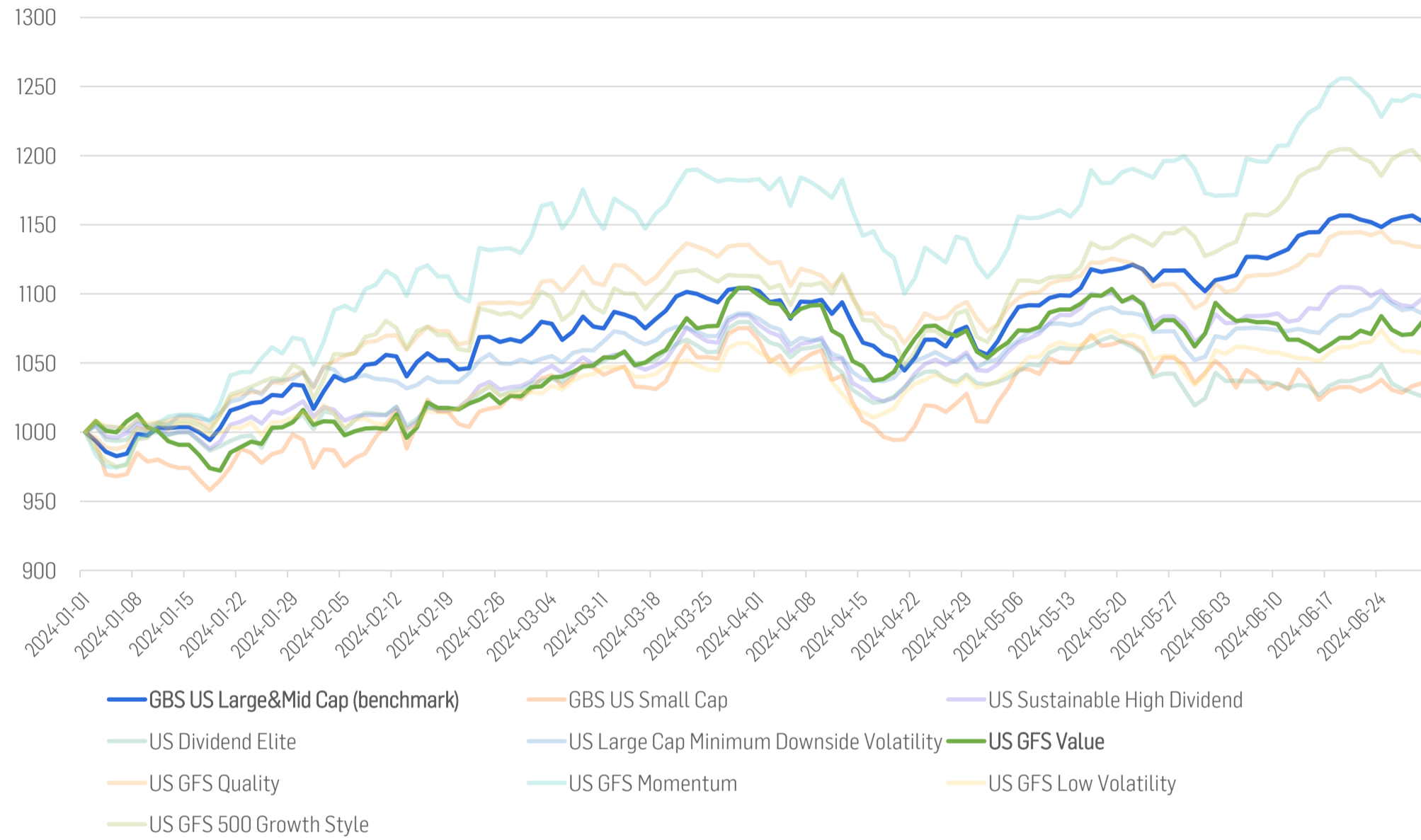
The index aims to track the performance of US companies and construct a portfolio which exhibits low downside volatility and avoids excessive sector concentration and index turnover.



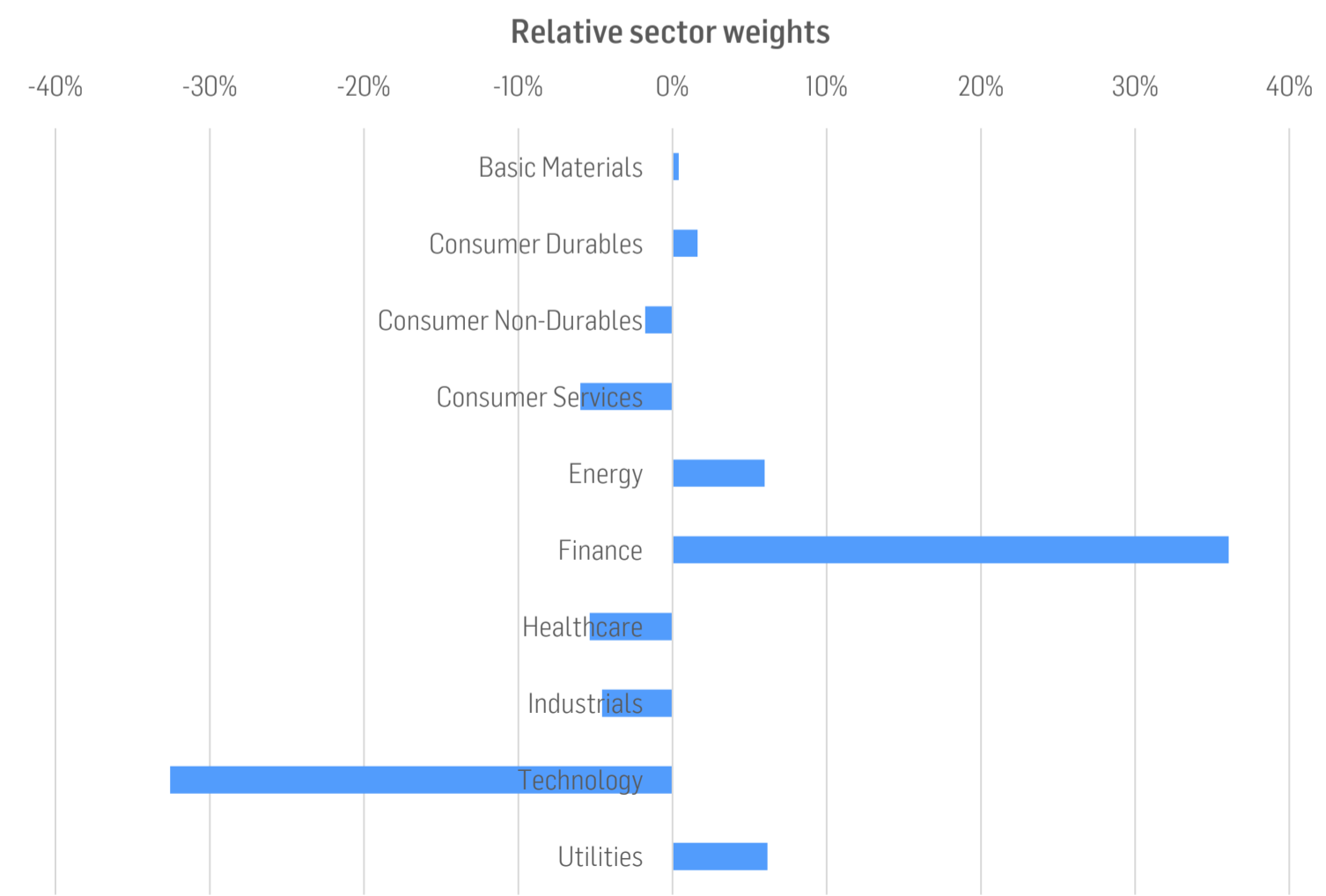
Top 5 Holdings

Garmin Ltd	3.89%
Amphenol Corp New Cl A	3.73%
Oracle Corp	3.43%
Motorola Solutions Inc	3.41%
Progressive Corp	3.28%

The index intends to track the performance of companies from the Solactive GBS United States Large & Mid Cap Index that exhibit Value characteristics.



