MORNINGSTAR Indexes

Morningstar Factor Monitor: Q2 2026

Momentum was the best-performing factor in Q2, while low volatility was the worst—a shift from Q1's value leadership

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Contents

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This is the latest installment of the Morningstar Quarterly Factor Monitor, which is designed to highlight factor performance trends. Factors are key drivers of stock returns. These are common security characteristics, like low valuations or small size, that can help explain why one group of stocks performs differently from another. Factors provide an effective lens through which to understand market performance.

This publication tracks the Morningstar Global Factor Indexes, providing insights into their performance drivers and notable facets of their portfolio composition. These indexes are designed to deliver strong, investable exposure to their target factors. They apply a consistent framework, each covering stocks representing 30% of their parent benchmarks by market value, and tilt weighting their constituents (from float market cap) to upweight those with the strongest factor characteristics. The appendix provides additional details on the index construction methodology.

Key Takeaways

- Momentum was the best-performing factor globally in the second quarter of 2026, while low volatility was the weakest. Size and quality also outperformed the parent benchmark, while value and yield lagged despite posting positive absolute returns.
- Momentum was the dominant factor in the second quarter, leading performance across regions and market segments. Its leadership was supported by strong contributions from technology and semiconductor-related stocks. The remaining factor rankings varied: Size ranked second globally and in the US, while quality took the second spot in developed markets ex-US and emerging markets. Low volatility was the weakest performing factor by a wide margin in most regions, except in developed markets ex-US, where yield ranked last.
- Factor leadership remained highly cyclical. Momentum led the global rankings in 2024, value took the lead in 2025 and the first quarter of 2026, but momentum reclaimed the top spot in the second quarter and now leads year to date. Quality—the weakest global factor in the first quarter of 2026—rebounded to outperform the benchmark in the second quarter.
- Because factors' market-relative returns have remained only modestly correlated, they can be complementary in a portfolio. That low correlation can help diversify active risk and smooth returns when leadership rotates.
- Regardless of the market conditions, the Morningstar Global Factor Indexes are effective tools for monitoring factor trends.

Performance (Q2 2026)

Global

Momentum was the best-performing factor globally in Q2 2026, returning 35.97%, while low volatility was the weakest at 4.37%. Size and quality also outperformed the Morningstar Global TME Index, which gained 14.93% for the quarter. Value, yield, and multifactor posted positive absolute returns but lagged the parent benchmark on a market-relative basis.

The quarter reinforced how quickly factor leadership can rotate. Exhibit 10 shows that value finished 2025 at the top of the global leaderboard and remained in lead in Q1 2026, but momentum reclaimed the top spot in Q2 2026 and now leads year to date. Quality, which had slipped into the bottom half of the rankings in 2025 and was the single weakest factor in Q1 2026, rebounded to outperform the benchmark this quarter, while 2025's leaders—value and yield—gave back relative performance and finished below the parent index. This pattern highlights the cyclical nature of factor returns, and how short-horizon leadership can change quickly.

Exhibit 1 Global Performance Summary

	Q2 2026		1 Year		5 Year		10 Year		Since Inception		
	Rtn	Std Dev	Rtn	Std Dev	Rtn	Std Dev	Rtn	Std Dev	Rtn	Std Dev	SR
Morningstar Gbl Low Vol Ftr	4.37	8.87	4.30	9.18	7.09	11.44	8.74	11.46	7.70	12.18	0.55
Morningstar Gbl Mtum Ftr	35.97	37.37	46.36	25.56	16.90	19.67	18.27	18.09	10.75	18.94	0.56
Morningstar Gbl Qual Ftr	15.78	19.90	24.70	15.98	10.36	17.31	13.54	15.81	10.22	16.42	0.59
Morningstar Gbl Size Ftr	18.50	15.72	24.67	13.32	9.19	15.87	11.15	16.25	8.66	17.98	0.48
Morningstar Gbl Val Ftr	11.58	13.43	35.15	12.83	13.91	14.63	12.47	15.13	9.02	16.92	0.51
Morningstar Gbl Yld Ftr	11.03	11.91	26.29	11.19	15.12	13.66	14.19	14.61	10.42	16.31	0.61
Morningstar Global Multifactor	9.12	14.49	17.18	11.52	11.98	13.45	12.40	12.98	10.07	13.83	0.66
Morningstar Global TME	14.93	16.06	23.92	13.97	11.43	14.97	13.29	14.67	9.25	16.24	0.54

Source: Morningstar Indexes. Performance shown in GR USD. Data as of June 30, 2026.

Exhibit 2 Global Risk Summary (Since Inception)

	Tracking Error	Beta	Max Drawdown	Down Capture Ratio	Up Capture Ratio
Morningstar Gbl Low Vol Ftr	7.06	0.69	-30.68	68.37	72.95
Morningstar Gbl Mtum Ftr	7.25	1.08	-53.92	106.82	110.01
Morningstar Gbl Qual Ftr	3.43	0.99	-41.50	96.91	101.29
Morningstar Gbl Size Ftr	3.81	1.09	-49.07	107.18	102.85
Morningstar Gbl Val Ftr	5.03	0.99	-47.38	99.92	99.13
Morningstar Gbl Yld Ftr	4.09	0.97	-45.44	93.83	99.89
Morningstar Global Multifactor	4.58	0.82	-36.90	81.19	90.00
Morningstar Global TME	0.00	1.00	-46.15	100.00	100.00

Source: Morningstar Indexes. Performance shown in GR USD. Data as of June 30, 2026.

The Morningstar Global Momentum Factor Index's strong performance was driven primarily by exposure to technology and semiconductor stocks that extended their recent gains. The largest contributors included overweight positions in Micron Technology, SK Hynix, Advanced Micro Devices, Alphabet Class A, and Lam Research. Those gains were partly offset by detractors such as Palantir Technologies, underweight positions in Apple, Taiwan Semiconductor Manufacturing, Alphabet Class C, and Applied Materials.

At the other end of the spectrum, the Morningstar Global Low Volatility Factor Index was the weakest-performing factor in the second quarter. It benefited from positions in United Microelectronics, Cisco Systems, Royal Bank of Canada, JPMorgan Chase, and Toronto-Dominion Bank, but those gains were more than offset by underweights in several high-return technology and semiconductor stocks, including Micron Technology, SK Hynix, Advanced Micro Devices, Nvidia, and Apple.

