M RNINGSTAR Indexes

Morningstar Quarterly Style Monitor: Q4 2024

US large caps shine amidst an eventful quarter. Value stocks fail to sustain their long-awaited outperformance over growth stocks.

Morningstar Inc.

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Contents

- 2 Performance Highlights
- 7 Portfolio Highlights
- 11 Performance Attribution
- 15 Concentration
- 17 Valuations
- 22 Forever in Style
- 23 Appendix

Aniket Gor Lead Quantitative Analyst, Indexes Aniket.Gor@morningstar.com

https://indexes.morningstar.com/

Executive Summary

This is the latest installment of the Morningstar Quarterly Style Monitor, which is designed to help investors stay on top of style trends. This publication tracks several members of the Morningstar Broad Style Index family, providing insights into their performance drivers and portfolio composition.

Key Takeaways

- Globally, markets delivered divergent returns, with US markets ending the quarter in positive, while the broad markets outside of the US, including their style variants, closing in negative. Contrary to the last quarter, growth style regained its dominance over value, with growth outperforming value in US markets and emerging markets, while marginally underperforming value style in developed markets outside of the US.
- The margin of outperformance for growth stocks versus its value counterpart was highest in the US large-cap segment, driven by strong rallies in Tesla, Amazon.com, and Nvidia. The US large-cap growth index delivered the highest returns across the board, ending the quarter with an impressive 7.63% return.
- Volatility was pronounced in growth stocks relative to value stocks over the past quarter for developed markets, including the US. Overall, compared with the third quarter, short-term volatility cooled off across the board for the latest quarter.
- In the US, sector composition saw a shift with communication services and financial services seeing an uptick in their weights, while healthcare saw a consistent decline in the growth index. Outside of the US, in terms of sector weights, consumer defensive experienced a downtrend in the growth indexes, while financial services gained a positive momentum.
- The US Large Growth Index continued to be highly concentrated, with the top 10 assets constituting 69% of the portfolio. Microsoft, Nvidia, Amazon, Apple, and Meta Platforms constituted a staggering 50% of the Morningstar US Large Growth Index.
- Valuation spreads between growth and value stocks, measured by P/E (trailing 12 months), increased over the past quarter for US large, small, and developed-markets ex-US segments, while easing a bit for US mid- and emerging markets. As of December 2024, the growth-value P/E spread continued to be in the top quartile of historical distributions for all size bands and regions. Comparatively higher valuation spreads have historically presaged subpar returns for the more expensive growth style.

Performance Highlights

Returns

The fourth quarter of 2024 witnessed a contrasting performance between the US markets and the markets outside of the US. The presidential election outcome, federal-reserve rate cuts, and healthy economic growth on the back of strong consumer spending helped the Morningstar US Market Index close the year with 2.56% returns for the latest quarter ending December 2024. Growth stocks, after taking a backseat amidst a turbulent third quarter, continued to extend their dominance over value stocks. The Morningstar US Broad Growth Index delivered 6.28%, while its value counterpart lost 0.88%. The large-cap growth was the best-performing size segment delivering a solid 7.63% return, with leading contributors to its outperformance suggesting that artificial intelligence enthusiasm has not waned off, particularly as Nvidia gained 10.0% after a sluggish third quarter.

Globally, where our style family is built by applying Morningstar Indexes' Broad Style methodology to our suite of Target Market Exposure indexes (targeting large- and mid-cap stocks representing 85% of the investable market), the dynamics were opposite to that of the US. Geopolitical tensions, inflationary concerns in the UK, along with political instability in Europe all weighed on the returns for the developed markets equities outside of the US. The Morningstar Developed Markets ex US Index fell by 7.37%, with its growth segment taking a larger hit (negative 8.04%) than its value counterpart (negative 6.68%).

Emerging markets also faced the effects of geopolitical tensions as well as tariff concerns from the Trump administration. Overall, the Morningstar Emerging Markets Index fell by 8.08%, with the growth index falling by 9.06% and value index ending lower by 7.21%.

For 2024, value outperformed growth in the markets outside of the US, while in the US, the large-cap growth stocks delivered an impressive 37.38% returns. Across longer horizons, the growth style has dominated over the value style, particularly in the US large-cap segment. Value, however, saw some redemption in the mid-and small-cap segments of the US market, where we observed pockets of outperformance versus growth over longer (greater than 15 years) time spans. In the cases where value underperformed growth, the differential is not as striking as the large-cap segment.

Outside the US, the Developed Markets Value Index outperformed its growth counterpart for one- and five-year period ending 2024, while emerging-markets value continued to deliver better risk-adjusted returns versus growth over one-, five-, and 10-year time horizons.

Exhibit 1 Performance Characteristics up to December 2024

		1 Qr		Y	TD/1 Yr			5 Yr			10 Yr		Sinc	e Incepti	on*
US	Return	Risk	Sharpe	Return	Risk	Sharpe	Return	Risk	Sharpe	Return	Risk	Sharpe	Return	Risk	Sharpe
Morningstar US Market Extended	2.56	6.55	0.24	23.81	11.29	1.51	13.83	18.87	0.65	12.56	15.84	0.71	9.17	15.90	0.50
Morningstar US Market Broad Growth Extended	6.28	8.43	0.61	31.31	12.90	1.80	16.36	21.10	0.70	14.57	17.49	0.76	9.09	18.30	0.45
Morningstar US Market Broad Value Extended	-0.88	5.57	-0.33	16.42	11.79	0.92	10.59	18.50	0.50	10.17	15.50	0.59	8.78	15.14	0.49
Value Relative to Growth															
Morningstar US Large Cap	3.28	6.62	0.34	27.94	10.49	1.93	15.39	18.27	0.74	13.72	15.38	0.80	8.99	15.50	0.50
Morningstar US Large Broad Growth	7.63	9.23	0.70	37.38	13.40	2.08	18.79	21.64	0.79	16.23	17.80	0.84	9.20	18.20	0.46
Morningstar US Large Broad Value	-0.64	5.18	-0.31	18.54	10.41	1.20	11.08	17.16	0.55	10.72	14.56	0.65	8.25	14.53	0.47
Value Relative to Growth															
Morningstar US Mid Cap	0.65	6.78	-0.04	15.29	15.19	0.67	10.49	21.06	0.46	10.29	17.40	0.55	9.66	17.58	0.49
Morningstar US Mid Cap Broad Growth	3.68	7.72	0.35	18.04	16.35	0.78	11.14	21.77	0.47	11.11	18.02	0.57	8.90	19.81	0.42
Morningstar US Mid Cap Broad Value	-2.36	6.27	-0.52	12.44	15.09	0.51	9.12	21.87	0.39	9.10	17.87	0.48	9.95	17.34	0.51
Value Relative to Growth															
Morningstar US Small Cap Extended	0.80	9.21	0.01	11.34	18.99	0.38	7.88	24.68	0.33	7.88	20.67	0.38	8.67	20.35	0.41
Morningstar US Small Broad Growth Extended	1.26	9.32	0.06	13.39	18.64	0.49	7.10	23.72	0.30	8.33	20.18	0.41	7.36	22.41	0.33
Morningstar US Small Broad Value Extended	0.30	9.44	-0.04	9.27	20.05	0.28	8.99	26.74	0.36	7.52	22.05	0.36	9.81	19.97	0.46
Value Relative to Growth															
Global															
Morningstar Global Target Market Exposure	-1.08	4.64	-0.44	17.70	9.09	1.29	10.52	17.42	0.51	9.77	14.78	0.58	8.07	16.49	0.48
Morningstar Global Growth	1.24	6.05	0.04	22.05	10.11	1.53	11.64	18.63	0.55	10.95	15.57	0.63	8.94	16.71	0.53
Morningstar Global Value	-3.32	3.95	-1.09	13.18	9.77	0.79	8.79	17.86	0.42	8.24	15.14	0.48	7.11	16.82	0.42
Value Relative to Growth															
Morningstar Developed Markets ex-US	-7.37	5.04	-1.69	5.22	10.06	0.04	5.77	17.90	0.26	5.90	15.22	0.33	4.28	17.55	0.26
Morningstar Developed Markets ex-US Growth	-8.04	5.47	-1.68	3.90	10.57	-0.08	4.89	18.06	0.21	6.09	15.11	0.35	4.31	16.86	0.27
Morningstar Developed Markets ex-US Value	-6.68	4.95	-1.58	6.39	10.45	0.15	6.29	19.16	0.28	5.48	16.37	0.30	4.24	18.78	0.25
Value Relative to Growth															
Morningstar Emerging Markets	-8.08	5.66	-1.62	7.46	11.98	0.23	2.56	18.18	0.09	4.57	16.79	0.24	3.36	20.49	0.21
Morningstar Emerging Markets Growth	-7.21	5.42	-1.52	6.63	11.38	0.17	0.60	18.47	-0.02	3.63	16.65	0.19	3.21	20.18	0.20
Morningstar Emerging Markets Value	-9.06	6.71	-1.52	8.58	12.92	0.30	4.29	19.15	0.18	5.41	18.00	0.28	3.87	20.99	0.23
Value Relative to Growth															
Source: Morningstar Direct.															
Returns longer than 1 year annualized.															
All index performance data displayed are for Total Re	turn USD varia	ants.					F	Return an	d Sharpe Ratio	<-50%	-25%to-50%	-5%to-25% -5%	to 5%to25%	25%to50%	>50%
*This includes performance back-tested to the end of			lexes and J	une 2008 for	Global ir	ndexes.		Risk		>50%	25%to50%	5%to25% 5%	6 -5%to-25%	-25%to-50%	<-50%
						-									