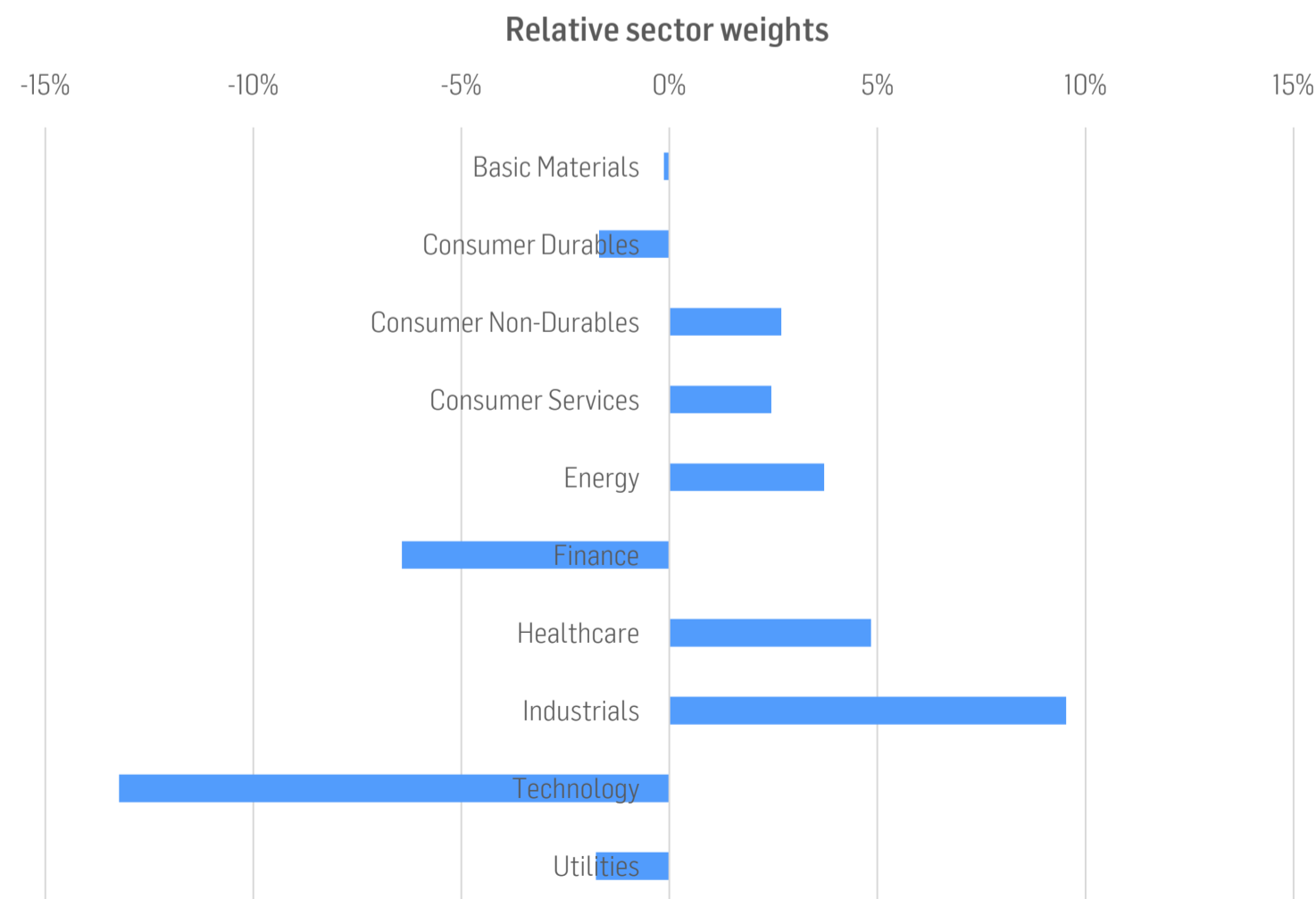
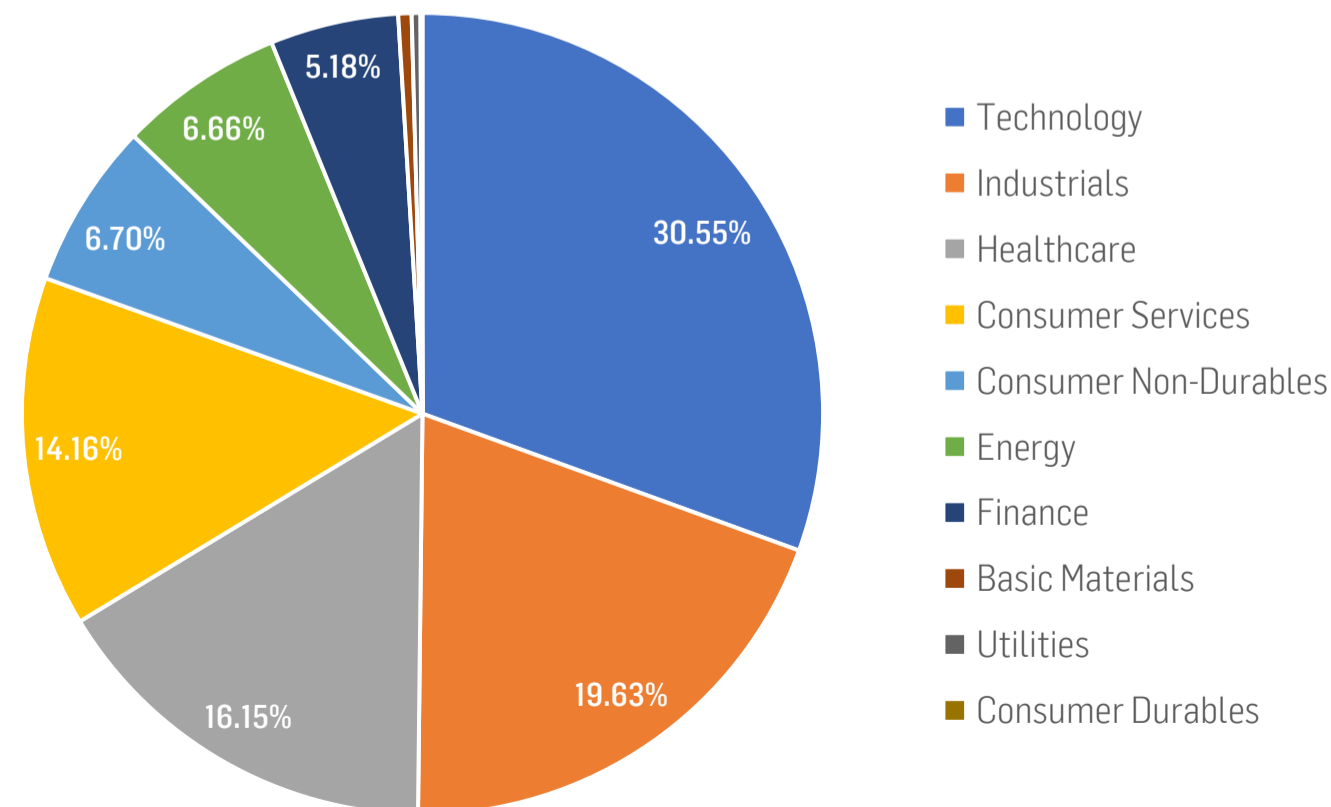
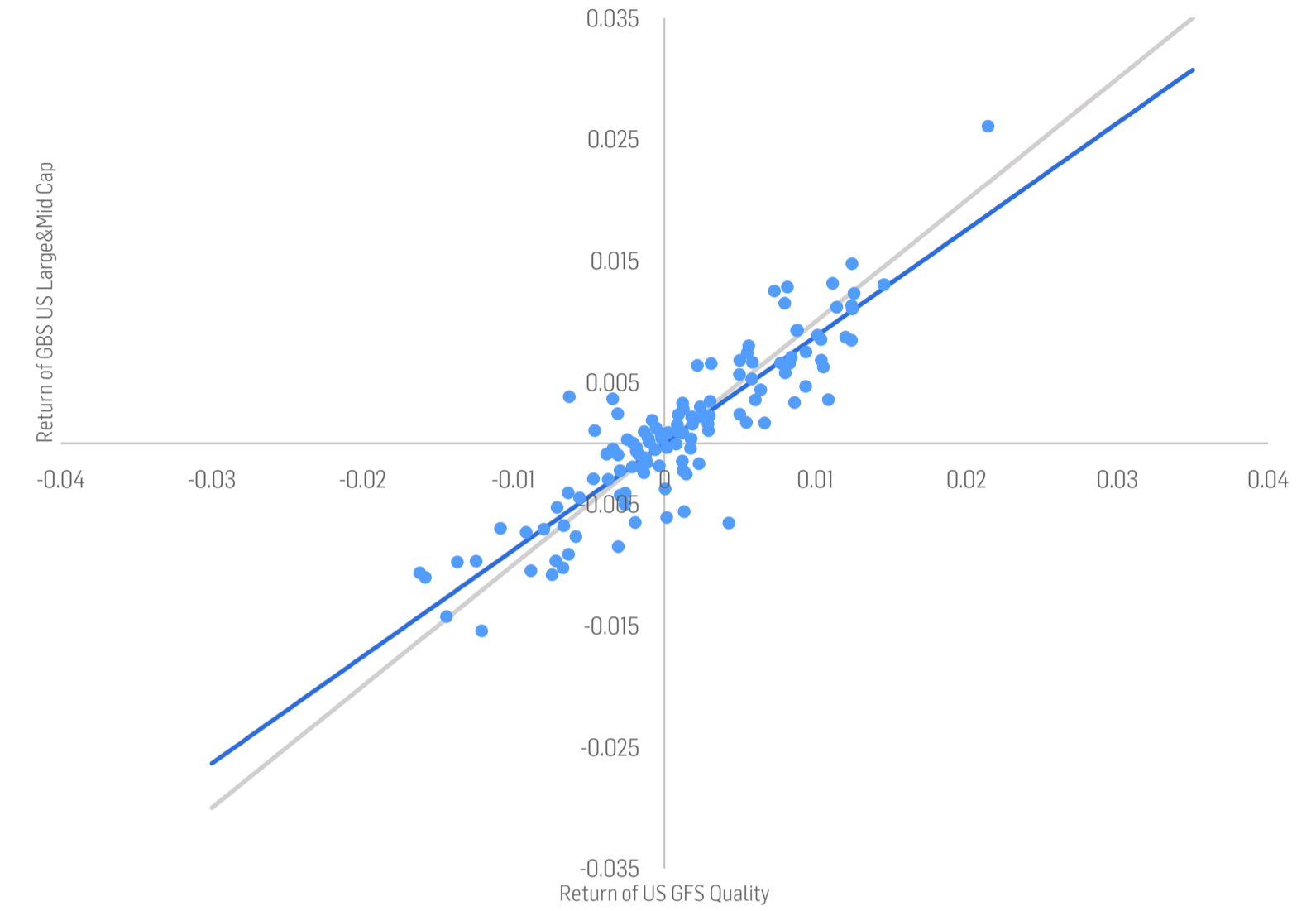
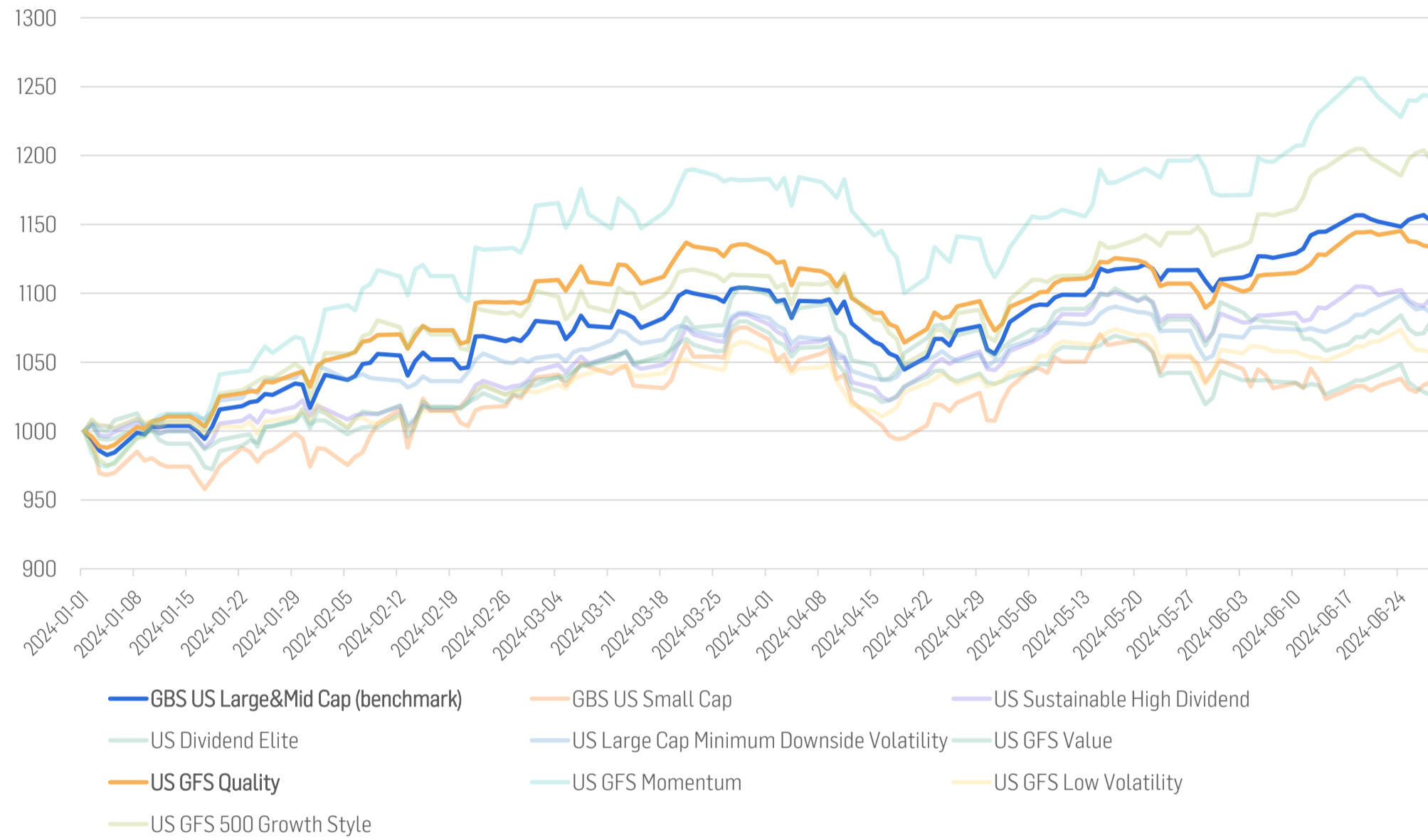
- Finance
- Technology
- Energy
- Utilities
- Healthcare
- Consumer Services
- Industrials
- Consumer Durables
- Consumer Non-Durables
- Basic Materials