Exhibit 3 Global Attribution

	Top Contributors				Top Detractors			
	Name	**Active Weight**	**3M Returns**	**Contr. To Active Return**	**Name**	**Active Weight**	**3M Returns**	**Contr. To Active Return**
Morningstar Global Low Volatility Factor	United Microelectronics	0.66	192.19	0.78	Micron Technology	-0.70	241.67	-1.04
	Cisco Systems	0.82	52.19	0.34	SK Hynix	-0.54	224.69	-0.73
	Royal Bank of Canada	0.98	29.34	0.26	Advanced Micro Devices	-0.60	185.56	-0.69
	JPMorgan Chase	1.57	11.84	0.18	Nvidia	-4.75	14.86	-0.69
	Toronto-Dominion Bank	0.51	31.58	0.14	Apple	-4.25	14.12	-0.59
Morningstar Global Momentum Factor	Micron Technology	3.12	241.67	5.24	Palantir Technologies Ordinary Shares - Class A	2.81	-20.24	-0.67
	SK Hynix	3.33	224.69	5.01	Apple	-4.25	14.12	-0.59
	Advanced Micro Devices	1.26	185.56	1.68	Taiwan Semiconductor Manufacturing	-1.65	37.79	-0.57
	Alphabet Inc Class A	5.53	24.35	1.34	Alphabet Class C	-1.83	23.25	-0.38
	Lam Research	1.10	102.95	1.12	Applied Materials	-0.33	111.80	-0.34
Morningstar Global Quality Factor	Taiwan Semiconductor Manufacturing	4.75	37.79	1.64	Micron Technology	-0.70	241.67	-1.04
	SK Hynix	1.19	224.69	1.60	Advanced Micro Devices	-0.60	185.56	-0.69
	ASML Holding NV	2.93	52.95	1.51	Apple	-4.25	14.12	-0.59
	Alphabet Inc Class A	6.12	24.35	1.33	Intel	-0.38	216.41	-0.47
	Lam Research	0.76	102.95	0.69	Alphabet Class C	-1.83	23.25	-0.38
Morningstar Global Size Factor	Samsung Electro-Mechanics	0.43	429.85	0.73	SK Hynix	-0.54	224.69	-0.73
	Western Digital	0.58	136.20	0.56	Advanced Micro Devices	-0.60	185.56	-0.69
	Seagate Technology Holdings PLC	0.49	146.51	0.47	Nvidia	-4.75	14.86	-0.69
	Yageo	0.18	373.14	0.42	Apple	-4.25	14.12	-0.59
	Astera Labs	0.20	340.71	0.38	Samsung Electronics	-0.79	97.49	-0.59
Morningstar Global Value Factor	Samsung Electronics	1.85	97.49	1.35	SK Hynix	-0.54	224.69	-0.73
	Cisco Systems	1.73	52.19	0.78	Advanced Micro Devices	-0.60	185.56	-0.69
	Dell Technologies Ordinary Shares - Class C	0.66	163.66	0.72	Nvidia	-4.75	14.86	-0.69
	Intel	0.39	216.41	0.46	Apple	-4.25	14.12	-0.59
	Qualcomm	1.35	44.04	0.44	Taiwan Semiconductor Manufacturing	-1.65	37.79	-0.57
Morningstar Global Yield Factor	MediaTek	0.68	185.91	0.71	Micron Technology	-0.70	241.67	-1.04
	UnitedHealth Group	1.19	54.47	0.54	SK Hynix	-0.54	224.69	-0.73
	Dell Technologies Ordinary Shares - Class C	0.45	163.66	0.50	Advanced Micro Devices	-0.60	185.56	-0.69
	United Microelectronics	0.37	192.19	0.47	Nvidia	-4.75	14.86	-0.69
	Apple	3.40	14.12	0.45	Taiwan Semiconductor Manufacturing	-1.65	37.79	-0.57

Source: Morningstar Indexes. Performance shown in GR USD. Data as of June 30, 2026.

US

The US results broadly mirrored the global pattern, with momentum at the top of the large- and mid-cap rankings and low volatility at the bottom.

In the large- and mid-cap segment, momentum returned 48.52% and was the clear leader, while size also outperformed the Morningstar US Target Market Exposure Index. Value finished slightly behind the parent benchmark, while quality, yield, multifactor, and low volatility lagged despite positive absolute returns.

The small-cap segment showed a similar momentum-led pattern. Momentum returned 46.76%, well ahead of the Morningstar US Small TME Index, while size also outpaced the small-cap benchmark. Value, yield, quality, and low volatility lagged the parent benchmark despite positive absolute returns.

Exhibit 4 US Performance Summary

	Q2 2026		1 Year		5 Year		10 Year		Since Inception		
	Rtn	**Std Dev**	**Rtn**	**Std Dev**	**Rtn**	**Std Dev**	**Rtn**	**Std Dev**	**Rtn**	**Std Dev**	**SR**
Morningstar US Low Vol Ftr	2.78	10.76	1.95	8.26	7.55	12.59	9.74	12.64	9.74	12.18	0.71
Morningstar US Mtum Ftr	48.52	40.18	53.75	27.08	19.41	21.53	21.29	19.73	14.21	19.41	0.71
Morningstar US Qual Ftr	10.58	18.75	13.89	12.70	11.74	18.33	15.38	16.87	13.38	16.14	0.78
Morningstar US Size Ftr	19.89	17.11	23.78	12.03	8.93	16.87	12.48	17.15	11.27	18.02	0.61
Morningstar US Val Ftr	14.65	16.33	33.68	11.07	13.02	15.95	12.59	16.72	11.03	17.09	0.62
Morningstar US Yld Ftr	9.25	12.40	19.57	9.32	14.21	14.65	14.15	15.91	12.39	16.07	0.72
Morningstar US Multifactor	8.36	14.13	15.86	9.96	12.37	14.45	13.66	14.10	12.54	13.78	0.83
Morningstar US TME	15.24	16.19	21.67	13.16	12.84	16.01	15.46	15.58	12.41	15.79	0.73
Morningstar US Small Low Vol Ftr	8.78	13.33	13.03	12.39	6.90	14.94	8.56	14.58	10.41	14.14	0.67
Morningstar US Small Mtum Ftr	46.76	45.60	82.15	25.94	23.05	26.90	20.56	24.09	13.01	23.39	0.58
Morningstar US Small Quality Ftr	11.54	16.59	19.27	9.66	7.78	18.66	12.65	17.47	11.21	17.22	0.62
Morningstar US Small Value Ftr	14.35	17.01	37.71	12.62	9.74	21.41	11.82	22.70	11.39	22.73	0.53
Morningstar US Small Yield Ftr	12.76	15.18	23.15	11.03	9.39	18.83	12.41	20.69	12.76	19.82	0.64
Morningstar US Small Cap Size Ftr	21.02	18.97	42.06	13.76	7.01	21.78	11.61	22.04	11.52	22.11	0.54
Morningstar US Small TME	19.29	20.00	34.95	12.61	8.39	19.69	12.29	19.69	11.07	19.69	0.56

Source: Morningstar Indexes. Performance shown in GR USD. Data as of June 30, 2026.