Tracking the return differentials between value and growth paints an interesting picture for style investing. The year 2020 saw growth indexes dominating across the board, with substantial differentials over value indexes. However, value indexes outpaced growth for most of the quarters between 2021 and 2022. The year 2023 moved the needle back in favor of growth stocks, primarily fueled by investors' enthusiasm in the applications of AI across businesses, as well as expectations of a soft landing and Fed rate cuts. Emerging markets, on the other hand, bucked this trend, with the value style outperforming growth for 12 out of 17 quarters since the end of 2020.

	03 20	04 19	01	02 202	03 20	04	01	02 20	03 21	04	01	02 20	03 22	Q4	01	02 20	03 23	04	01	02	03 2024	04
Emerging	-2.58		-7.47	-9.28		10.63	4.09	-1.02	8.73		7.60		-1.10		3.01	2.74		1.55	-0.1			
Developed Ex US	-1.73	0.12	-10.96	-5.14	-6.12	6.53	8.46	-2.74	-0.63	-1.75	11.43	3.94	-0.85	3.35	-4.52	0.99	7.20	-3.09	-1.9	8 -0.1	1 2.71	1.35
Global	0.22	-0.90	-11.21	-8.44	-6.44	6.02	8.14	-4.97	-0.07	0.00	9.59	7.83	-1.56	7.97	-8.54	-4.27	3.49	-3.29	-1.0	7 -5.4	7 4.19	-4.57
US Small	2.13	-0.57	-12.27	-5.13	-2.67	3.69	14.10	1.26	1.92	4.25	10.15	5.95	-3.33	5.99	-7.47	-2.60	3.14	1.15	-2.3	1 -2.4	7 2.20	-0.96
US Mid	3.75	-1.57	-12.72	-10.25	-3.04	0.57	13.04	-4.65	-1.05	1.69	13.71	5.61	-2.02	4.37	-6.67	-2.92	1.99	-0.69	-2.	2 1.2	8 1.92	-6.04
JS Large	1.83	-1.77	-11.09	-11.82	-6.82	4.00	7.43	-7.51	-2.26	-0.26	6.88	12.72	-2.18	13.48	-13.97	-9.43	2.18	-5.07	-2.3	6 -10.	83 5.80	-8.27
US Broad	2.27	-1.61	-11.57	-11.02	-5.68	3.22	9.16	-6.04	-1.81	0.62	8.46	10.82	-2.23	11.06	-11.90	-7.59	2.17	-3.67	-2.3	6 -7.6	9 4.72	-7.16

Exhibit 2 Quarterly Value Minus Growth Performance Differential (%)

Source: Morningstar Direct.

We shed more light on the drivers of fourth-quarter returns in the Performance Attribution section.

Risk

Not surprisingly, over long-term time horizons, smaller-cap stocks in the US tended to exhibit greater volatility and sensitivity to market fluctuations than their larger counterparts, as Exhibit 1 shows. Such companies tend to have more volatile earnings as they are more leveraged to the vagaries of niche markets and have a lower likelihood of enjoying durable competitive advantages relative to larger stocks. The expected pattern is observed across time horizons for the US market indexes, with the delta of risk between small- and large-cap stocks being the widest in the recent one-year period (19.0% versus 10.5% annualized volatility).

In the US, the growth segment tended to be more volatile than value for large- and mid-cap stocks, while for small caps, value stocks were riskier than the growth stocks. Interestingly, in the US, the period of positive value minus growth return differential fairly overlaps with periods when the growth and value stocks experienced an increase in their risk spread. Outside of the US, however, value stocks exhibited a higher volatility than growth stocks across majority of the time horizons.







Exhibit 3.2 Rolling Three-Month Risk Versus Value-Growth Differential for US Size Segments

Portfolio Highlights

December Reconstitution

Morningstar's broad style index family was reconstituted in December (the next reconstitution will be in June 2025) according to its reconstitution schedule. As a result, the compositions of the indexes changed more noticeably between the third and fourth quarters than they did between the previous two quarters. Changes can be driven by corporate actions, style and size migration, or price fluctuations of existing constituents. Exhibit 4 shows the top five new constituents added to each index during the December reconstitution.

Exhibit 4 Top Five Additions to Each Index in December 2024

Index	Additions
Morningstar US Market Broad Growth Extended	Flutter Entertainment (0.14%), Constellation Energy (0.10%), Fidelity National Information Services (0.09%), Norfolk
Index	Southern (0.09%), Freeport-McMoRan (0.09%)
Morningstar US Market Broad Value Extended Index	Adobe (0.30%), Equinix (0.13%), Sysco (0.09%), Rockwell Automation (0.06%), Agilent Technologies (0.06%)
Morningstar US Large Cap Broad Growth Index	Palantir Technologies (0.69%), GE Vernova (0.25%), Constellation Energy (0.14%), Freeport-McMoRan (0.12%)
Morningstar US Large Broad Value Index	Adobe (0.43%), Carrier Global (0.30%), Equinix (0.19%), GE Vernova (0.19%)
Morningstar US Mid Cap Broad Growth Index	Arthur J. Gallagher (1.23%), Airbnb (0.98%), Roper Technologies (0.96%), Snowflake (0.88%), Flutter Entertainment (0.72%)
Morningstar US Mid Cap Broad Value Index	Schlumberger (1.02%), MetLife (0.90%), Philips 66 (0.89%), Marathon Petroleum (0.85%), Occidental Petroleum (0.63%)
Morningstar US Small Broad Growth Extended Index	Dayforce (0.47%), Lincoln Electric (0.45%), Churchill Downs (0.39%), Wingstop (0.35%), Medspace Holdings (0.35%)
Morningstar US Small Broad Value Extended Index	Ovintiv (0.44%), The Interpublic Group of Companies (0.43%), Molson Coors Beverage (0.41%), LQK (0.40%), Ally Financial (0.40%)
Morningstar Global Growth Index	Xiaomi (0.19%), AppLovin (0.17%), MicroStrategy (0.13%), Shin-Etsu Chemical (0.12%), Sumitomo Mitsui Financial Group (0.11%)
Morningstar Global Value Index	Visa (0.58%), LVMH (0.17%), Intuit (0.16%), Reliance Industries (0.15%), SoftBank (0.09%)
Morningstar DM xUS Growth Index	Shin-Etsu Chemical (0.54%), Sumitomo Mitsui Financial Group (0.48%), Munchener Ruckversicherungs-Gesellschaft (0.36%), Nintendo (0.35%), TC Energy (0.27%)
Morningstar DM xUS Value Index	LVMH (0.73%), SoftBank (0.40%), Takeda Pharmaceutical (0.32%), Alimentation Couche-Tard (0.24%), Repsol (0.16%)
Morningstar EM Growth Index	Xiaomi (1.78%), Naspers (0.95%), Saudi Telecom (0.23%), Hindustan Aeronautics (0.22%), New Oriental Education and Technology Group (0.22%)
Morningstar EM Value Index	Reliance Industries (1.46%), Fomento Economico Mexicano (0.24%), Kweichow Moutai (0.23%), Naver (0.22%), Kuaishou Technology (0.20%)