Top 5 Holdings

Bank Of America Corp	5.42%
Jpmorgan Chase & Co	5.20%
Berkshire Hathaway Inc-Cl B	4.93%
Exxon Mobil Corp	4.15%
Wells Fargo & Co	4.01%

The index intends to track the performance of companies from the Solactive GBS United States Large & Mid Cap Index that exhibit Quality characteristics.

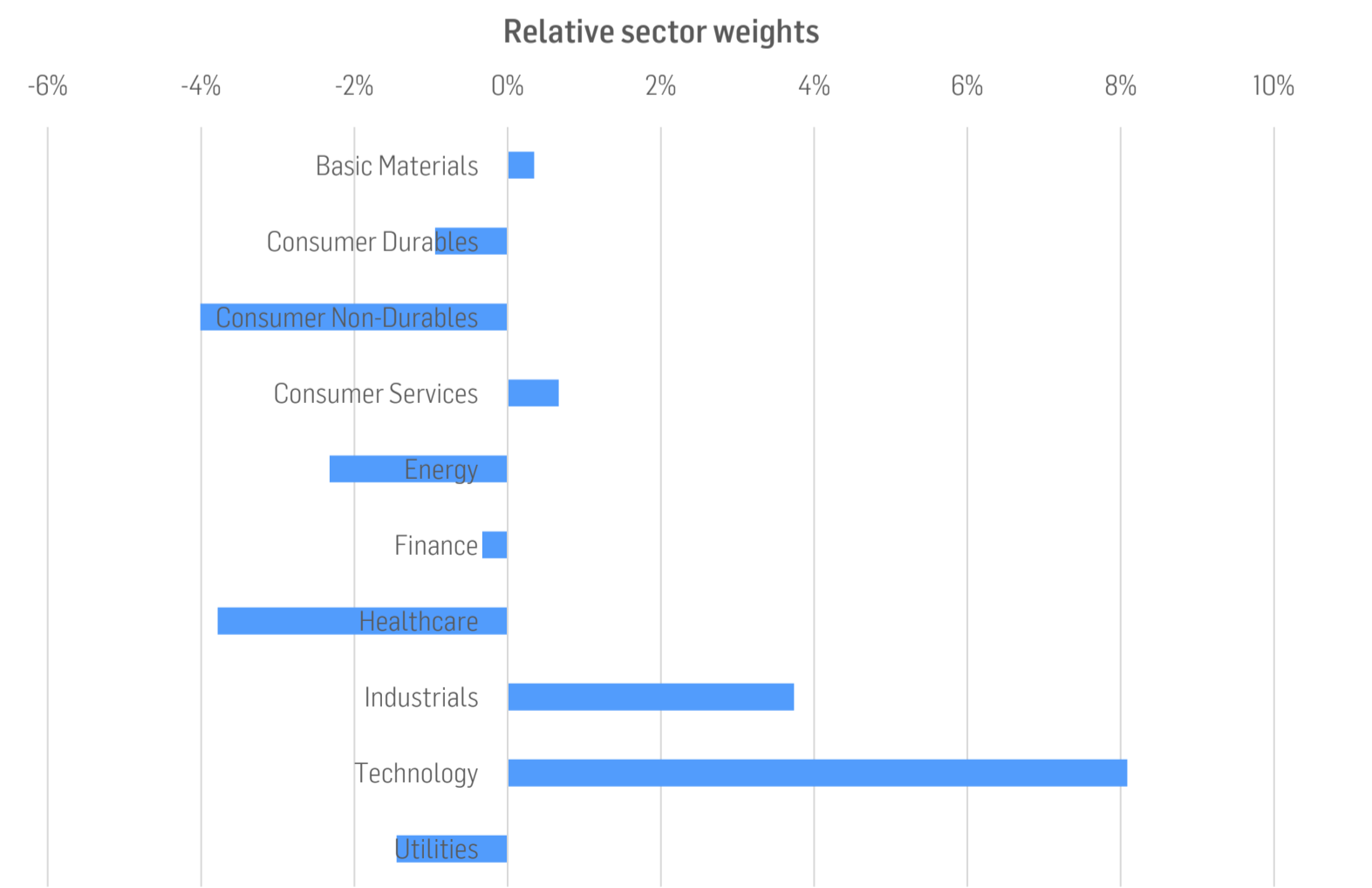
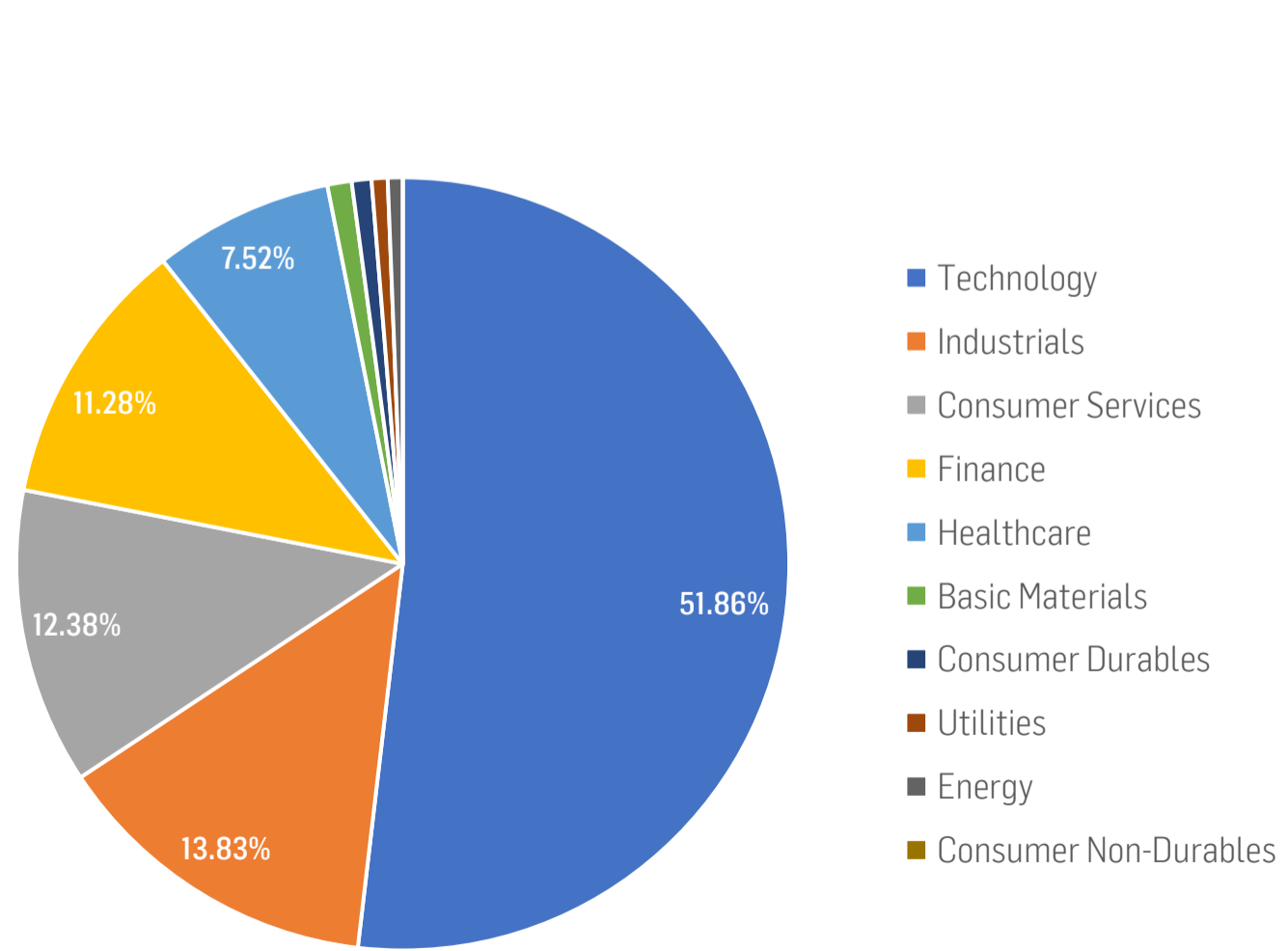
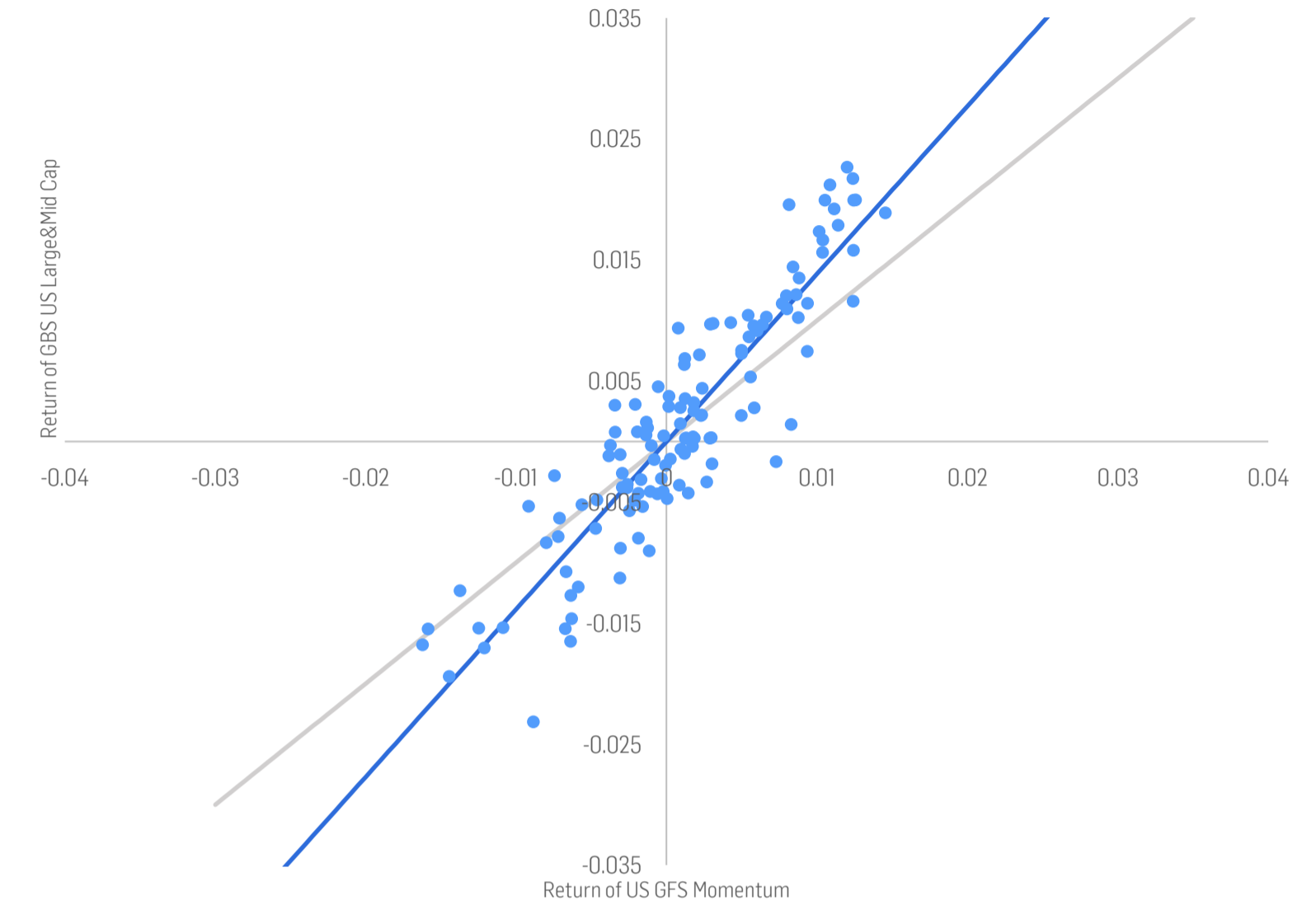
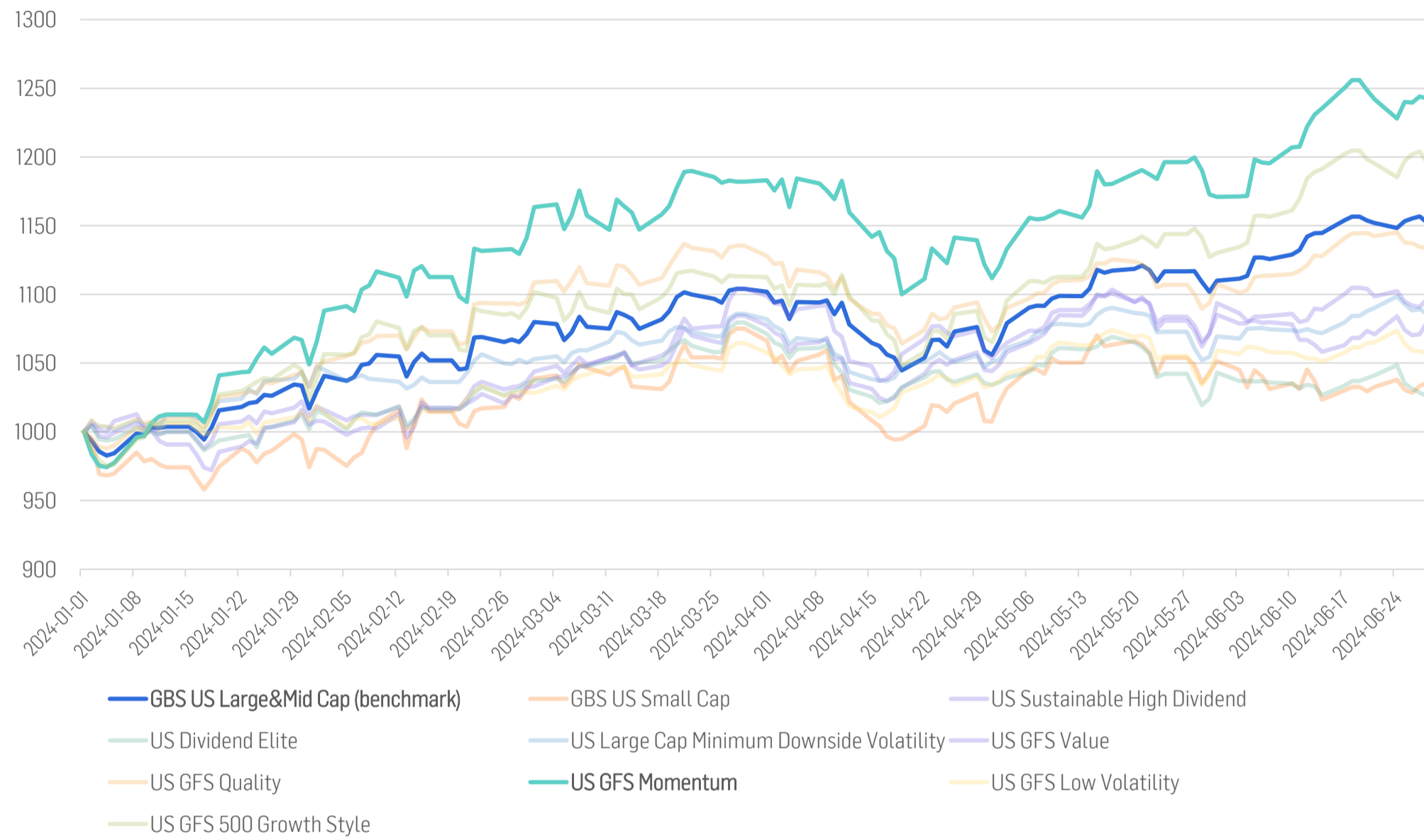