Exhibit 5 US Risk Summary (Since Inception)

	Tracking Error	Beta	Max Drawdown	Down Capture Ratio	Up Capture Ratio
Morningstar US Low Vol Ftr	8.19	0.66	-28.62	64.71	70.30
Morningstar US Mtum Ftr	8.35	1.11	-50.93	105.83	109.34
Morningstar US Qual Ftr	4.37	0.98	-37.20	96.22	100.89
Morningstar US Size Ftr	5.38	1.09	-46.51	109.54	102.01
Morningstar US Val Ftr	6.74	1.00	-44.76	102.03	96.68
Morningstar US Yld Ftr	5.19	0.96	-42.02	92.45	95.41
Morningstar US Multifactor	4.79	0.84	-32.73	78.93	87.84
Morningstar US TME	0.00	1.00	-41.49	100.00	100.00
Morningstar US Small Low Vol Ftr	8.57	0.66	-32.47	62.98	72.52
Morningstar US Small Mtum Ftr	10.45	1.06	-54.37	104.76	108.92
Morningstar US Small Quality Ftr	5.04	0.85	-36.42	83.90	89.19
Morningstar US Sml Cap Size Ftr	6.01	1.12	-49.74	113.35	110.35
Morningstar US Small Value Ftr	4.71	0.98	-44.16	92.35	99.48
Morningstar US Small Yield Ftr	5.30	1.09	-46.23	112.56	110.16
Morningstar US Small TME	0.00	1.00	-45.80	100.00	100.00

Source: Morningstar Indexes. Performance shown in GR USD. Data as of June 30, 2026.

The Morningstar US Momentum Factor Index's leadership was driven by overweight positions in the semiconductor and memory names that led the market. The largest contributors were Micron Technology, Advanced Micro Devices, Intel, Western Digital, and Lam Research, each of which posted a triple-digit quarterly return. Those gains were partly offset by underweight positions in Nvidia, Apple, Alphabet Class C, and Applied Materials, each of which rose, along with an overweighting in Palantir Technologies, which declined over the quarter.

At the other end of the spectrum, the Morningstar US Low Volatility Factor Index was the weakest-performing factor in the large- and mid-cap segment in the second quarter. It benefited from overweight positions in Cisco Systems, JPMorgan Chase, Automatic Data Processing, and Visa, along with an underweighting in Netflix, which fell over the quarter. Those gains were more than offset by underweight positions in several high-return technology and semiconductor stocks, including Micron Technology, Advanced Micro Devices, Nvidia, Apple, and Intel.

Developed Markets ex-US

Momentum was the top performer in developed markets outside the US in the second quarter, returning 14.54%, while quality ranked second at 13.01%. Both factors outperformed the Morningstar Developed Markets ex-US TME Index, which gained 9.93%. Size, value, low volatility, yield, and multifactor all posted positive absolute returns but lagged the parent benchmark. The quarter marked a sharp reversal from the first quarter, when value and yield led the region while momentum and size trailed.

Exhibit 6 Developed Markets ex-US Performance Summary

	Q2 2026		1 Year		5 Year		10 Year		Since Inception		
	Rtn	Std Dev	Rtn	Std Dev	Rtn	Std Dev	Rtn	Std Dev	Rtn	Std Dev	SR
Morningstar DM xUS Low Vol Ftr GR USD	7.13	13.12	19.23	12.54	10.27	12.75	9.40	12.26	6.98	13.40	0.47
Morningstar DM xUS Mtum Ftr GR USD	14.54	35.52	23.05	20.94	12.58	17.87	11.58	16.43	6.39	18.38	0.35
Morningstar DM xUS Qual Ftr GR USD	13.01	23.79	17.72	17.59	6.72	18.06	10.37	16.06	6.72	17.54	0.38
Morningstar DM xUS Size Ftr GR USD	8.64	18.53	15.50	14.55	7.79	16.05	9.38	16.04	6.29	18.36	0.35
Morningstar DM xUS Val Ftr GR USD	7.55	16.77	33.50	14.85	15.21	15.28	11.98	16.57	7.02	18.78	0.38
Morningstar DM xUS Yld Ftr GR USD	6.88	14.98	29.58	12.49	15.22	14.41	13.17	15.00	8.16	17.89	0.45
Morningstar DM xUS Multifactor GR USD	3.58	18.69	14.62	13.10	10.25	13.95	10.45	13.37	7.64	15.10	0.47
Morningstar DM xUS TME GR USD	9.93	19.51	21.56	15.06	9.89	15.36	10.46	14.99	6.08	17.26	0.35

Source: Morningstar Indexes. Performance shown in GR USD. Data as of June 30, 2026.

Exhibit 7 Developed Markets ex-US Risk Summary (Since Inception)

	Tracking Error	Beta	Max Drawdown	Down Capture Ratio	Up Capture Ratio
Morningstar DM xUS Low Vol Ftr	6.81	0.72	-32.11	70.59	79.85
Morningstar DM xUS Mtum Ftr	6.66	0.99	-52.26	97.96	99.47
Morningstar DM xUS Qual Ftr	4.41	0.98	-46.02	96.83	99.78
Morningstar DM xUS Size Ftr	2.88	1.05	-49.83	102.73	102.94
Morningstar DM xUS Val Ftr	4.86	1.05	-45.20	105.56	107.93
Morningstar DM xUS Yld Ftr	3.61	1.01	-49.58	95.92	104.31
Morningstar DM xUS Multifactor	4.26	0.85	-39.37	81.92	91.21
Morningstar DM xUS TME	0.00	1.00	-48.51	100.00	100.00

Source: Morningstar Indexes. Performance shown in GR USD. Data as of June 30, 2026.

The Morningstar Developed Markets ex-US Momentum Factor Index's leadership was supported by overweight positions in SoftBank Group, Advantest, Ibiden, Banco Santander, and Fujikura, with Ibiden's more-than-tripling over the quarter. Those gains were partly offset by overweight positions in Rheinmetall and Agnico Eagle Mines, both of which declined, and by underweightings in Tokyo Electron, Murata Manufacturing, and Royal Bank of Canada, each of which rose.

The Morningstar Developed Markets ex-US Yield Factor Index was the weakest single-factor index in the region. Positive contributions came from overweight positions in Murata Manufacturing, BNP Paribas, ING Groep, Screen Holdings, and Nokia. However, those gains were more than offset by an underweighting to ASML Holding and Tokyo Electron, both of which rose sharply, and by overweight positions in Mitsubishi Corp, Shell, and TotalEnergies, each of which declined over the quarter.

