MORNINGSTAR Indexes

Morningstar Factor Monitor: Q3 2026

Value was the best-performing factor in Q3, while momentum was the worst—a reversal of Q2's momentum leadership

Morningstar
October 2026

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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

- Value was the best-performing factor globally in the third quarter of 2026, while momentum was the worst. Yield also outperformed the parent benchmark, while low volatility, quality, and size lagged despite posting small positive returns.
- Momentum's leadership reversed sharply in the third quarter. It was the weakest factor across regions and market segments, as the memory-related semiconductor holdings that had powered its second-quarter gains pulled back. Value and yield consistently occupied the top two positions. Quality generally lagged its parent benchmarks, and size's relative performance varied across markets. Low volatility lagged in the US but outperformed in emerging markets, where the parent benchmark declined.
- Factor leadership remained highly cyclical. Momentum led the global rankings in 2024, value took the lead in 2025 and the first quarter of 2026, momentum reclaimed the top spot in the second quarter, and value returned to the top in the third quarter. Momentum still narrowly leads year to date, but its third-quarter reversal shows how quickly short-horizon leadership can change.
- 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 (Q3 2026)

Global

Value was the best-performing factor globally in the third quarter of 2026, returning 6.30%, while momentum was the weakest, declining 7.12%. Yield also outperformed the Morningstar Global Target Market Exposure Index, which gained 1.70% for the quarter. Low volatility, quality, and size posted modest positive absolute returns but lagged the parent benchmark while multifactor declined.

The quarter reinforced how quickly factor leadership can rotate. Exhibit 10 shows that value, the strongest global factor in 2025, returned to the top of the rankings in the third quarter, followed by yield. Momentum, which led in the second quarter, fell to the bottom of the quarterly leaderboard, although it retained a narrow year-to-date lead. Quality and size, both of which outperformed in the second quarter, slipped below the parent index. Low volatility improved its quarterly ranking but remains the weakest factor year to date. This pattern highlights the cyclical nature of factor returns, and how short-horizon leadership can change quickly.

Exhibit 1 Global Performance Summary

	Q3 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	1.12	8.00	4.53	10.76	7.54	11.57	8.56	11.61	7.66	12.18	0.55
Morningstar Gbl Mtum Ftr	-7.12	36.32	24.00	29.49	15.46	20.40	17.03	18.54	10.15	19.06	0.53
Morningstar Gbl Qual Ftr	0.72	15.88	16.82	16.75	10.70	17.15	13.11	15.85	10.12	16.34	0.59
Morningstar Gbl Size Ftr	0.06	11.17	18.81	14.82	9.41	15.94	10.51	16.31	8.54	17.91	0.47
Morningstar Gbl Val Ftr	6.30	10.76	31.15	14.57	15.87	14.88	12.57	15.29	9.26	16.90	0.53
Morningstar Gbl Yld Ftr	5.88	11.00	25.19	12.97	16.81	13.85	14.16	14.75	10.62	16.29	0.62
Morningstar Global Multifactor	-1.30	9.98	10.99	11.98	11.79	13.26	11.97	13.00	9.84	13.76	0.65
Morningstar Global TME	1.70	12.37	17.02	14.21	12.01	14.83	12.88	14.66	9.22	16.14	0.54

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

Exhibit 2 Global Risk Summary (Since Inception)

	Tracking Error	Beta	Max Drawdown	Down Capture Ratio	Up Capture Ratio
Morningstar Global Low Volatility Factor	7.16	0.69	-30.68	69.36	73.59
Morningstar Global Momentum Factor	7.77	1.08	-53.92	105.87	107.36
Morningstar Global Quality Factor	3.45	0.99	-41.50	97.01	101.14
Morningstar Global Size Factor	3.85	1.09	-49.07	108.01	103.07
Morningstar Global Value Factor	5.22	1.00	-47.38	100.82	100.70
Morningstar Global Yield Factor	4.33	0.97	-45.44	94.71	101.35
Morningstar Global Multifactor	4.57	0.82	-36.90	81.49	89.59
Morningstar Global TME	0.00	1.00	-46.15	100.00	100.00

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

The Morningstar Global Value Factor Index's leadership was driven primarily by stock selection rather than broad sector positioning. Its largest contributors included overweight positions in Microsoft, Accenture, Salesforce, Pfizer, and AT&T. Those gains were partly offset by underweight positions in Nvidia, Apple, Meta Platforms, and Palantir Technologies, each of which rose, along with an overweighting in International Business Machines, which declined.