Source: Morningstar Direct. Data as of Dec. 31, 2024.

Sectors

There are persistent differences in growth rates and valuations across sectors, leading to diverging sector weightings across the value and growth indexes, which can affect performance. Within the US, the Morningstar US Market Large Broad Growth Index was highly skewed toward the technology sector, which commands 43% of the index weight as of Dec. 31, 2024. The value index, on the other hand, had a balanced exposure to financial services, healthcare, consumer defensive, and industrials. For the latest quarter, communication services and financial services saw an uptick in their weights, while healthcare saw a consistent decline in the growth index. Interestingly, the weight of the technology sector gradually picked up in the US value index. Looking at the longer-term trends, industrials gained weight in the mid- and small-cap growth index, while healthcare experienced a down trend across all the growth size segments.

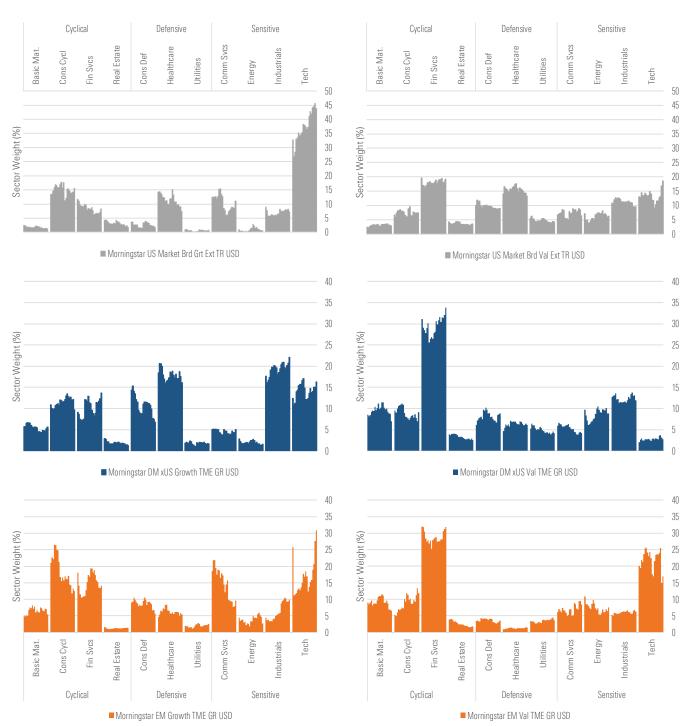


Exhibit 5.1 Historical Sector Weights Distribution for the US, Developed Markets ex-US, and Emerging Markets

Source: Morningstar Direct. Data December 2019 to December 2024. (Each bar further displays the quarterly sector weight for the respective sector from December 2019 to December 2024.)

Interestingly, these sector tilts become less nuanced globally. For example, in developed markets outside the US, healthcare, consumer defensive, and industrials were overweight in growth indexes, while they were underweight in the US growth index. Morningstar Emerging Markets Value Index has a significant technology component to it, which is contrary to what we observed in the US and developed-markets ex-US.

In the US, there are also notable sector differences along the market-cap spectrum. In the Morningstar US Large Cap Index, value stocks were predominant in financial services, healthcare, industrials, and increasingly in technology, while the Mid Cap Value Index had a balanced exposure across multiple cyclical and defensive industries. The Small Cap Value Index followed the mid-cap suite, albeit with higher tilts toward financial services. Large-cap growth stocks were predominantly found in technology and consumer cyclicals, whereas mid- and small-cap growth stocks, apart from technology, were found in industrials and healthcare sectors.

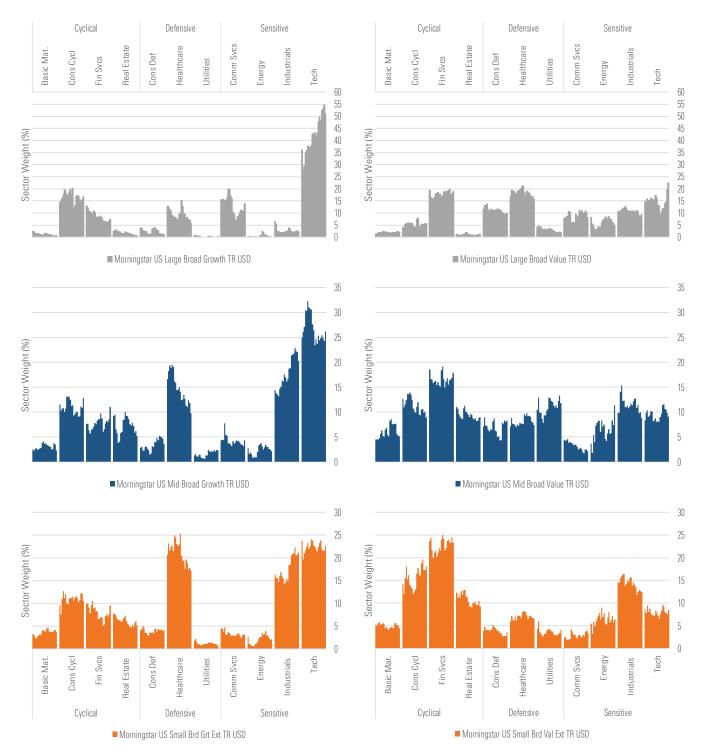


Exhibit 5.2 Historical Sector Weights Distribution for US Size Segments

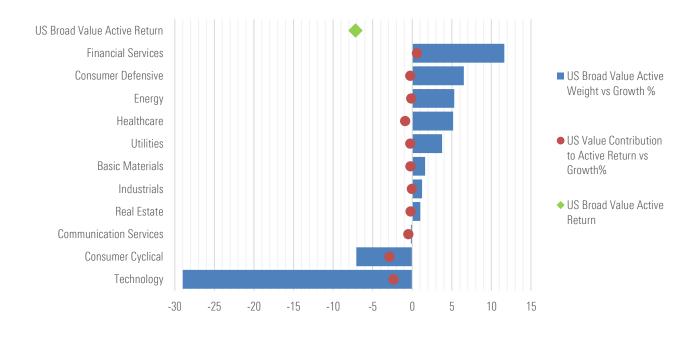
Source: Morningstar Direct. Data December 2019 to December 2024. (Each bar displays the quarterly sector weight for the respective sector from December 2019 to December 2024.)

Performance Attribution

US

The Morningstar US Market Broad Value Index underperformed the Broad Growth Index by 7.16%. Underweighting technology and consumer cyclicals were the key drivers accounting for a third of value's underperformance, followed by consumer cyclical and healthcare contributing 33% and 12% of the value minus growth delta, respectively.