Emerging Markets

Momentum led in emerging markets in Q2 2026, returning 44.95%, followed by quality at 34.48%. Both factors outperformed the Morningstar Emerging Markets TME Index, which gained 23.84% for the quarter. Value, multifactor, size, and yield posted strong absolute returns but finished modestly below the benchmark, while low volatility performed the worst, returning 5.44%.

The Morningstar Emerging Markets Momentum Factor Index's leadership was driven by large overweight positions in SK Hynix, Samsung Electronics, SK Square, Samsung Electro-Mechanics, and Elite Material. Those gains were partly offset by sizable underweightings in Taiwan Semiconductor Manufacturing, MediaTek, and Samsung Electronics Participating Preferred, which rose, along with overweight positions in Gold Fields and Alibaba Group, which declined.

The Morningstar Emerging Markets Low Volatility Factor Index, by contrast, was the region's weakest factor by a wide margin. It benefited from overweight positions in United Microelectronics, Realtek Semiconductor, Novatek Microelectronics, and ICICI Bank, as well as an underweighting in Alibaba Group, which fell. Those gains were overwhelmed by underweights in the surging large-cap semiconductor names—SK Hynix, Samsung Electronics, Taiwan Semiconductor Manufacturing, MediaTek, and SK Square—a structural consequence of the factor's low-volatility construction.

Exhibit 8 Emerging Markets Performance Summary

	Q2 2026		1 Year		5 Year		10 Year		Since Inception		
	Rtn	**Std Dev**	**Rtn**	**Std Dev**	**Rtn**	**Std Dev**	**Rtn**	**Std Dev**	**Rtn**	**Std Dev**	**SR**
Morningstar EM Low Vol Ftr GR USD	5.44	13.13	-0.62	10.94	6.14	11.40	8.16	11.89	6.27	14.93	0.39
Morningstar EM Mtum Ftr GR USD	44.95	53.88	70.31	37.39	11.01	22.67	15.14	20.48	7.26	22.85	0.36
Morningstar EM Qual Ftr GR USD	34.48	35.53	47.77	27.46	12.39	22.60	11.86	19.08	7.21	21.54	0.37
Morningstar EM Size Ftr GR USD	20.80	26.87	34.61	20.49	8.68	16.68	9.41	17.26	5.85	20.95	0.31
Morningstar EM Val Ftr GR USD	22.94	34.03	58.59	27.72	15.65	19.24	13.80	18.52	8.13	21.86	0.40
Morningstar EM Yld Ftr GR USD	20.33	29.75	39.88	21.99	14.25	16.63	12.42	16.01	7.56	19.36	0.40
Morningstar EM Multifactor GR USD	21.64	30.54	37.46	22.96	10.87	16.11	11.41	15.28	8.04	18.33	0.44
Morningstar EM TME GR USD	23.84	32.46	42.10	24.10	7.79	18.04	10.67	17.04	5.91	20.53	0.32

Source: Morningstar Indexes. Performance shown in GR USD. Data as of June 30, 2026.

Exhibit 9 Emerging Markets Risk Summary (Since Inception)

	Tracking Error	Beta	Max Drawdown	Down Capture Ratio	Up Capture Ratio
Morningstar EM Low Vol Ftr	8.74	0.67	-41.20	60.54	68.62
Morningstar EM Mtum Ftr	8.46	1.03	-58.53	101.53	105.74
Morningstar EM Qual Ftr	12.93	0.85	-46.25	85.33	92.07
Morningstar EM Size Ftr	4.61	1.00	-51.16	95.94	96.41
Morningstar EM Val Ftr	5.86	1.03	-51.17	97.84	105.49
Morningstar EM Yld Ftr	4.88	0.92	-47.43	86.93	94.52
Morningstar EM Multifactor	4.85	0.87	-47.88	80.56	90.80
Morningstar EM TME	0.00	1.00	-53.11	100.00	100.00

Source: Morningstar Indexes. Performance shown in GR USD. Data as of June 30, 2026.

Performance Cyclicality

Exhibit 10 illustrates that factor leadership has remained highly cyclical. Momentum ranked at the top of the global factor leaderboard in 2024, value led in 2025, and momentum surged back to the top in the second quarter, where it also leads year to date. Quality's path is a vivid illustration of this cyclicality: After strong showings in 2023 and 2024, it fell into the bottom half of the rankings in 2025 and was the single weakest factor in 2026's first quarter, only to rebound and outperform the benchmark in the second quarter. These shifts underscore how quickly relative factor performance can change and why short-horizon factor timing is difficult. Low volatility, by contrast, has been the most persistent laggard, sitting at the bottom of the rankings in 2025 and 2026 year to date.

The silver lining is that factors' market-relative returns have remained only modestly correlated with one another, as Exhibit 11 shows. That low correlation means factors can be complementary in a portfolio, helping diversify active risk and smooth the path of returns when leadership rotates across factors.

Exhibit 10 Global Quilt Chart

2017	2018	2019	2020	2021	2022	2023	2024	2025	YTD	Q2 2026
Momentum Factor 34.8	Low Volatility Factor -4.5	Quality Factor 30.0	Momentum Factor 37.5	Yield Factor 22.2	Value Factor -5.1	Quality Factor 31.2	Momentum Factor 32.8	Value Factor 32.6	Momentum Factor 32.5	Momentum Factor 36.0
Quality Factor 29.8	Momentum Factor -6.4	Momentum Factor 27.4	Quality Factor 23.9	Multifactor 22.1	Yield Factor -6.6	Yield Factor 24.0	Quality Factor 22.6	Momentum Factor 31.0	Size Factor 16.9	Size Factor 18.5
Multifactor 26.4	Multifactor -8.4	Global TME 27.1	Global TME 16.4	Value Factor 20.0	Low Volatility Factor -9.1	Global TME 22.7	Multifactor 21.4	Yield Factor 28.1	Value Factor 13.9	Quality Factor 15.8
Global TME 24.5	Yield Factor -8.5	Size Factor 26.0	Multifactor 11.7	Size Factor 19.4	Multifactor -13.3	Value Factor 18.1	Global TME 17.7	Global TME 22.7	Yield Factor 12.4	Global TME 14.9
Size Factor 22.7	Global TME -8.7	Yield Factor 25.3	Size Factor 10.7	Global TME 19.1	Size Factor -15.0	Size Factor 16.3	Yield Factor 14.4	Multifactor 21.2	Quality Factor 11.7	Value Factor 11.6
Low Volatility Factor 21.4	Value Factor -9.1	Multifactor 23.1	Low Volatility Factor 5.9	Quality Factor 18.3	Global TME -17.6	Multifactor 16.0	Low Volatility Factor 12.2	Quality Factor 20.0	Global TME 11.2	Yield Factor 11.0
Yield Factor 21.3	Quality Factor -10.6	Low Volatility Factor 20.9	Yield Factor 5.8	Low Volatility Factor 18.2	Momentum Factor -18.9	Momentum Factor 11.6	Value Factor 10.4	Size Factor 16.9	Multifactor 9.0	Multifactor 9.1
Value Factor 19.2	Size Factor -11.7	Value Factor 20.7	Value Factor 0.7	Momentum Factor 16.0	Quality Factor -27.4	Low Volatility Factor 10.3	Size Factor 10.4	Low Volatility Factor 14.7	Low Volatility Factor 1.4	Low Volatility Factor 4.4

Source: Morningstar Indexes. Performance shown in GR USD. Data as of June 30, 2026.