At the other end of the spectrum, the Morningstar Global Momentum Factor Index was the weakest-performing factor in the third quarter. As the index was last reconstituted in June, it entered the quarter positioned for the rally in memory-related stocks earlier in the year, but was left exposed when that trend reversed and market leadership rotated toward value and yield stocks. Its largest detractors included overweight positions in SK Hynix and SanDisk, both of which fell sharply, along with underweights in Microsoft, Nvidia, and Apple, each of which rose. Positive effects from overweight positions in Valero Energy, Newmont, Suncor Energy, and Advanced Micro Devices, as well as an underweighting in Tesla, which declined, provided only a partial offset. The index's volatility over the quarter was nearly three times that of the parent benchmark.

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	SK Hynix	-0.76	-23.27	0.22	Microsoft	-3.25	37.76	-1.03
	China Construction Bank Class A	1.20	18.54	0.21	Nvidia	-4.75	14.27	-0.66
	Industrial And Commercial Bank Of China Class A	1.10	18.51	0.19	Apple	-4.38	15.19	-0.64
	DBS Group Holdings	0.96	21.29	0.19	Meta Platforms Class A	-1.21	28.83	-0.35
	Tesla	-1.01	-15.64	0.18	Palantir Technologies Ordinary Shares - Class A	-0.31	60.32	-0.15
Morningstar Global Momentum Factor	Valero Energy	0.51	49.40	0.19	SK Hynix	4.55	-23.27	-1.21
	Tesla	-1.01	-15.64	0.18	Microsoft	-3.25	37.76	-1.03
	Newmont	0.51	23.74	0.10	SanDisk Ordinary Shares	2.67	-23.48	-0.79
	Suncor Energy	0.42	27.20	0.09	Nvidia	-4.75	14.27	-0.66
	Advanced Micro Devices	1.58	5.31	0.09	Apple	-4.38	15.19	-0.64
Morningstar Global Quality Factor	Microsoft	2.05	37.76	0.64	SK Hynix	4.42	-23.27	-1.27
	NVIDIA	3.69	14.27	0.50	Apple	-4.38	15.19	-0.64
	Palantir Technologies Ordinary Shares - Class A	0.73	60.32	0.36	ASML Holding	2.94	-7.72	-0.25
	Tesla	-1.01	-15.64	0.18	SanDisk Ordinary Shares	0.75	-23.48	-0.24
	Wheaton Precious Metals	1.03	19.19	0.18	Western Digital	0.63	-28.83	-0.21
Morningstar Global Size Factor	SK Hynix	-0.76	-23.27	0.22	Microsoft	-3.25	37.76	-1.03
	Tesla	-1.01	-15.64	0.18	Nvidia	-4.75	14.27	-0.66
	Applied Materials	-0.44	-29.19	0.17	Apple	-4.38	15.19	-0.64
	Everpure Class A	0.26	65.99	0.16	Meta Platforms Class A	-1.21	28.83	-0.35
	Snowflake Inc Ordinary Shares	0.51	33.42	0.15	Palantir Technologies Ordinary Shares - Class A	-0.31	60.32	-0.15
Morningstar Global Value Factor	Microsoft	4.42	37.76	1.51	Nvidia	-4.75	14.27	-0.66
	Accenture Class A	1.06	49.08	0.43	Apple	-4.38	15.19	-0.64
	Salesforce	0.95	46.81	0.37	International Business Machines	1.40	-21.23	-0.36
	Pfizer	1.29	20.51	0.26	Meta Platforms Class A	-1.21	28.83	-0.35
	AT&T	1.22	19.42	0.22	Palantir Technologies Ordinary Shares - Class A	-0.31	60.32	-0.15
Morningstar Global Yield Factor	Salesforce	1.57	46.81	0.61	Microsoft	-3.25	37.76	-1.03
	Apple	3.42	15.19	0.55	Nvidia	-4.75	14.27	-0.66
	Accenture C Class A	0.83	49.08	0.34	Meta Platforms Class A	-1.21	28.83	-0.35
	SK Hynix	-0.76	-23.27	0.22	Palantir Technologies Ordinary Shares - Class A	-0.31	60.32	-0.15
	Shell	0.84	22.88	0.18	Fair Isaac	0.21	-50.41	-0.12

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

US

The US results broadly mirrored the global pattern, with value and yield[1] at the top of the large- and mid-cap rankings and momentum at the bottom. Yield led the small-cap segment, where momentum was again the weakest-performing factor.

In the large- and mid-cap segments, value was the clear leader, posting 6.83% gain. Yield also outperformed the Morningstar US Target Market Exposure Index, which gained 2.40%. Multifactor, size, quality, low volatility, and momentum all lagged the parent benchmark with flat or negative returns, and momentum was the weakest performer, declining 7.00%.

In the small-cap segment, yield led with a return of 0.40% and was the only factor with a positive return, finishing well ahead of the Morningstar US Small TME Index, which fell 5.77%. Value ranked second. Low volatility, quality, and size finished in line with or slightly ahead of the small-cap benchmark despite negative absolute returns. Momentum, which led small caps by a wide margin in the second quarter, declined 15.89% and lagged by a wide margin.