Exhibit 6.1 Active Sector Weights and Their Respective Contribution to Active Returns for the US Broad Value Versus Growth Index



Source: Morningstar Direct. Data as of Dec. 31, 2024.

From the perspective of the value index, underweighting Tesla (54 % return), Amazon (17%), and Nvidia (10%) contributed to half of the underperformance of value index. On the positive active returns side were underweighting Eli Lilly (negative 13% return) and Advanced Micro Devices (negative 26% return), while overweighting JPMorgan Chase (14% return) worked in favor of value index.

Exhibit 6.2 shows the top and bottom contributors to the active return of the US Broad Value Index over Broad Growth Index.

Exhibit 6.2 Top and Bottom Contributors to the Active Return for the US Broad Value Versus Growth Index

	Active		Contr. to Active		Active		Contr. to Active
Name	Weight	3M Return	Return	Name	Weight	3M Return	Return
Eli Lilly and Co	-2.59	-12.71	0.36	Tesla Inc	-2.89	54.36	-1.48
JPMorgan Chase & Co	2.25	14.35	0.30	Amazon.com Inc	-6.69	17.74	-1.17
Advanced Micro Devices Inc	-0.88	-26.38	0.26	NVIDIA Corp	-11.31	10.59	-1.14
Microsoft Corp	-11.40	-1.85	0.22	Netflix Inc	-1.23	25.67	-0.29
Wells Fargo & Co	0.78	25.05	0.17	Palantir Technologies Inc	-0.35	103.31	-0.29
Walmart Inc	1.28	12.13	0.15	Visa Inc Class A	-1.79	15.16	-0.26
Adobe Inc	-0.82	-14.12	0.12	Salesforce Inc	-1.01	22.29	-0.21
Uber Technologies Inc	-0.54	-19.74	0.11	UnitedHealth Group Inc	1.35	-13.16	-0.18
Bank of America Corp	1.01	11.38	0.11	AppLovin Corp	-0.16	148.05	-0.15
Morgan Stanley	0.51	21.57	0.10	Broadcom Inc	-0.39	34.74	-0.15
US Value Active Return			-7.16			0	id +ve 3M return
						Underweight a	and +ve 3M return

Source: Morningstar Direct. Data as of Dec. 31, 2024.

Developed-Markets ex-US

The value and growth style segments for the Morningstar Developed Markets ex-US Market Index ended the quarter in negative, falling by 6.68% and 8.04%, respectively. For the value index, avoiding a few big healthcare stocks like Novo Nordisk (negative 26% return) and AstraZeneca (negative 16% return) worked in its favor. Excluding these stocks along with ASML Holding (negative 15% return) together helped the value index fall less than its growth counterpart.

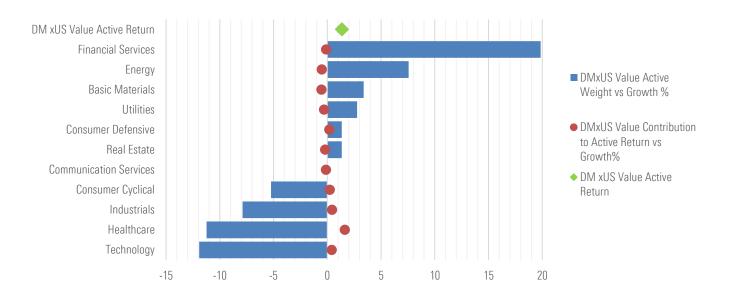


Exhibit 7.1 Active Sector Weights and Their Respective Contribution to Active Returns for the Developed Markets ex-US Value Versus Growth Index

Source: Morningstar Direct. Data as of Dec. 31, 2024.

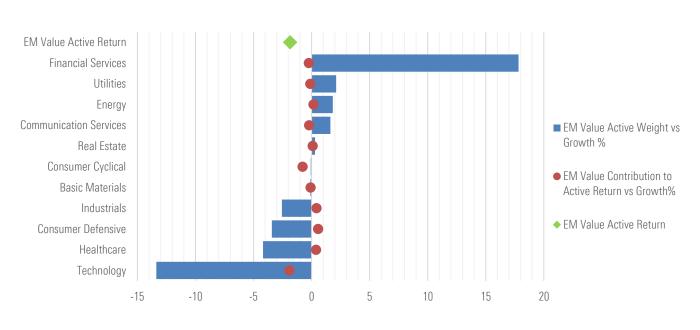
On the other hand, overweighting BHP Group, TotalEnergies, and AIA Group dragged the performance of value index relative to the growth index in the developed-markets ex-US.

Exhibit 7.2 Top and Bottom Contributors to the Active Return of Developed Markets ex-US broad Value Versus Growth Index

Active	C	ontr. to Active		Active		Contr. to Active
Weight	3M Return	Return	Name	Weight	3M Return	Return
-3.81	-26.42	1.02	BHP Group Ltd	1.54	-23.20	-0.38
-3.07	-15.35	0.52	Shopify Inc	-1.17	32.63	-0.32
-2.38	-15.66	0.39	TotalEnergies SE	1.39	-15.35	-0.22
-1.88	-13.58	0.28	AIA Group Ltd	0.95	-19.24	-0.20
-1.01	-21.11	0.24	SAP SE	-2.55	7.26	-0.18
1.80	10.77	0.18	Mitsubishi Corp	0.80	-19.73	-0.17
-0.49	-28.29	0.15	Shin-Etsu Chemical Co Ltd	0.82	-19.35	-0.17
-0.79	-15.33	0.13	The Toronto-Dominion Bank	1.09	-14.89	-0.17
-0.91	-13.95	0.13	Recruit Holdings Co Ltd	-1.05	16.53	-0.16
-0.98	-12.22	0.12	Bayer AG	0.26	-40.91	-0.13
		1.36			•	d +ve 3M return
	Weight -3.81 -3.07 -2.38 -1.88 -1.01 1.80 -0.49 -0.79 -0.91	Weight 3M Return -3.81 -26.42 -3.07 -15.35 -2.38 -15.66 -1.88 -13.58 -1.01 -21.11 1.80 10.77 -0.49 -28.29 -0.79 -15.33 -0.91 -13.95	Weight3M ReturnReturn-3.81-26.421.02-3.07-15.350.52-2.38-15.660.39-1.88-13.580.28-1.01-21.110.241.8010.770.18-0.49-28.290.15-0.79-15.330.13-0.91-13.950.13-0.98-12.220.12	Weight 3M Return Return Name -3.81 -26.42 1.02 BHP Group Ltd -3.07 -15.35 0.52 Shopify Inc -2.38 -15.66 0.39 TotalEnergies SE -1.88 -13.58 0.28 AIA Group Ltd -1.01 -21.11 0.24 SAP SE 1.80 10.77 0.18 Mitsubishi Corp -0.49 -28.29 0.15 Shin-Etsu Chemical Co Ltd -0.79 -15.33 0.13 The Toronto-Dominion Bank -0.91 -13.95 0.13 Recruit Holdings Co Ltd -0.98 -12.22 0.12 Bayer AG	Weight 3M Return Return Name Weight -3.81 -26.42 1.02 BHP Group Ltd 1.54 -3.07 -15.35 0.52 Shopify Inc -1.17 -2.38 -15.66 0.39 TotalEnergies SE 1.39 -1.88 -13.58 0.28 AIA Group Ltd 0.95 -1.01 -21.11 0.24 SAP SE -2.55 1.80 10.77 0.18 Mitsubishi Corp 0.80 -0.49 -28.29 0.15 Shin-Etsu Chemical Co Ltd 0.82 -0.79 -15.33 0.13 The Toronto-Dominion Bank 1.09 -0.91 -13.95 0.13 Recruit Holdings Co Ltd -1.05 -0.98 -12.22 0.12 Bayer AG 0.26	Weight3M ReturnReturnNameWeight3M Return-3.81-26.421.02BHP Group Ltd1.54-23.20-3.07-15.350.52Shopify Inc-1.1732.63-2.38-15.660.39TotalEnergies SE1.39-15.35-1.88-13.580.28AlA Group Ltd0.95-19.24-1.01-21.110.24SAP SE-2.557.261.8010.770.18Mitsubishi Corp0.80-19.73-0.49-28.290.15Shin-Etsu Chemical Co Ltd0.82-19.35-0.79-15.330.13The Toronto-Dominion Bank1.09-14.89-0.91-13.950.13Recruit Holdings Co Ltd-1.0516.53-0.98-12.220.12Bayer AG0.26-40.91

Emerging Markets

The emerging markets also closed the quarter in negative territory for both value (negative 9.06%) and growth (negative 7.21%) style, with value underperforming growth by 1.85%. Technology and consumer cyclicals were the leading detractors for the Emerging Markets Value Index.