Exhibit 11 Global Excess Return Correlation Matrix (10-Year)

1	Morningstar Gbl Low Vol Ftr	1.00						
2	Morningstar Gbl Mtum Ftr	-0.33	1.00					
3	Morningstar Gbl Qual Ftr	-0.33	0.28	1.00				
4	Morningstar Gbl Size Ftr	0.02	-0.20	-0.29	1.00			
5	Morningstar Gbl Val Ftr	0.31	-0.49	-0.61	0.42	1.00		
6	Morningstar Gbl Yld Ftr	0.41	-0.58	-0.58	0.44	0.89	1.00	
7	Morningstar Global Multifactor	0.76	0.00	-0.09	-0.15	0.19	0.24	1.00

Source: Morningstar Indexes. Excess return against Morningstar Global Target Market Exposure. Data as of June 30, 2026.

Long-Term Performance

A long investment horizon can reduce timing risk, but it does not eliminate the risk of underperformance. Globally, through June 30, 2026, three single-factor indexes—momentum, quality, and yield—outperformed the Morningstar Global Target Market Exposure Index since inception, while low volatility, size, and value lagged their parent benchmarks. Momentum posted the highest raw since-inception return among the single factors, while yield delivered the strongest risk-adjusted result, carrying the highest single-factor Sharpe ratio.

Value's long-term record still looks mixed, particularly in the US. The Morningstar US Value Factor Index continues to trail the Morningstar US Target Market Exposure Index since inception and over the trailing 10-year period. By contrast, value remains a stronger long-term performer in emerging markets, where it ranks first among the single-factor indexes since inception.

Momentum's long-term record improved further after its strong second-quarter showing. It is now the best-performing global single-factor index since inception and leads in the US large-mid cap and US small-cap universes. Yield remains a durable long-term factor as well, leading developed markets ex-US and ranking near the top globally and in emerging markets.

Low volatility's long-term profile is a reminder that raw returns and risk-adjusted outcomes are not the same. The factor has generally delivered lower beta and lower down-capture than the market across regions, even when it has not led the return rankings. Its weak second-quarter performance does not erase that defensive profile, but it does highlight the factor's tendency to lag during sharp risk-on rallies; its main long-term appeal is the smoother ride it has historically provided rather than consistently leading on absolute return.

Portfolio Highlights

June Reconstitution

The Morningstar Global Factor Indexes reconstitute twice a year, in June and December. The momentum and low-volatility factor indexes often have the highest turnover, and this was observed at the June 2026 reconstitution, as shown in Exhibit 12. These are price-driven factors where leadership tends to rotate more quickly than it does among fundamental factors, like value and quality. The quality and size factor indexes experienced the smallest changes during the June reconstitution.

Exhibit 12 June 2026 Reconstitution Summary: Largest Additions

Index	Additions	Turnover (%)
Morningstar Global Low Volatility Factor Index	Bank of America (1.09%), Nestle SA Act Nom (0.59%), RTX (0.58%), Electronic Arts (0.58%), Prologis (0.44%)	33.12
Morningstar Global Momentum Factor Index	Taiwan Semiconductor Manufacturing (3.5%), SanDisk (3.47%), ASML Holding NV Common Stock Bearer Form (2.38%), Kioxia Holdings (1.77%), Applied Materials (0.85%)	43.94
Morningstar Global Quality Factor Index	SanDisk (1.27%), Western Digital (1.10%), Palantir Technologies Ordinary Shares - Class A (0.94%), Safran SA Act (0.64%), Allianz SE Namen-Akt. vinkulierte (0.18%)	15.81
Morningstar Global Size Factor Index	SanDisk (0.57 %), Qualcomm (0.45%), Credo Technology Group Holding (0.39%), ServiceNow (0.33%), Coherent (0.33%)	20.05
Morningstar Global Value Factor Index	Uber Technologies (0.57%), Intuit Common Stock (0.38%), McDonald's (0.31%), Suncor Energy (0.30%), SoftBank Group Shs (0.29%)	28.97
Morningstar Global Yield Factor Index	JPMorgan Chase (1.72%), Sanofi (1.09%), Uber Technologies (0.55%), The Walt Disney Shs (0.46%), SAP SE Common Stock (0.37%)	31.52

Source: Morningstar Indexes. Data as of June 22, 2026.

There were a few notable additions to the Morningstar Global Factor Indexes at the June reconstitution. Taiwan Semiconductor Manufacturing, SanDisk, ASML Holding, Kioxia Holdings, and Applied Materials were the largest additions to the Morningstar Global Momentum Factor Index. The momentum factor index measures performance from trailing 12 months through trailing one month (as of the reconstitution reference date). This means returns were measured from the end of May 2025 through the end of April 2026. SanDisk was notable for entering multiple indexes—momentum, quality, and size—underscoring how broadly the memory rally registered across factor definitions.

On the more defensive side, Bank of America, Nestlé, and RTX led additions to the Morningstar Global Low Volatility Factor Index, which selects stocks that exhibit low volatility based on their trailing six-month idiosyncratic volatility, total volatility, and MAX5 parameter[1].

JPMorgan Chase and Sanofi were the largest additions to the Morningstar Global Yield Factor Index, while Uber Technologies, Intuit, and McDonald's were the largest additions to the Morningstar Global Value Factor Index. The Morningstar Global Size Factor Index added SanDisk, Qualcomm, and Credo Technology Group among its largest new positions.

Sectors

The Morningstar Global Factor Indexes anchor their regional and sector weightings to those of their parent benchmarks. The slower-moving, fundamental factor indexes—value, quality, size, and yield—apply tighter sector and regional constraints and measure factor exposures on a sector-relative basis within each region to determine eligibility. This process is intended to mitigate unintended biases that might otherwise creep into the indexes and to facilitate greater comparability. Consequently, these indexes tend to maintain sector exposures similar to those of their benchmarks.