Exhibit 4 US Performance Summary

	Q3 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	-1.88	12.44	-1.66	10.25	7.04	12.55	9.57	12.80	9.49	12.19	0.69
Morningstar US Mtum Ftr	-7.00	38.46	30.47	31.38	17.72	22.30	20.18	20.23	13.55	19.56	0.68
Morningstar US Qual Ftr	-1.87	17.77	3.50	14.10	11.09	18.24	14.69	17.00	13.07	16.11	0.76
Morningstar US Size Ftr	-0.20	13.35	17.59	13.61	9.29	16.90	11.88	17.21	11.09	17.94	0.60
Morningstar US Val Ftr	6.83	15.13	32.62	14.40	15.01	16.40	12.86	16.98	11.27	17.13	0.63
Morningstar US Yld Ftr	5.02	15.76	17.77	12.94	15.49	15.06	14.06	16.16	12.51	16.12	0.73
Morningstar US Multifactor	-0.01	10.86	8.09	9.91	11.99	14.13	13.59	14.10	12.36	13.70	0.82
Morningstar US TME	2.40	13.19	15.24	13.24	13.31	15.80	15.27	15.57	12.37	15.69	0.73

[1] The yield factor measures total shareholder yield (dividends plus buybacks). For a broader look at the outperformance of companies returning cash through dividends and buybacks in 2026, see Dan Lefkovitz, "The Surprising Stocks Beating the Market in 2026"

	Q3 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 Small Low Vol Ftr	-5.26	11.10	4.45	13.74	5.79	15.03	7.78	14.72	9.94	14.14	0.64
Morningstar US Small Mtum Ftr	-15.89	38.58	37.30	33.04	20.29	27.50	18.19	24.60	11.76	23.51	0.53
Morningstar US Small Quality Ftr	-5.70	13.94	4.82	11.58	6.66	18.73	11.59	17.57	10.69	17.17	0.60
Morningstar US Small Value Ftr	-0.66	15.28	22.77	13.23	10.68	21.42	10.89	22.76	11.19	22.63	0.52
Morningstar US Small Yield Ftr	0.40	16.67	15.35	13.39	9.61	19.10	11.63	20.80	12.60	19.78	0.63
Morningstar US Small Cap Size Ftr	-5.73	14.81	19.32	15.18	6.69	21.83	10.02	22.10	10.99	22.01	0.52
Morningstar US Small TME	-5.77	14.42	16.93	14.75	7.66	19.77	10.97	19.76	10.55	19.62	0.54

Source: Morningstar Indexes. Performance shown in GR USD. Data as of Sept. 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	8.29	0.66	-28.62	65.18	69.86
Morningstar US Mtum Ftr	8.87	1.12	-50.93	108.77	109.11
Morningstar US Qual Ftr	4.49	0.99	-37.20	98.11	101.15
Morningstar US Size Ftr	5.41	1.10	-46.51	110.76	102.22
Morningstar US Val Ftr	7.02	1.00	-44.76	101.54	97.27
Morningstar US Yld Ftr	5.54	0.97	-42.02	92.46	95.95
Morningstar US Multifactor	4.78	0.84	-32.73	79.13	87.53
Morningstar US TME	0.00	1.00	-41.49	100.00	100.00
Morningstar US Small Low Vol Ftr	8.62	0.66	-32.47	62.71	72.02
Morningstar US Small Mtum Ftr	10.76	1.07	-54.37	106.85	108.44
Morningstar US Small Quality Ftr	5.01	0.85	-36.42	84.17	89.20
Morningstar US Sml Cap Size Ftr	6.08	1.12	-49.74	112.08	110.52
Morningstar US Small Value Ftr	4.98	0.98	-44.16	91.23	99.71
Morningstar US Small Yield Ftr	5.28	1.09	-46.23	112.23	110.06
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 Sept. 30, 2026.

The Morningstar US Value Factor Index's leadership was driven primarily by overweight positions in Microsoft, Accenture, Salesforce, Pfizer, and Strategy, each of which posted a double-digit quarterly return. Those gains were partly offset by underweight positions in Nvidia, Apple, Meta, and Palantir , each of which rose, along with an overweighting in IBM, which declined.

The Morningstar US Momentum Factor Index, by contrast, was hurt by underweighting in Microsoft, Nvidia, and Apple, each of which rose, and overweight positions in SanDisk and Western Digital, which declined sharply. Positive effects from overweight positions in ExxonMobil, Valero Energy, Marathon Petroleum, and Advanced Micro Devices, along with an underweighting in Tesla, which fell over the quarter, were not enough to offset the losses.

Developed Markets ex-US

Yield was the top performer in developed markets outside the US in the third quarter, returning 6.52%, followed by value at 3.55%. Both factors, along with size, outperformed the Morningstar Developed Markets ex-US TME Index, which gained 1.10%. Low volatility finished roughly in line with the benchmark, while multifactor and quality posted small positive returns but lagged. Momentum was the weakest factor, declining 4.63%. This marked a sharp reversal from the second quarter, when momentum and quality led the region while yield ranked last.