Top 5 Holdings

Apple Inc	6.13%
Broadcom Inc	5.99%
Home Depot Inc	4.73%
Abbvie Inc	4.58%
Mastercard Inc-Class A	4.36%

Profile – US GFS Momentum

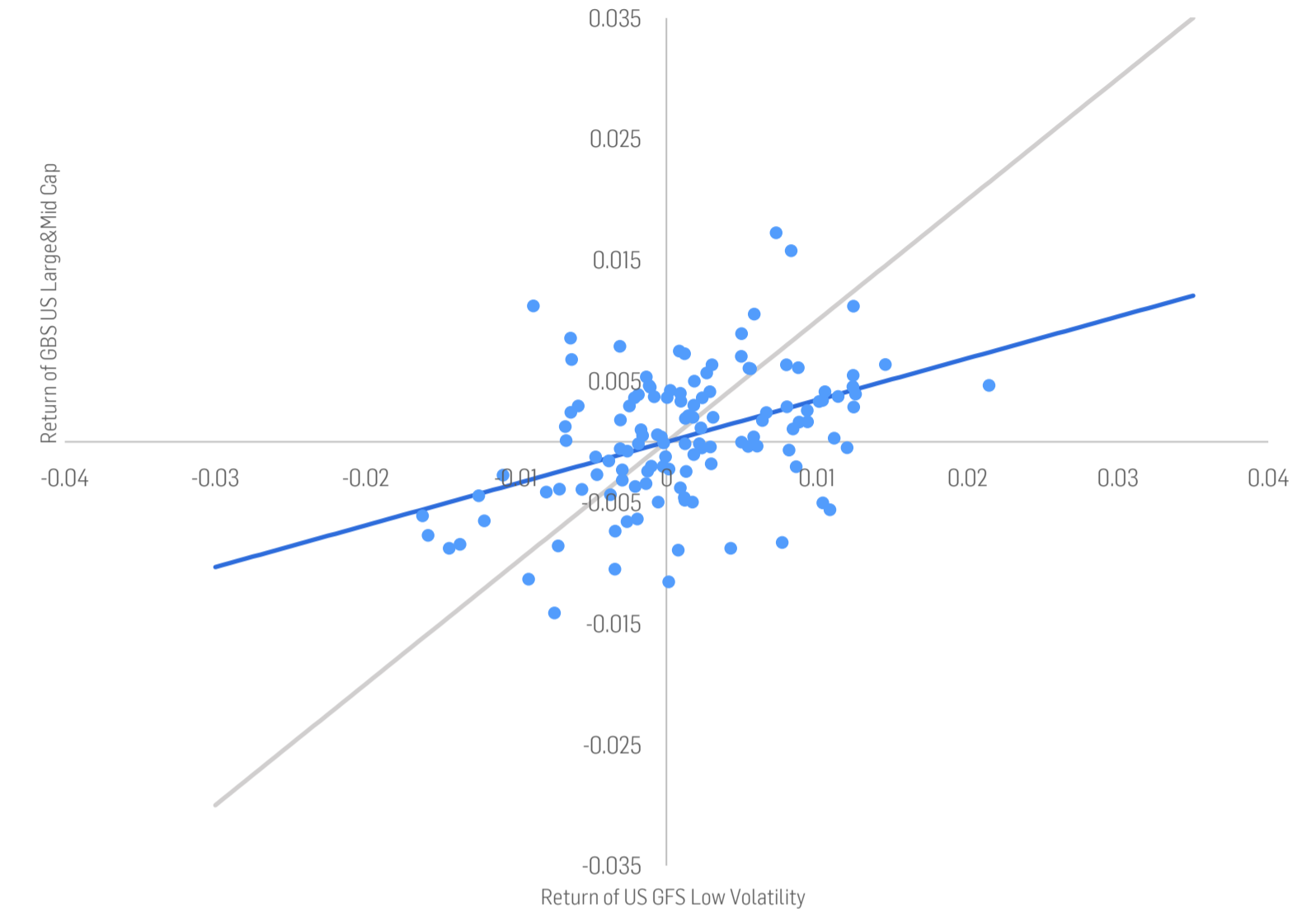
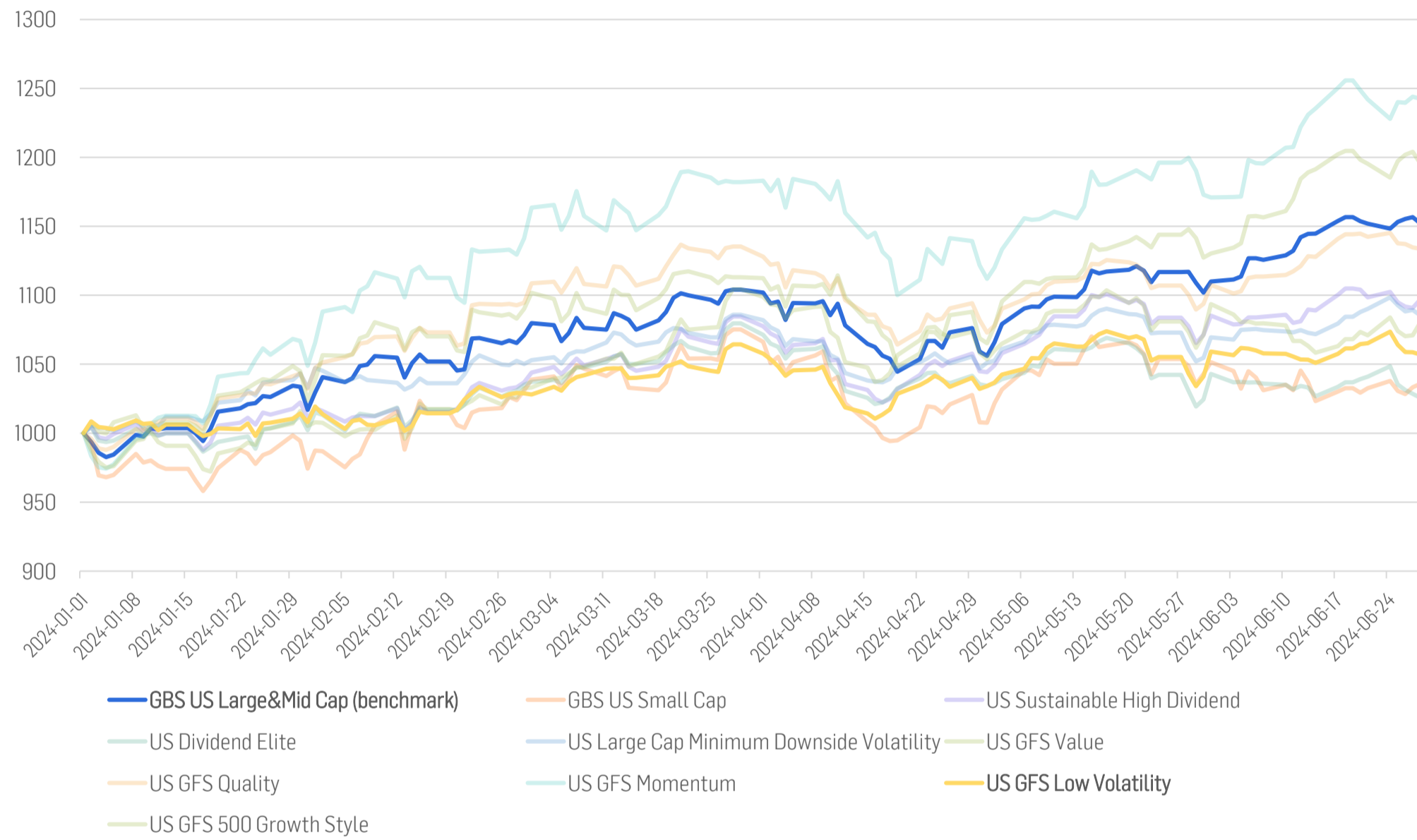
The index intends to track the performance of companies from the Solactive GBS United States Large & Mid Cap Index that exhibit Momentum characteristics.