Source: Morningstar Direct. Data as of Dec. 31, 2024.

Predominantly, having a 17% weight on TSMC (9% return) in the growth index while having no exposure in the value index proved to be a leading detractor for the value index. Selecting Alibaba (negative 25%) and JD.com (negative 19%) also added to the underperformance. On the other hand, the value index gained by avoiding falling stocks like Reliance Industries (negative 19%), PDD Holding (negative 28%), and Meituan (negative 11%).

Exhibit 8.2 Top and Bottom Contributors to the Active Return of Emerging Markets Value Versus Growth Index

	Active		Contr. to Active		Active		Contr. to Active
Name	Weight	3M Return	Return	Name	Weight	3M Return	Return
Reliance Industries Ltd	-3.09	- 19.43	0.63	Taiwan Semiconductor Manufacturing Co Ltd	-17.46	8.84	-1.45
PDD Holdings Inc ADR	-1.81	-28.05	0.57	Alibaba Group Holding Ltd	5.08	-24.69	-1.37
Meituan	-2.74	-11.34	0.30	JD.com Inc	1.27	-18.68	-0.24
Samsung Electronics Co Ltd	-0.97	-23.16	0.24	Vale SA	1.00	-23.59	-0.24
Asian Paints Ltd	-0.59	-32.77	0.21	POSCO Holdings Inc	0.44	-41.51	-0.21
China Construction Bank Corp	1.92	10.37	0.19	NTPC Ltd	0.59	-25.90	-0.16
Emaar Properties PJSC	0.39	47.36	0.17	Hyundai Motor Co	0.60	-22.82	-0.15
Hindustan Unilever Ltd	-0.66	-22.15	0.16	Shinhan Financial Group Co Ltd	0.49	-23.73	-0.12
Industrial And Commercial Bank Of China Ltd	1.11	12.49	0.13	United Microelectronics Corp	0.47	-22.76	-0.11
Bharti Airtel Ltd	-1.21	-9.09	0.11	PT Bank Rakyat Indonesia (Persero) Tbk	0.50	-19.91	-0.10
EM Value Active Return			-1.85			Overweight an	id +ve 3M return
						Underweight a	and +ve 3M returr

Source: Morningstar Direct. Data as of Dec. 31, 2024.

Concentration

The broad style indexes skew toward the larger names within their respective segments, owing to market-cap weighting. This weighting approach reflects the composition of the opportunity set and allows companies to become a bigger part of the portfolios as they grow within each market-cap segment.

Concentration was most pronounced in the large-cap indexes (as shown in Exhibit 9), particularly in the Morningstar US Large Broad Growth Index, where the percentage of assets in the top 10 constituents grew from 44% at the end of December 2019 to roughly 69% five years later. The market became more concentrated as the largest growth stocks outperformed. This not only increased their market-cap weightings but also reduced the number of large-growth stocks required to reach 50% coverage of the large-cap market, reducing the number of stocks in the portfolio. Today, the Morningstar US Large Broad Growth Index holds 82 stocks, down from 164 five years ago. Moreover, the largest constituent in the index today (Nvidia) comprises over 14.5% of the portfolio, with Microsoft following closely at 14.4%, whereas six years ago, the equivalent weight for the largest holding (Microsoft) was 60% of today's number, just over 9.0%. The Morningstar US Large Value Index is relatively diversified, with top 10 holdings constituting 34% of the total portfolio and the medium-term trend ranging between 15% to 20% since 2020.

The small- and mid-cap indexes have far less concentration in their top 10 constituents, as there is a natural cap on how large constituents can grow before they advance to the next market-cap segment.

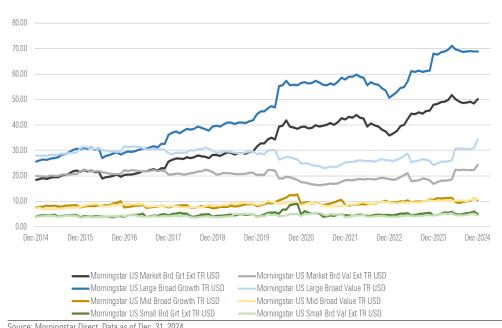


Exhibit 9 Percentage of Portfolio in Top 10 Holdings-US

Source: Morningstar Direct. Data as of Dec. 31, 2024.

Exhibit 10 shows the concentration trends for the style indexes across emerging markets and ex-US developed markets, along with the corresponding parent indexes. Concentration was perennially higher in emerging markets, particularly in the growth index, which implies that there are factors endemic to these markets that facilitate greater concentration of capital. Additionally, while the portfolios largely seem to be getting more concentrated over time, the recent trend in the Morningstar Emerging Markets Growth Index is interesting, with concentration falling precipitously from October 2020 until the end of 2023. This is partially owing to the underperformance of Chinese mega-caps like Alibaba and Tencent, which have been beleaguered by regulatory crackdowns on gaming, digital commerce, and the like.



Exhibit 10 Percentage of Portfolio in Top 10 Holdings—Global

Valuations

By definition, growth stocks trade at higher valuations than value stocks. After years of stronger performance, growth stocks have become more expensive relative to value stocks. This trend holds true both in the US and globally, as illustrated in Exhibits 11 through 17. These figures show the spread between the trailing 12-month P/E ratios of the growth and value indexes in the Morningstar Broad Style Index family for each of the three market-cap segments, as well as for the ex-US developed- and emerging-markets regions of the global style index family. It also includes this spread data for the Morningstar US Large Cap Index and the Morningstar US Small Cap Extended Index, along with historical distributions for all the spreads.

After a volatile 2022, which saw a broad selloff in the first three quarters, followed by a recovery since the fourth quarter, relative valuations for growth stocks increased noticeably compared with the end of 2022 across all size segments and regions. As of December, the growth-value P/E spread was in or close to the top quintile of historical distributions for the large- and mid-cap size in the US. The valuation spread cooled down for the US small-cap segment, although it still is in the top 30 percentile. Compared with the third quarter of 2024, the growth-value P/E spread eased a bit for US small- and emerging markets, while it widened for US large-, mid-, and developed-markets ex-US.