Exhibit 6 Developed Markets ex-US Performance Summary

	Q3 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	1.07	9.55	16.54	12.90	10.94	12.77	9.07	12.33	6.95	13.36	0.46
Morningstar DM xUS Mtum Ftr GR USD	-4.63	27.50	9.87	22.43	11.56	18.12	10.88	16.53	6.02	18.34	0.33
Morningstar DM xUS Qual Ftr GR USD	0.33	14.89	15.44	17.86	6.93	18.03	9.91	16.08	6.64	17.47	0.37
Morningstar DM xUS Size Ftr GR USD	2.63	11.89	14.10	15.26	8.35	16.17	8.87	16.08	6.35	18.29	0.35
Morningstar DM xUS Val Ftr GR USD	3.55	12.38	27.16	15.96	16.35	15.46	11.55	16.64	7.13	18.71	0.39
Morningstar DM xUS Yld Ftr GR USD	6.52	12.06	28.16	14.12	17.07	14.68	13.19	15.14	8.42	17.85	0.46
Morningstar DM xUS Multifactor GR USD	0.98	12.24	12.10	13.42	10.76	13.94	10.16	13.40	7.59	15.03	0.47
Morningstar DM xUS TME GR USD	1.10	12.08	16.51	15.32	10.21	15.40	9.91	15.00	6.06	17.17	0.35

Source: Morningstar Indexes. Performance shown in GR USD. Data as of Sept. 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	6.80	0.72	-32.11	70.85	80.03
Morningstar DM xUS Mtum Ftr	6.92	0.99	-52.26	97.49	97.83
Morningstar DM xUS Qual Ftr	4.42	0.98	-46.02	97.07	99.79
Morningstar DM xUS Size Ftr	2.88	1.05	-49.83	102.89	103.39
Morningstar DM xUS Val Ftr	4.89	1.05	-45.20	105.63	108.47
Morningstar DM xUS Yld Ftr	3.78	1.02	-49.58	95.89	105.33
Morningstar DM xUS Multifactor	4.26	0.85	-39.37	81.97	91.17
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 Sept. 30, 2026.

The Morningstar Developed Markets ex-US Yield Factor Index's leadership was supported by overweight positions in Shell, Recruit Holdings, SAP, and Mitsubishi Corp, along with an underweighting in Kioxia Holdings, which fell sharply. Those gains were only modestly offset by detractors, including overweight

positions in Novartis, Societe Generale, and Sanofi, which declined, and underweightings in Mitsubishi UFJ Financial Group and Shopify, each of which rose.

The Morningstar Developed Markets ex-US Momentum Factor Index was the weakest single-factor index in the region. Positive contributions came from overweight positions in Shell, Advantest, Repsol, Sumitomo Metal Mining, and BP. However, those gains were more than offset by overweight positions in Kioxia Holdings, Mitsui Kinzoku, Siemens Energy, ASML Holding, and Nokia, each of which declined over the quarter. Kioxia's sharp drop alone outweighed the combined gains from the index's top five contributors.

Emerging Markets

Yield led in emerging markets in the third quarter, returning 8.45%, followed by value at 5.81% and low volatility at 5.24%. All three factors outperformed the Morningstar Emerging Markets TME Index, which declined 0.62% for the quarter. Size finished in line with the benchmark, while multifactor and quality lagged, and momentum performed the worst, falling 8.04%. The rankings were a near-complete reversal of the second quarter, when momentum and quality led the region and low volatility ranked last.

Exhibit 8 Emerging Markets Performance Summary

	Q3 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	5.24	9.75	7.49	13.64	6.85	11.65	8.09	12.12	6.48	14.95	0.40
Morningstar EM Mtum Ftr GR USD	-8.04	58.62	38.21	44.13	11.42	23.97	13.50	21.47	6.66	23.18	0.34
Morningstar EM Qual Ftr GR USD	-3.30	32.59	36.98	29.11	13.14	22.60	10.87	19.22	6.92	21.46	0.35
Morningstar EM Size Ftr GR USD	-0.61	20.19	21.55	23.53	8.97	17.19	8.56	17.51	5.73	20.96	0.30
Morningstar EM Val Ftr GR USD	5.81	15.03	50.68	28.35	18.04	19.17	13.33	18.54	8.35	21.75	0.41
Morningstar EM Yld Ftr GR USD	8.45	14.46	43.30	22.51	16.12	16.65	12.38	16.04	7.93	19.28	0.42
Morningstar EM Multifactor GR USD	-0.98	30.33	29.09	23.64	11.52	15.90	10.71	15.31	7.87	18.23	0.43
Morningstar EM TME GR USD	-0.62	28.44	28.09	24.68	9.38	17.72	9.68	17.05	5.79	20.42	0.31