1 https://indexes.morningstar.com/docs/rulebook/morningstar-global-low-volatility-factor-FS0000HZEL

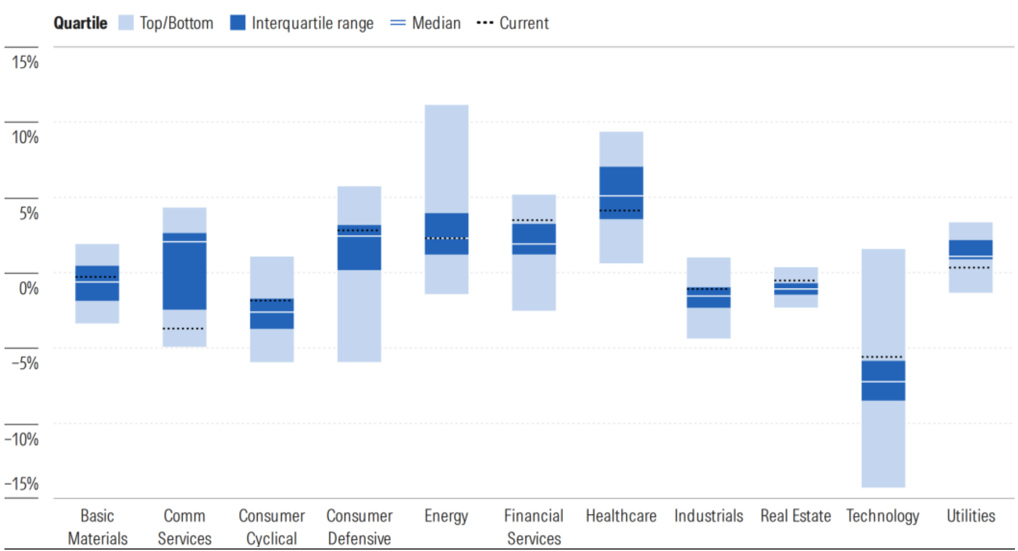
The faster-moving, price-driven low-volatility and momentum factor indexes apply looser regional and sector constraints. These indexes also measure factor exposures on a regional-relative basis without adjusting for sector membership. This approach is appropriate because these price-driven factors are generally more comparable across sectors than the fundamental factors.

Not surprisingly, the Morningstar low-volatility factor indexes tend to overweight more defensive sectors, such as utilities, healthcare, and consumer defensive, while underweighting technology, consumer cyclicals, and industrials. The technology underweight is currently by far the index's largest active position, consistent with the sector's elevated volatility during the semiconductor rally.

Some of the low-volatility factor's sector tilts also change over time. For example, financial-services stocks are currently more heavily represented in the Morningstar Global Low Volatility Factor Index than they are in the benchmark. But during the 2008-09 global financial crisis, this sector was one of the more volatile areas of the market and was underweight in the index.

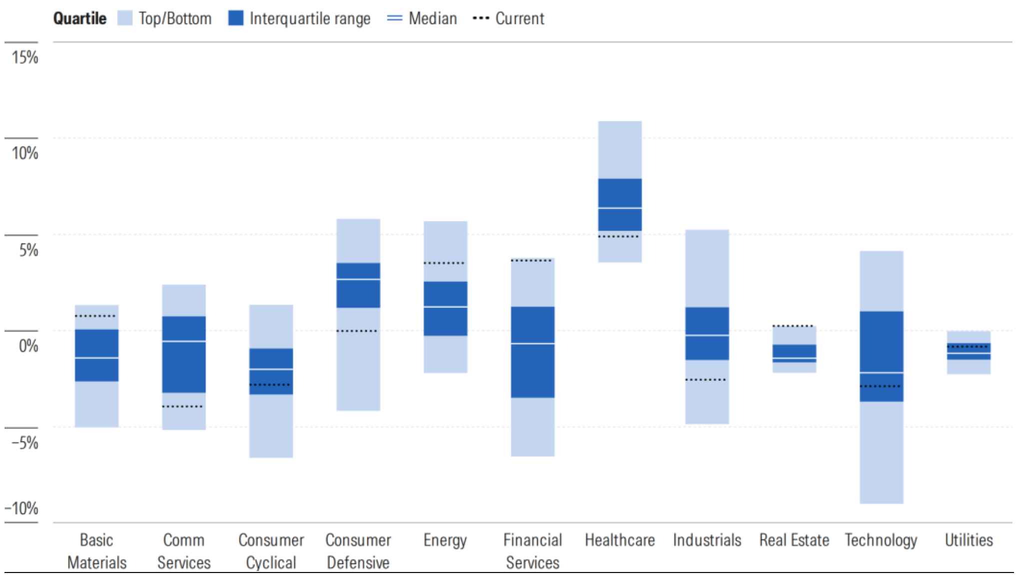
The Morningstar Global Momentum Factor Index is currently overweight the technology sector by a wide margin, reflecting artificial intelligence- and semiconductor-driven sentiment.

Exhibit 13 Value Factor Active Sector Weights



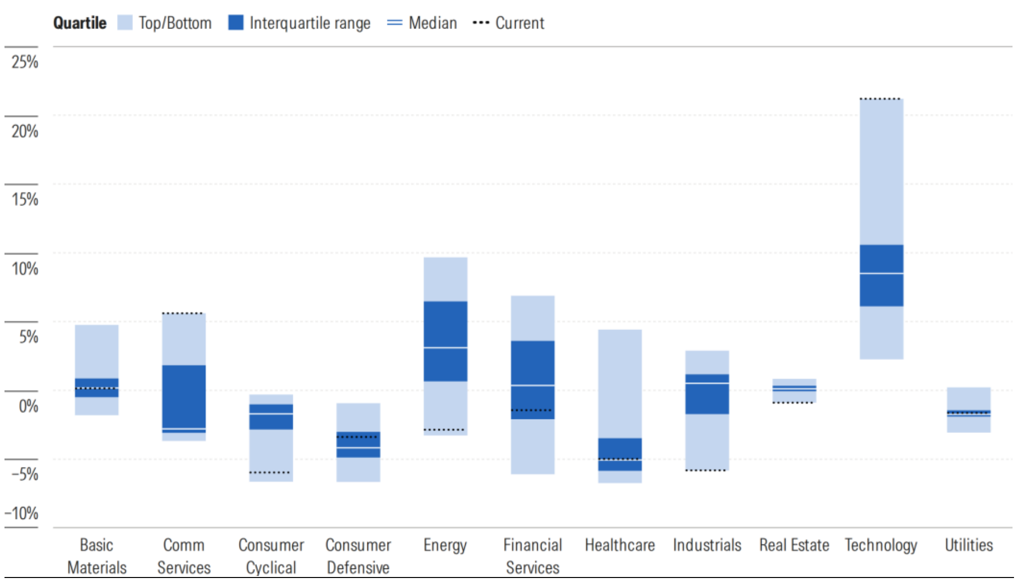
Source: Morningstar Indexes. Data as of June 30, 2026.