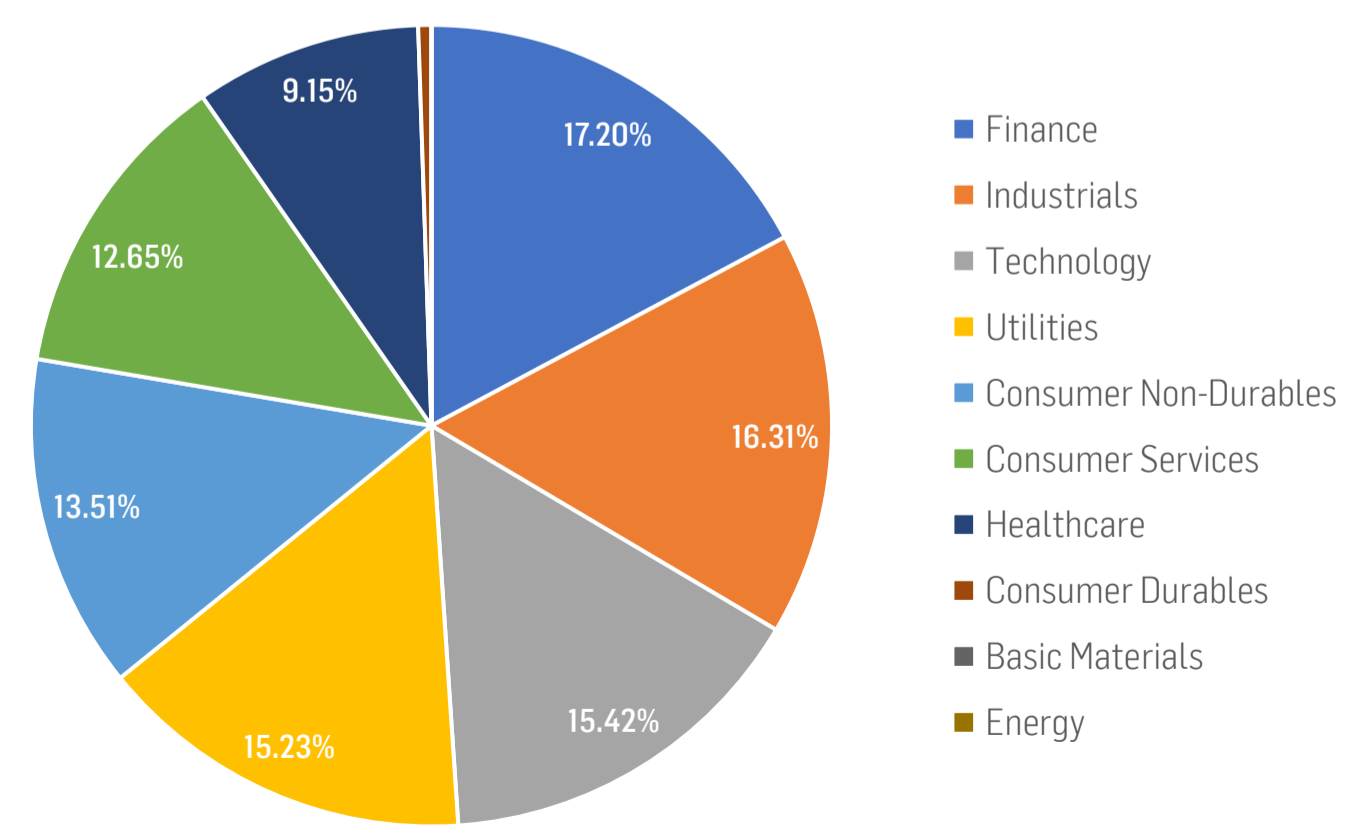
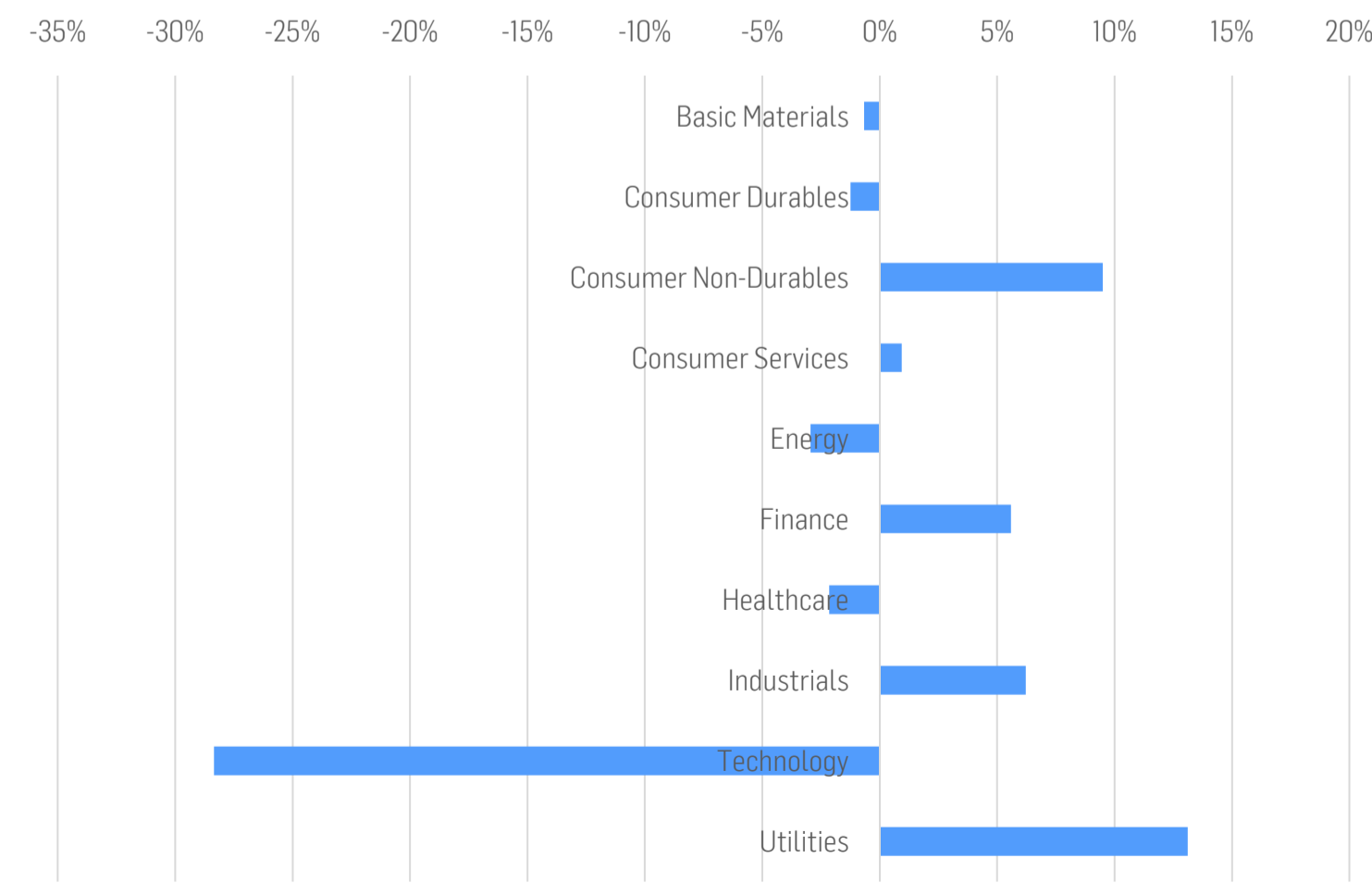
Top 5 Holdings