Source: Morningstar Indexes. Performance shown in GR USD. Data as of Sept. 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	9.08	0.67	-41.20	58.90	68.29
Morningstar EM Mtum Ftr	9.21	1.04	-58.53	104.93	107.08
Morningstar EM Qual Ftr	12.86	0.85	-46.25	86.26	92.26
Morningstar EM Size Ftr	4.82	1.00	-51.16	97.15	97.41
Morningstar EM Val Ftr	5.97	1.02	-51.17	97.04	105.99
Morningstar EM Yld Ftr	5.18	0.91	-47.43	85.43	94.91
Morningstar EM Multifactor	4.83	0.87	-47.88	80.52	90.62
Morningstar EM TME	0.00	1.00	-53.11	100.00	100.00

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

The Morningstar EM Yield Factor Index's leadership was driven in large part by underweight positions in SK Hynix and Samsung Electronics, both of which declined. Its largest contributors also included overweightings in ASUSTeK Computer, Lenovo Group, and Alibaba Group, which rallied. Those gains were partly offset by detractors, including an overweighting in Yageo, which roughly halved in value over the quarter, and an underweighting in Taiwan Semiconductor Manufacturing, which rose. Overweight positions in Vanguard International Semiconductor and United Microelectronics, both of which declined, also detracted.

The Morningstar EM Momentum Factor Index, by contrast, was the region's weakest factor. The Korean semiconductor names that powered its second quarter leadership reversed and became its largest detractors: SK Hynix, Samsung Electro-Mechanics, SK Square, and Samsung Electronics. A sizable underweighting in TSMC, which rose, added to the shortfall. Positive effects from overweight positions in Nan Ya Plastics, Petrobras, Unimicron Technology, S-Oil, and China Gold International Resources provided only a partial offset.

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, momentum surged back to the top in the second quarter of 2026, and value reclaimed the lead in the third quarter. Momentum's path is a vivid illustration of this cyclicality: After leading in the second quarter, it was the weakest global factor in the third, yet its earlier gains still leave it narrowly ahead of value year to date. These shifts underscore how quickly relative factor performance can change and why short-horizon factor timing is difficult. Low volatility remained the weakest factor year to date, although it ranked above quality, size, multifactor, and momentum in the third quarter.

The silver lining is that factors' market-relative returns have remained only modestly correlated with one another, as Exhibit 11 shows. Momentum, for example, has been negatively correlated with value and yield over the past 10 years, a relationship on clear display in the third quarter, when value and yield led as momentum fell. These relationships mean 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	Q3 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 23.0	Value Factor 6.3
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	Value Factor 21.1	Yield Factor 5.9
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	Yield Factor 19.0	Global TME 1.7
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	Size Factor 16.9	Low Volatility Factor 1.1
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	Global TME 13.1	Quality Factor 0.7
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	Quality Factor 12.5	Size Factor 0.1
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 7.6	Multifactor -1.3
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 2.5	Momentum Factor -7.1

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

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

1	Morningstar Gbl Low Vol Ftr	1.00						
2	Morningstar Gbl Mtum Ftr	-0.40	1.00					
3	Morningstar Gbl Qual Ftr	-0.35	0.31	1.00				
4	Morningstar Gbl Size Ftr	0.03	-0.19	-0.26	1.00			
5	Morningstar Gbl Val Ftr	0.35	-0.55	-0.60	0.43	1.00		
6	Morningstar Gbl Yld Ftr	0.46	-0.64	-0.56	0.43	0.90	1.00	
7	Morningstar Global Multifactor	0.73	0.01	-0.09	-0.14	0.16	0.20	1.00

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

Long-Term Performance

A long investment horizon can reduce timing risk, but it does not eliminate the risk of underperformance. Globally, through Sept. 30, 2026, four single-factor indexes—yield, momentum, quality, and value—outperformed the Morningstar Global TME Index since inception, though value only narrowly, while low volatility and size lagged their parent benchmark. Yield posted the highest raw since-inception return among the single factors and 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. Despite its strong quarter, the Morningstar US Value Factor Index continues to trail the Morningstar US TME Index since inception, and the gap remains wider 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 took a step back after its weak third-quarter showing. It ceded the top global since-inception spot to yield but remains the best-performing single-factor index since inception in the US large- and mid-cap universe. In developed markets ex-US, it now trails the parent benchmark since inception. Yield remains a durable long-term factor. It now leads globally, in developed markets ex-US, and in US small caps, and ranks second in emerging markets behind value.

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 downside capture than the market across regions, even when it has not led the return rankings. In emerging markets, low volatility outperformed its parent benchmark since inception, but its main long-term appeal is the smoother ride it has historically provided rather than consistently leading on absolute return.