Exhibit 14 Yield Factor Active Sector Weights



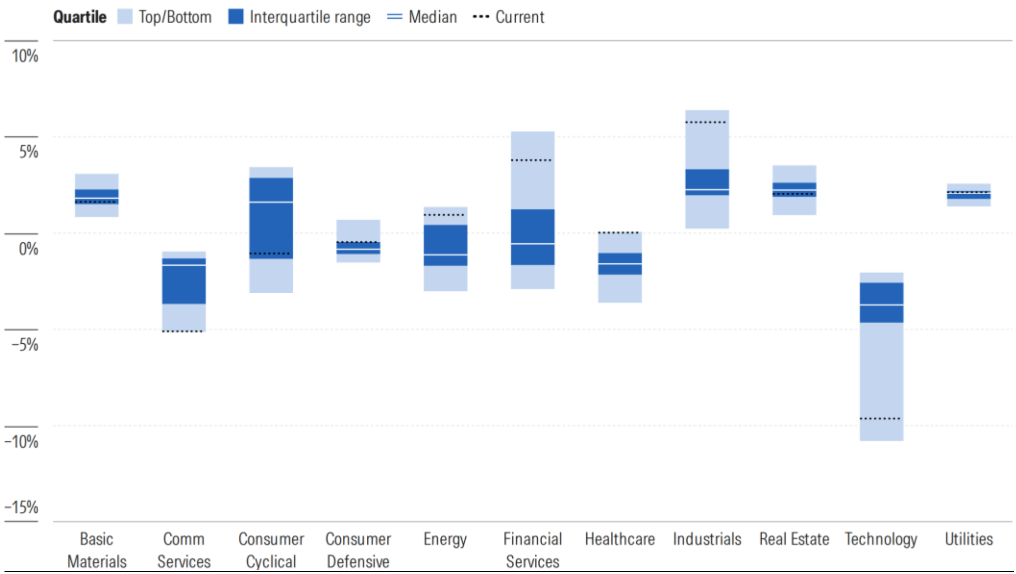
Source: Morningstar Indexes. Data as of June 30, 2026.

Exhibit 15 Quality Factor Active Sector Weights



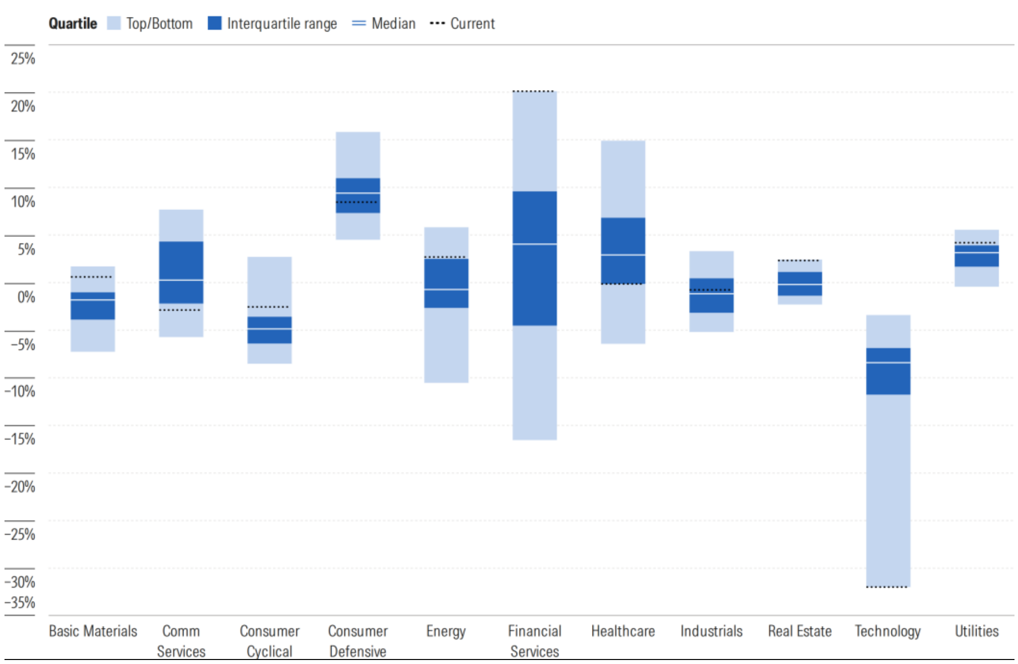
Source: Morningstar Indexes. Data as of June 30, 2026.

Exhibit 16 Size Factor Active Sector Weights



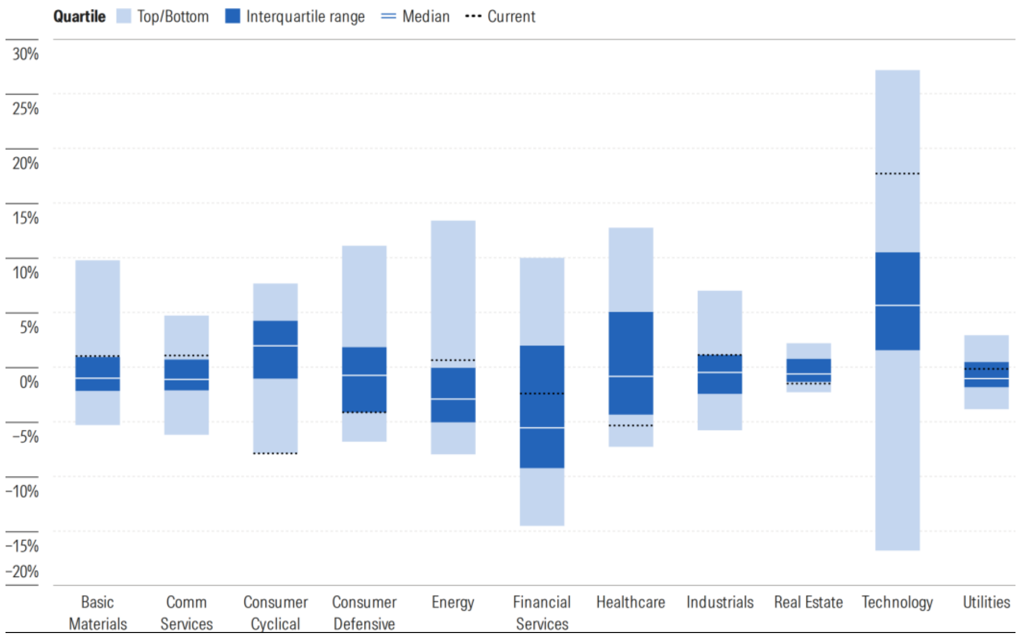
Source: Morningstar Indexes. Data as of June 30, 2026.