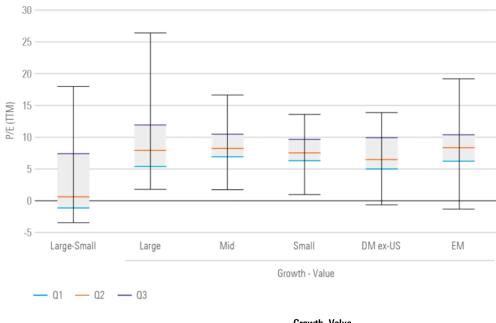


Exhibit 11 P/E (TTM) Valuation Spread

	Growth–Value									
US Large-										
Small	US Large	US Mid	US Small	DM ex-US	EM					
11.32	17.70	12.72	9.64	12.03	11.09					
94.90%	93.30%	89.70%	74.20%	87.80%	84.30%					
94.50%	90.90%	87.90%	96.20%	86.10%	90.70%					
	Small 11.32 94.90%	Small US Large 11.32 17.70 94.90% 93.30%	US Large- Small US Large US Mid 11.32 17.70 12.72 94.90% 93.30% 89.70%	US Large- US Mid US Small 11.32 17.70 12.72 9.64 94.90% 93.30% 89.70% 74.20%	Small US Large US Mid US Small DM ex-US 11.32 17.70 12.72 9.64 12.03 94.90% 93.30% 89.70% 74.20% 87.80%					

Source: Morningstar Direct. Data as of Dec. 31, 2024.

Unusually wide valuation spreads may portend lower expected returns for the pricier index. Historically, in the US, wider valuation spreads have been associated with lower returns over the next five years for the large- and mid-cap growth indexes relative to their value counterparts, as Exhibits 12 and 13 show. The same is true of the large-cap index relative to the small-cap extended index, as shown in Exhibit 15.

There wasn't a strong relationship between valuation spreads and future returns for the US small-cap growth and value indexes shown in Exhibit 14. The same is true of the large-mid universe in emerging markets, displayed in Exhibit 17.

A startling and counterintuitive phenomenon was observed in developed markets outside the US (Exhibit 16), where a significantly positive relationship between valuation spreads and subsequent five-year returns is seen. We view this as an anomaly, likely attributable to exogenous economic factors that have disproportionately benefited growth stocks over this period. It's also worth noting that the historical distribution of valuation spreads has been tightest in these ex-US developed markets.

Exhibit 12 Relationship Between Valuations and Future Returns: November 1999 to September 2024 (Morningstar US Large Broad Growth Index – Morningstar US Large Broad Value Index)

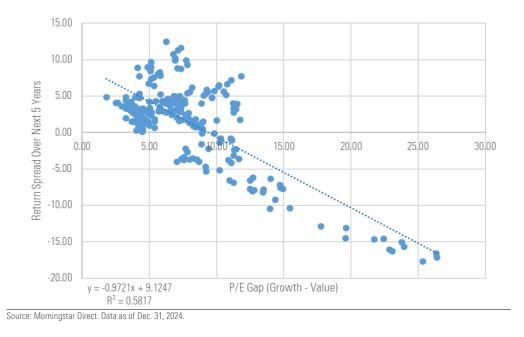
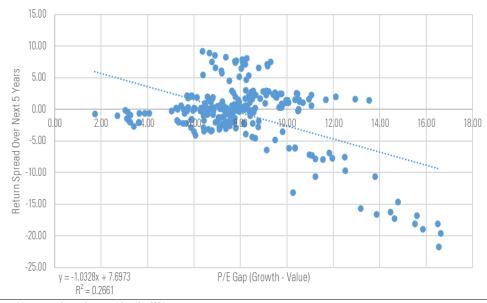
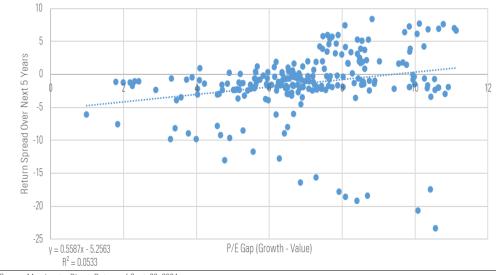


Exhibit 13 Relationship Between Valuations and Future Returns: November 1999 – September 2024 (Morningstar US Mid Broad Growth Index – Morningstar US Mid Broad Value Index)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

Exhibit 14 Relationship Between Valuations and Future Returns: November 1999 to September 2024 (Morningstar US Small Cap Broad Growth Extended Index – Morningstar US Small Cap Broad Value Extended Index)



Source: Morningstar Direct. Data as of Sept. 30, 2024.



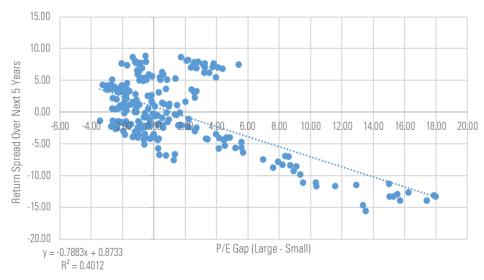


Exhibit 16 Relationship Between Valuations and Future Returns: June 2008 to September 2024 (Morningstar DM ex-US Growth TME Index – Morningstar DM ex-US Value TME Index)

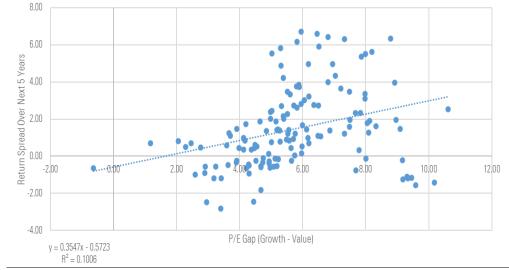
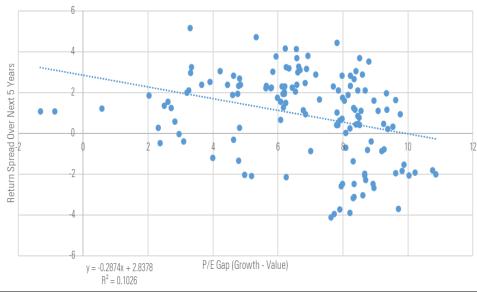




Exhibit 17 Relationship Between Valuations and Future Returns: June 2008 – September 2024 (Morningstar EM Growth TME Index – Morningstar EM Value TME Index)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

Forever in Style

Regardless of the market conditions, the Morningstar Broad Style and Global Style Index families provide a robust toolkit for style investors. The indexes accurately represent the opportunity set available to style investors across different regions and can facilitate precise performance benchmarking and efficient asset allocation aligned with the Morningstar Style Box. For more information, visit https://www.morningstar.com/products/indexes-style.

Appendix

Appendix 1: Style Investing

Style investing focuses on two of the most important drivers of stock returns: size and valuations. In their 1992 seminal paper, "The Cross-Section of Expected Stock Returns," Nobel laureates Eugene Fama and Kenneth French demonstrated that the differences in these two variables can explain much of the variation of stock returns. That was the same year the Morningstar Style Box launched. This tool divides the equity market into nine sections along two dimensions: size and value/growth orientation, which has become a widely adopted frame of reference for classifying managed portfolios and assessing performance.

This style framework is also useful for framing asset-allocation decisions. The large-value segment of the market is a fertile hunting ground for mature dividend payers, while the large-growth segment is home to many highly profitable companies with strong prospects. Small-growth stocks tend to have the greatest potential for capital appreciation, but they also carry considerable risk. Finally, the small-value segment may be where the best bargains are. Historically, this market segment has had the highest returns, though it has experienced long stretches of underperformance.

The Morningstar Broad Style and Global Style Indexes provide an effective toolkit to gauge style trends, both in the US and globally. These indexes cast a wider net than the nine segments of the style box, carving the value-growth spectrum into halves rather than thirds. This better reflects the opportunity set available to style investors, as managers often color outside their designated section in the style box. Stocks in the blend segment of the market are partially allocated to both the value and growth indexes, as they often appear in both value and growth managers' portfolios.

Appendix 2: Company Characteristics by Style

Morningstar's broad style and global style indexes each focus on a different type of stock, reflecting how many active managers define their opportunity set.