Portfolio Highlights

Reconstitution and Rebalance

The Morningstar Global Factor Indexes are reconstituted and rebalanced semiannually in June and December. As a result, portfolio changes tend to be concentrated in the second and fourth quarters. There was no scheduled reconstitution or rebalance during the third quarter.

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.

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

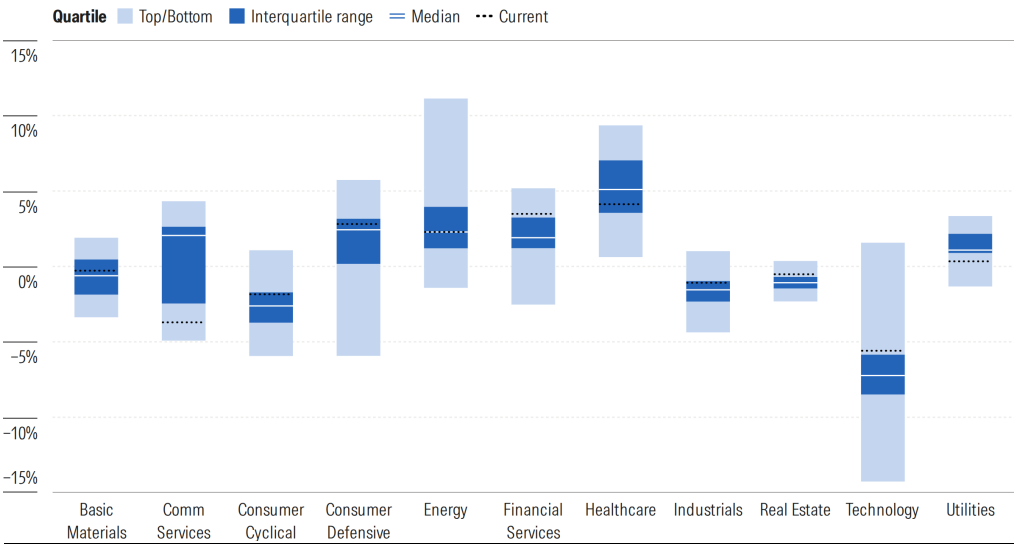
adjusting for sector membership. This approach is appropriate because these price-driven factors are generally more comparable across sectors than the fundamental factors.

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 underweighting is currently the index's largest active position, consistent with the sector's elevated volatility.

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 underweighted in the index.

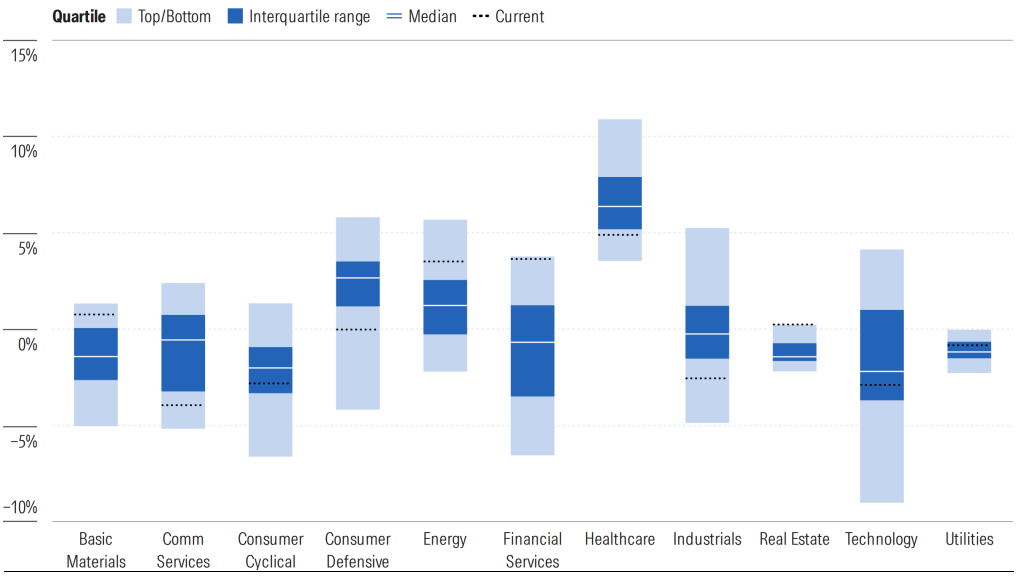
The Morningstar Global Momentum Factor Index is currently overweight the technology sector by a wide margin, reflecting artificial intelligence-and semiconductor-driven sentiment.