Exhibit 17 Low Volatility Factor Active Sector Weights



Source: Morningstar Indexes. Data as of June 30, 2026.

Exhibit 18 Momentum Factor Active Sector Weights



Source: Morningstar Indexes. Data as of June 30, 2026.

Factors Drive Performance

Factor leadership is volatile, but factors are key return drivers that can help explain variations in performance across the market. As such, factor performance is crucial to understand.

Regardless of the market conditions, the Morningstar Global Factor Indexes are effective tools for monitoring factor trends. These indexes are designed to provide efficient, investable exposure to industry-standard factors with a consistent framework. They can facilitate precise performance benchmarking and efficient asset allocation. For more information, visit https://indexes.morningstar.com/factors.

Appendix

Factor Definitions

Low Volatility: This factor is the weighted average of idiosyncratic volatility over the past six months (50%), total volatility over the past six months (25%), and MAX5/lottery factor (25%), which is based on the highest five-day returns over the past month, where lower values are favored. This composite provides a more complete view of risk than a security's total volatility alone.

Stocks with low past volatility tended to offer better risk-adjusted performance than those with high volatility. Unlike many of the other factors, there isn't a clear risk-based explanation for this effect. The anomaly is typically explained through investor behavior, given leverage and tracking error constraints. Professional investors overly focused on returns and unable to leverage their portfolios might crowd into volatile stocks, which have greater upside potential than their more-staid counterparts. Retail investors looking for lotterylike upside might do the same. As a result, not only are low-volatility stocks more resilient during "risk-off" market environments, but they may also be priced to offer a more favorable risk/reward trade-off over the long term.

Momentum: This factor is measured as the trailing 12-month total return (in local currency), excluding the most recent month, minus the local risk-free rate. This definition aligns with the momentum factor as defined by academic literature.

Momentum describes short-term performance persistence. Momentum strategies target stocks with strong recent returns, based on the premise that they are likely to continue to outperform. Prices may adjust more slowly than they should to new information, as investors often initially underreact. This alone can cause performance to persist. Once a trend is established, more investors may continue to buy, further fueling price momentum.

Quality: This is measured as the equally weighted z-score of a company's profitability (trailing 12-month return on assets) and the z-score of its financial leverage (trailing 12-month debt/invested capital).

The shares of companies with strong profitability and balance sheets performed better historically than less profitable and more highly indebted counterparts. They tended to hold up better than the market during downturns, which intuitively wouldn't lead to an expectation of higher returns. However, investors may have historically underestimated the long-term durability of these firms' strong cash flows, leading to an impressive long-term track record of risk-adjusted returns.

Value: This factor's definition aligns with the Morningstar Style Box methodology, which incorporates historical and forward-looking value and growth metrics. The actual factor is value-growth, where the value inputs include price/earnings (50.0%), price/book (12.5%), price/cash flow (12.5%), price/sales (12.5%), and dividend yield (12.5%).

The value factor targets stocks trading at low multiples on fundamental measures like earnings, book value, cash flow, sales, and dividends. Value investing is backed by strong economic rationale and empirical evidence. Lower valuations should reflect higher expected returns, either as compensation for risk or because investors may be overly pessimistic about these stocks' prospects.

Yield: The yield factor is defined as the total yield, which is the sum of the trailing 12-month buyback and dividend yield of a company. Higher values indicate larger positive yield exposure. The yield factor is sector-neutralized.

Index Construction

Single-Factor Indexes

The Morningstar Global Factor Indexes are from a corresponding standard parent benchmark from the Morningstar Target Market Exposure Index family, which represents the top 85% of equity market capitalization in its segment. The focus on large- and mid-cap stocks facilitates high investment capacity. To be eligible for inclusion, each stock must have valid factor exposure scores.

Within each parent index, constituents are ranked by their factor exposure. All factors are measured relative to each broad region. The quality, size, value, and yield factor exposures are also measured on a sector-relative basis. This improves comparability and mitigates persistent sector biases. For low volatility and momentum, no sector-relative adjustments are made, as these price-driven signals tend to be more comparable across sectors. The highest-ranking 30% of the parent index's float-adjusted market capitalization is targeted for inclusion in each index. Focusing on a percentage of the parent index as opposed to a fixed number of securities ensures that a consistent portion of the market is represented.

Constituents are weighted by the product of their float-adjusted market capitalization and the strength of their factor exposure, subject to constraints to limit unintended risk. The indexes are reconstituted and rebalanced semiannually.

For further details, please refer to the Construction Rules for the Morningstar Global Factor Indexes.

Multifactor Indexes

The Morningstar Global Multifactor Indexes use optimization to target low volatility, momentum, quality, and value. As a part of this optimization framework, the indexes aim to maximize portfolio-level factor characteristics under constraints to limit unintended risk and transaction costs while offering significant liquidity.

Morningstar Indexes offers multifactor indexes derived from various broad regional parent indexes, and the construction rules that follow are applied similarly for each variant.

Each multifactor index is derived from its corresponding standard parent benchmark from the Morningstar Target Market Exposure Indexes, representing the top 85% of equity market capitalization in its segment. The focus on large- and mid-cap stocks facilitates high investment capacity.

The portfolios are long-only and enforce a minimum nonzero weight of 1 basis point (0.01%) to avoid economically insignificant allocations. To limit unintended active risk against the parent index, sector and country constraints are enforced. This allows a bit of flexibility for the optimizer to over- and underweight securities relative to the parent indexes while limiting the deviations to mitigate unintended biases. Turnover is also controlled to mitigate transaction costs.

For further details, please refer to the Construction Rules for the Morningstar Global Multifactor Indexes.

About Morningstar Indexes

Morningstar Indexes was built to keep up with the evolving needs of investors—and to be a leading-edge advocate for them. Our rich heritage as a transparent, investor-focused leader in data and research uniquely equips us to support individuals, institutions, wealth managers and advisors in navigating investment opportunities across major asset classes, styles and strategies. From traditional benchmarks and unique IP-driven indexes, to index design, calculation and distribution services, our solutions span an investment landscape as diverse as investors themselves.

Please visit indexes.morningstar.com for more information.

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