Nvidia Corp	6.72%
Broadcom Inc	5.69%
Eli Lilly & Co	5.50%
Amazon.Com Inc	5.01%
Microsoft Corp	4.99%

The index intends to track the performance of companies from the Solactive GBS United States Large & Mid Cap Index that exhibit Low Volatility characteristics.



Relative sector weights

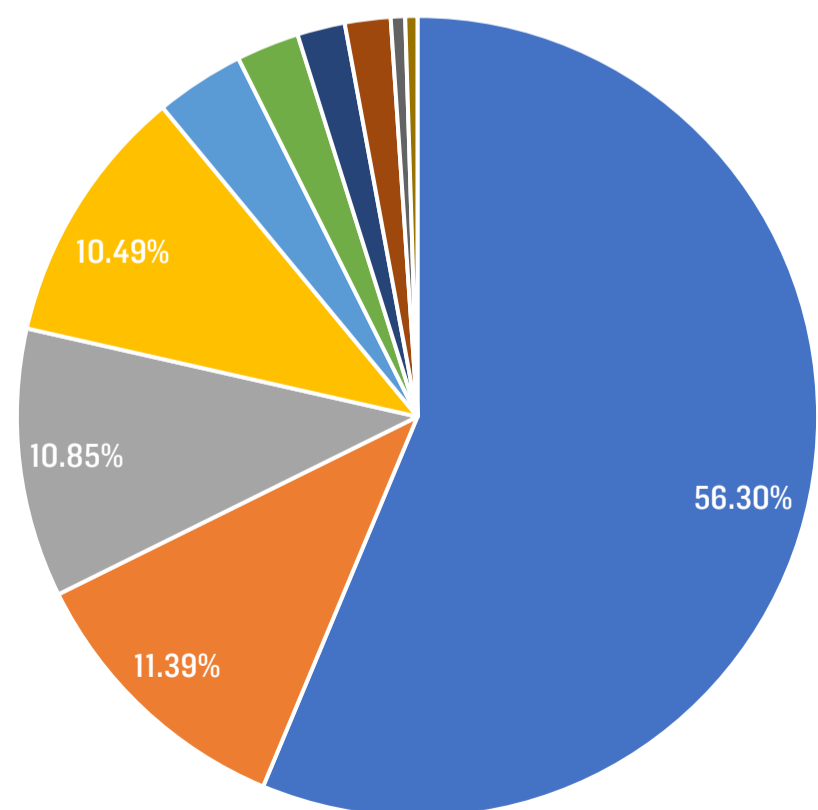
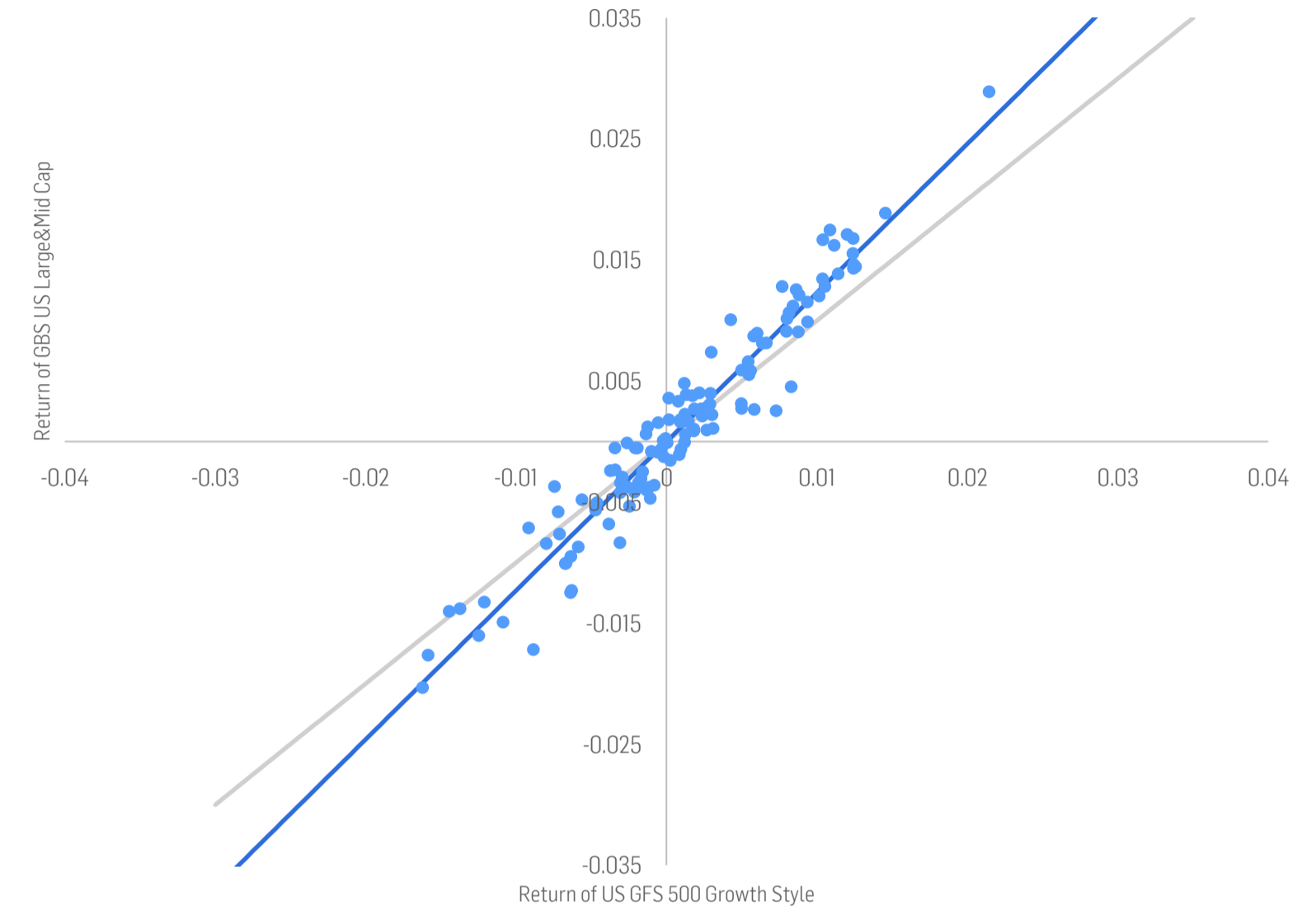
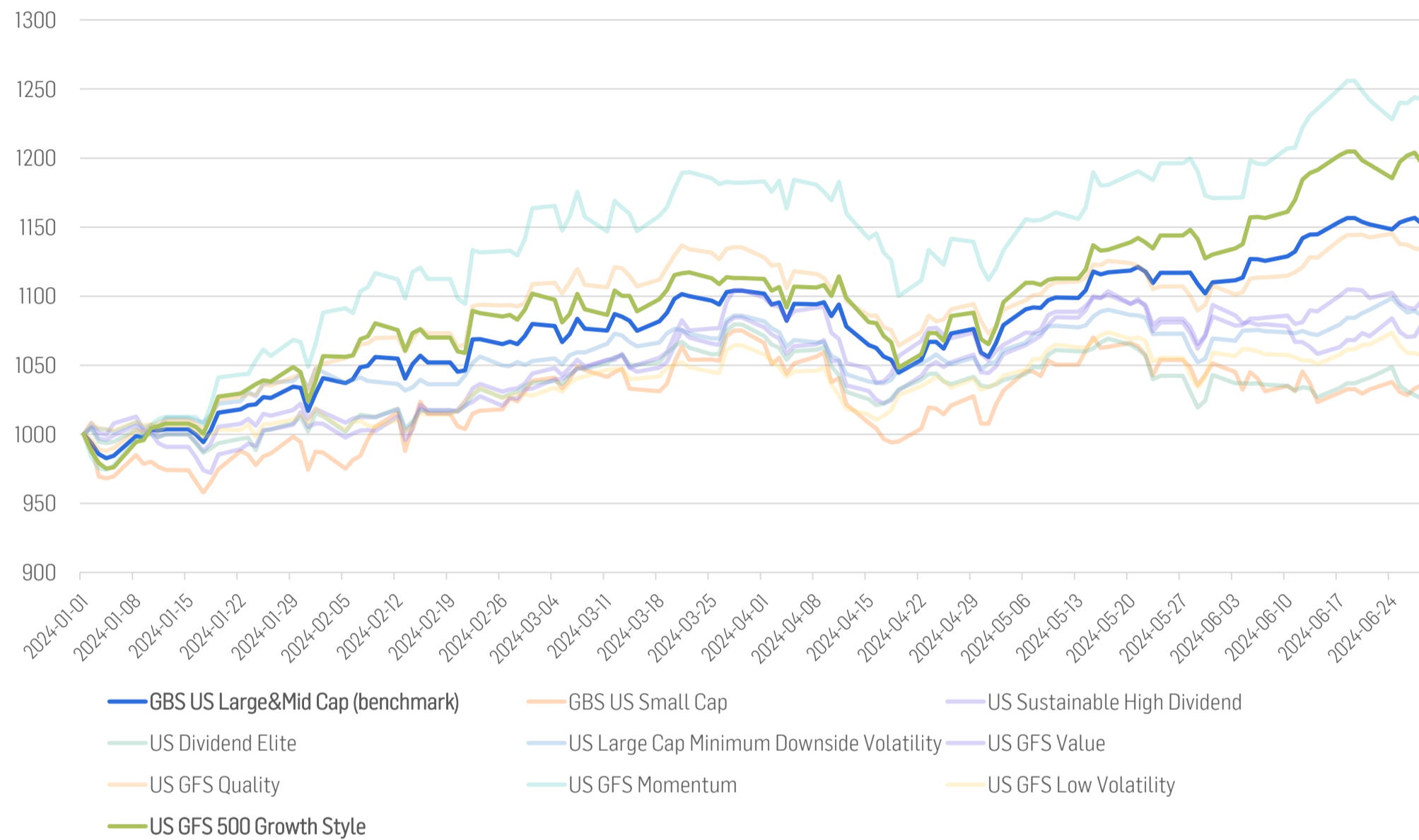