Exhibit 12 Value Factor Active Sector Weights



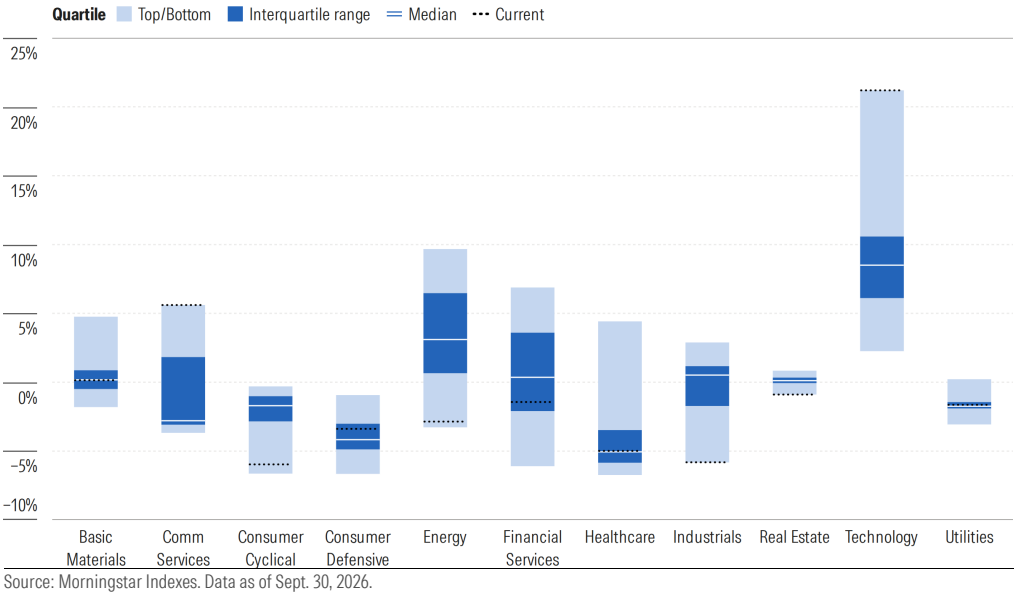
Source: Morningstar Indexes. Data as of Sept. 30, 2026.

Exhibit 13 Yield Factor Active Sector Weights



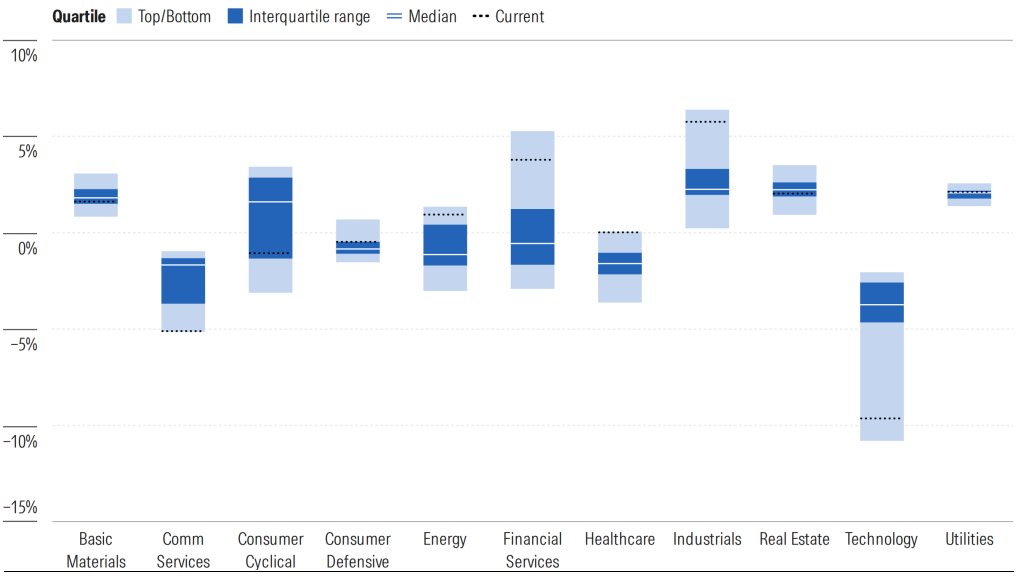
Source: Morningstar Indexes. Data as of Sept. 30, 2026.