Large-growth stocks are often among the market's most enviable businesses. These firms not only tend to enjoy robust growth prospects but also typically benefit from dominant market positions and deploy extremely profitable business models. Within the Morningstar Broad Style Index family, the Morningstar US Large Broad Growth Index has the greatest exposure to stocks with Morningstar Economic Moat Ratings of wide, reflecting durable competitive advantages that Morningstar equity analysts expect to last for at least 20 years, as Exhibit 18 illustrates. However, the constituents of this index tend to generate a smaller share of their revenue outside the US compared with any of the other broad style indexes that cover the US, as shown in Exhibit 19.

Similar to the US, global growth indexes have the greatest bent toward wide moat ratings, reflecting the structurally more favorable business models of these constituents. These durable competitive advantages are also more prevalent in developed markets relative to emerging markets. Companies listed in emerging markets are more likely to have to navigate headwinds like tenuous regulatory

landscapes (which invite competition) and more acute economic cyclicality (which detracts from our equity analysts' confidence in the durability of their profits).

Exhibit 18 Economic Moat Exposure (%)

US	Wide Moat	Narrow Moat	None
Morningstar US Market Extended	58.35	25.23	6.27
Morningstar US Market Broad Growth Extended	66.31	19.45	3.86
Morningstar US Market Broad Value Extended	49.5	31.72	8.95
Morningstar US Large Cap	76.08	22.08	1.48
Morningstar US Large Broad Growth	84.4	14.93	0.37
Morningstar US Large Broad Value	66.57	30.26	2.75
Morningstar US Mid Cap	17.81	42.93	21.64
Morningstar US Mid Cap Broad Growth	24.8	39.75	15.16
Morningstar US Mid Cap Broad Value	10.22	46.39	28.66
Morningstar US Small Cap Extended	1.2	11.61	11.64
Morningstar US Small Broad Growth Extended	1.21	12	8.61
Morningstar US Small Broad Value Extended	1.21	11.33	14.73

Morningstar Global Target Market Exposure

Global

Morningstar Global Target Market Exposure	52.27	24.8	11.18
Morningstar Global Growth	62.64	20.4	5.83
Morningstar Global Value	41.42	29.48	16.72
Morningstar Developed Markets ex-US	32.4	23.79	25.66
Morningstar Developed Markets ex-US Growth	45.36	27.48	11.30
Morningstar Developed Markets ex-US Value	19.52	20.12	39.77
Morningstar Emerging Markets	18.85	14.64	14.07
Morningstar Emerging Markets Growth	25.13	13.62	9.92
Morningstar Emerging Markets Value	12.22	15.79	18.57

Exhibit 19 Revenue Generated in the US

US	% of Revenue from the US
Morningstar US Market Extended	60.87
Morningstar US Market Broad Growth Extended	56.22
Morningstar US Market Broad Value Extended	66.08
Morningstar US Large Cap	55.66
Morningstar US Large Broad Growth	50.31
Morningstar US Large Broad Value	61.78
Morningstar US Mid Cap	73.32
Morningstar US Mid Cap Broad Growth	71.02
Morningstar US Mid Cap Broad Value	75.82
Morningstar US Small Cap Extended	76.47
Morningstar US Small Broad Growth Extended	74.59
Morningstar US Small Broad Value Extended	78.64

Global

Morningstar Global Target Market Exposure	46.05
Morningstar Global Growth	43.90
Morningstar Global Value	48.41
Morningstar Developed Markets ex-US	23.08
Morningstar Developed Markets ex-US Growth	26.85
Morningstar Developed Markets ex-US Value	19.38
Morningstar Emerging Markets	13.77
Morningstar Emerging Markets Growth	19.15
Morningstar Emerging Markets Value	8.08

Source: Morningstar Direct. Data as of Dec. 31, 2024.

Large-value stocks tend to be more mature. These include slow-growth giants like Berkshire Hathaway and JPMorgan in the US and Shell outside the US. Because they often have strong cash flows and a limited need to fund growth, these stocks tend to make larger cash distributions to shareholders than their faster-growing and smaller counterparts.

Stocks in the middle of the value-growth spectrum, like Apple and Meta, are found in both the Morningstar US Large Broad Value and Growth indexes. This reflects they are also found in both value and growth managers' portfolios, as they don't have a strong bias toward one style over the other.

Moving down the market-cap ladder tends to increase both risk and upside potential. Mid-cap growth stocks have a bit more growth runway than their larger counterparts. These companies are often at an earlier stage in their lifecycle; yet, they have been successful or trying to unlock growth avenues via acquisitions, like Arthur J Gallagher, or could be relatively mature firms updating their pricing strategy and aligning their businesses to integrate Al in their products, like the technology firm Adobe. Both companies were among the top holdings of the Morningstar US Mid Cap Broad Growth Index at the end of December 2024.

Small-growth stocks are riskier still. These firms tend to be less profitable and face greater uncertainty than better-established growth stocks, yet with this broader distribution of potential outcomes comes the juiciest growth potential. SoFi Technologies, a top holding in the Morningstar US Small Cap Broad Growth Extended Index, exemplifies this promise and risk by offering financial products, aided by technology, to a niche customer segment. However, competition is fierce, and the industry tends to be quite cyclical, with high sensitivity to interest rates.

Mid- and small-cap value stocks also carry greater risk and upside potential than their larger counterparts. This includes a mix of stocks lacking sales growth, as well as names that have fallen out of favor, often for good reason. Luxury goods firm Tapestry is a good example of the former, while automobile manufacturer General Motors embodies the latter.

Smaller stocks tend to generate more of their revenue in the US, particularly on the value side. The constituents of the Morningstar US Small Cap Broad Value Extended Index generated a larger share of their revenue in the US than any of the other broad style indexes, as shown in Exhibit 19.

Exhibits 20-34 show the top 10 constituents in the large-, mid-, and small-cap extended indexes, the value and growth indexes in those segments, as well as the value and growth indexes for ex-US developed and emerging markets.

Exhibit 20 Top Holdings: Morningstar US Large Cap Index

Constituent	Ticker	Sector	Weighting (%)
Apple Inc	AAPL	Technology	9.25
Nvidia Corp	NVDA	Technology	7.76
Microsoft Corp	MSFT	Technology	7.67
Amazon.com Inc	AMZN	Consumer Cyclical	5.10
Meta Platforms Inc Class A	META	Communication Services	3.12
Tesla Inc	TSLA	Consumer Cyclical	2.76
Alphabet Inc Class A	GOOGL	Communication Services	2.71
Broadcom Inc	AVGO	Technology	2.60
Alphabet Inc Class C	GOOG	Communication Services	2.40
Berkshire Hathaway Inc Class B	BRK.B	Financial Services	2.00

Exhibit 21 Top Holdings: Morningstar US Large Broad Growth Index

Constituent	Ticker	Sector	Weighting (%)
Nvidia	NVDA	Technology	14.55
Microsoft	MSFT	Technology	14.37
Amazon.com	AMZN	Consumer Cyclical	9.55
Apple	AAPL	Technology	7.67
Meta Platforms	META	Communication Services	5.85
Tesla	TSLA	Consumer Cyclical	5.17
Broadcom	AVGO	Technology	3.19
Alphabet Class A	GOOGL	Communication Services	3.01
Eli Lilly and Co	LLY	Healthcare	2.84
Alphabet Class C	GOOG	Communication Services	2.67

Source: Morningstar Direct. Data as of Dec. 31, 2024.

Exhibit 22 Top Holdings: Morningstar US Broad Value Index

Constituent	Ticker	Sector	Weighting (%)
Apple	AAPL	Technology	11.06
Berkshire Hathaway	BRK.B	Financial Services	4.28
JPMorgan Chase & Co	JPM	Financial Services	3.54
ExxonMobil Corp	XOM	Energy	2.48
UnitedHealth Group	UNH	Healthcare	2.44
Alphabet Inc Class A	GOOGL	Communication Services	2.36
Alphabet Inc Class C	GOOG	Communication Services	2.09
Procter & Gamble Co	PG	Consumer Defensive	2.07
Walmart	WMT	Consumer Defensive	2.05
The Home Depot	HD	Consumer Cyclical	2.02

Source: Morningstar Direct. Data as of Dec. 31, 2024.