Top 5 Holdings

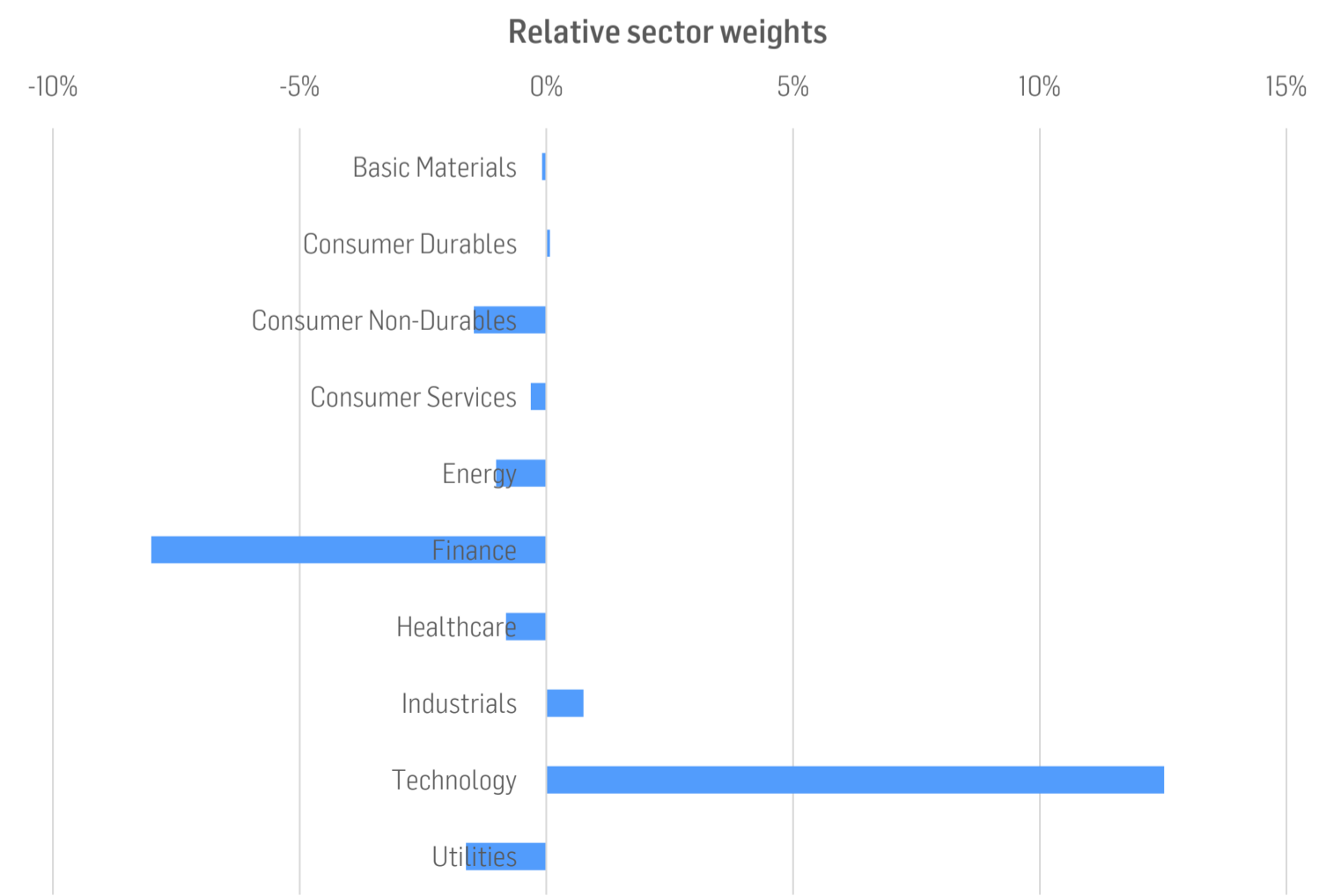
Coca-Cola Co/The	1.06%
Berkshire Hathaway Inc-Cl B	1.03%
Republic Services Inc	1.00%
Colgate-Palmolive Co	0.98%
Walmart Inc	0.94%

Profile – US GFS 500 Growth Style

The index intends to track the performance of companies from the Solactive GBS United States 500 Index that exhibit Growth Style characteristics, allocating securities between the value and the growth index based on factor score exposure.



- Technology
- Consumer Services
- Industrials
- Healthcare
- Finance
- Consumer Non-Durables
- Energy
- Consumer Durables
- Basic Materials
- Utilities



Top 5 Holdings

Microsoft Corp	10.37%
Apple Inc	9.87%
Nvidia Corp	9.27%
Amazon.Com Inc	5.50%
Meta Platforms Inc	3.51%

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