Exhibit 14 Quality Factor Active Sector Weights



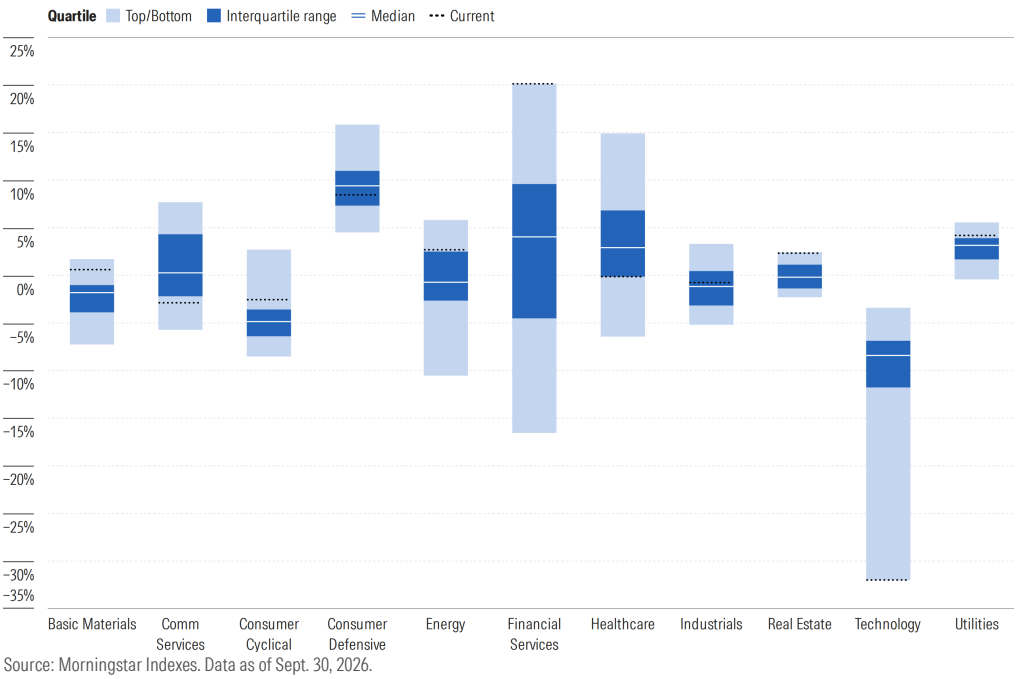
Source: Morningstar Indexes. Data as of Sept. 30, 2026.

Exhibit 15 Size Factor Active Sector Weights



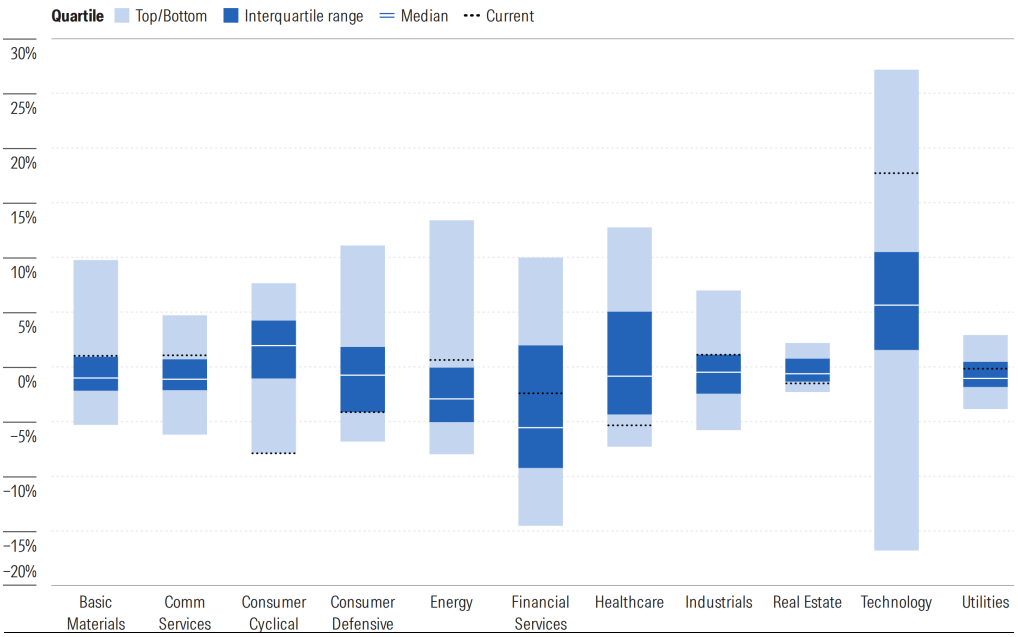
Source: Morningstar Indexes. Data as of Sept. 30, 2026.

Exhibit 16 Low Volatility Factor Active Sector Weights



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

Exhibit 17 Momentum Factor Active Sector Weights



Source: Morningstar Indexes. Data as of Sept. 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, and 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 the 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 a total yield, which is the sum of 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 strength of their factor exposure, subject to constraints to limit unintended risk. The indexes are reconstituted and rebalanced semiannually.

For further details, please reference 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 reference 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. In February 2026, the acquisition of CRSP brought the CRSP Market Indexes—benchmarks for over $3 trillion in AUM—into the Morningstar Indexes family. Rebranded to the Morningstar Market Indexes in July 2026, these indexes are recognized globally for their high-quality methodology and focus on investability. Additionally, CRSP's Research Data Products, renowned for their academic rigor, historical depth, and accuracy, will further enhance Morningstar's equity research and data capabilities. This integration unites two trusted sources of market insight, reinforcing a shared commitment to transparency, quality, and investor-focused solutions.

Please visit indexes.morningstar.com for more information.

Contact:
indexes@morningstar.com

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