Exhibit 23 Top Holdings: Morningstar US Mid Cap Index

Constituent	Ticker	Sector	Weighting (%)
Arthur J. Gallagher & Co	AJG	Financial Services	0.64
Capital One Financial	COF	Financial Services	0.62
AppLovin	APP	Technology	0.61
Williams Companies	WMB	Energy	0.60
Autodesk	ADSK	Technology	0.57
Fortinet	FTNT	Technology	0.56
DoorDash	DASH	Communication Services	0.54
Hilton Worldwide Holdings	HLT	Consumer Cyclical	0.54
Digital Realty Trust	DLR	Real Estate	0.53
General Motors Co	GM	Consumer Cyclical	0.53

Exhibit 24 Top Holdings: Morningstar US Mid Cap Broad Growth Index

Constituent	Ticker	Sector	Weighting (%)
Arthur J. Gallagher & Co	AJG	Financial Services	1.23
AppLovin	APP	Technology	1.17
Autodesk	ADSK	Technology	1.10
Fortinet	FTNT	Technology	1.07
DoorDash	DASH	Communication Services	1.04
Hilton Worldwide Holdings	HLT	Consumer Cyclical	1.03
Royal Caribbean Group	RCL	Consumer Cyclical	0.99
Airbnb	ABNB	Consumer Cyclical	0.98
Roper Technologies	ROP	Technology	0.96
Workday	WDAY	Technology	0.95

Source: Morningstar Direct. Data as of Dec. 31, 2024.

Exhibit 25 Top Holdings: Morningstar US Mid Cap Broad Value Index

Constituent	Ticker	Sector	Weighting (%)
Capital One Financial	COF	Financial Services	1.28
Williams Companies	WMB	Energy	1.24
General Motors	GM	Consumer Cyclical	1.11
ONEOK	OKE	Energy	1.11
Truist Financial	TFC	Financial Services	1.09
Sempra	SRE	Utilities	1.04
Schlumberger Ltd	SLB	Energy	1.02
Kinder Morgan Class P	KMI	Energy	1.02
PACCAR	PCAR	Industrials	1.01
Simon Property Group	SPG	Real Estate	1.00

Source: Morningstar Direct. Data as of Dec. 31, 2024.

Exhibit 26 Top Holdings: Morningstar US Small Cap Extended Index

Constituent	Ticker	Sector	Weighting (%)
SoFi Technologies	SOFI	Financial Services	0.33
Tapestry	TPR	Consumer Cyclical	0.31
Affirm Holdings	AFRM	Technology	0.29
EPAM Systems	EPAM	Technology	0.27
GameStop	GME	Consumer Cyclical	0.26
Insmed	INSM	Healthcare	0.25
Ciena	CIEN	Technology	0.25
C.H. Robinson Worldwide	CHRW	Industrials	0.25
Duolingo	DUOL	Technology	0.24
ITT	ITT	Industrials	0.24

Exhibit 27 Top Holdings: Morningstar US Small Broad Growth Extended Index

Constituent	Ticker	Sector	Weighting (%)
SoFi Technologies	SOFI	Financial Services	0.67
Affirm Holdings	AFRM	Technology	0.58
Insmed	INSM	Healthcare	0.51
Duolingo	DUOL	Technology	0.49
ITT	ITT	Industrials	0.49
Dayforce	DAY	Technology	0.47
Norwegian Cruise Line Holdings	NCLH	Consumer Cyclical	0.45
Lincoln Electric Holdings	LECO	Industrials	0.45
AptarGroup	ATR	Healthcare	0.43
Kinsale Capital Group	KNSL	Financial Services	0.43

Source: Morningstar Direct. Data as of Dec. 31, 2024.

Exhibit 28 Top Holdings: Morningstar US Small Value Extended Index

Constituent	Ticker	Sector	Weighting (%)
Tapestry	TPR	Consumer Cyclical	0.61
Assurant	AIZ	Financial Services	0.45
First Horizon	FHN	Financial Services	0.45
Ovintiv	OVV	Energy	0.44
American Airlines Group	AAL	Industrials	0.43
The Interpublic Group of Companies	IPG	Communication Services	0.43
Globe Life	GL	Financial Services	0.42
Annaly Capital Management	NLY	Real Estate	0.42
Molson Coors Beverage	TAP	Consumer Defensive	0.41
Lithia Motors	LAD	Consumer Cyclical	0.40

Source: Morningstar Direct. Data as of Dec. 31, 2024.

Exhibit 29 Top Holdings: Morningstar Developed Markets Ex-US TME Index

Constituent	Ticker	Sector	Weighting (%)
ASML Holding	ASML	Technology	1.55
Novo Nordisk	NOVO B	Healthcare	1.55
SAP	SAP	Technology	1.41
Toyota Motor	7203	Consumer Cyclical	1.30
Nestle	NESN	Consumer Defensive	1.19
AstraZeneca	AZN	Healthcare	1.14
Roche Holding	ROG	Healthcare	1.09
Shell	SHEL	Energy	1.07
Novartis	NOVN	Healthcare	1.05
HSBC Holdings	HSBA	Financial Services	1.00

Exhibit 30 Top Holdings: Morningstar Developed Markets Ex-US Growth TME Index

Constituent	Ticker	Sector	Weighting (%)
ASML Holding	ASML	Technology	3.10
Novo Nordisk	NOVO B	Healthcare	3.09
SAP	SAP	Technology	2.82
AstraZeneca	AZN	Healthcare	2.27
Schneider Electric	SU	Industrials	1.51
Shopify	SHOP	Technology	1.43
Hitachi	6501	Industrials	1.29
Recruit Holdings	6098	Communication Services	1.18
Lvmh Moet Hennessy Louis Vuitton	MC	Consumer Cyclical	1.17
Airbus	AIR	Industrials	1.05

Source: Morningstar Direct. Data as of Dec. 31, 2024.

Exhibit 31 Top Holdings: Morningstar Developed Markets Ex-US Value TME Index

Constituent	Ticker	Sector	Weighting (%)
Toyota Motor	7203	Consumer Cyclical	2.62
Shell	SHEL	Energy	2.16
HSBC Holdings	HSBA	Financial Services	2.02
BHP Group	BHP	Basic Materials	1.41
Nestle	NESN	Consumer Defensive	1.38
TotalEnergies	TTE	Energy	1.31
Roche Holding	ROG	Healthcare	1.30
Novartis	NOVN	Healthcare	1.24
The Toronto-Dominion Bank	TD	Financial Services	1.05
Royal Bank of Canada	RY	Financial Services	0.94

Source: Morningstar Direct. Data as of Dec. 31, 2024.

Exhibit 32 Top Holdings: Morningstar Emerging Markets TME Index

Constituent	Ticker	Sector	Weighting (%)
Taiwan Semiconductor Manufacturing Co Ltd	2330	Technology	9.85
Tencent Holdings	700	Communication Services	3.97
Samsung Electronics Co	5930	Technology	2.27
Alibaba Group Holding	9988	Consumer Cyclical	2.23
HDFC Bank	HDFCBANK	Financial Services	1.45
Reliance Industries	RELIANCE	Energy	1.44
Meituan Class B	3690	Consumer Cyclical	1.30
Infosys	INFY	Technology	1.12
China Construction Bank Corp Class H	939	Financial Services	1.01
International Holdings Co PJSC	IHC	Industrials	1.01

Exhibit 33 Top Holdings: Morningstar Emerging Markets Growth TME Index

Constituent	Ticker	Sector	Weighting (%)
Taiwan Semiconductor Manufacturing Co	2330	Technology	19.1
Tencent Holdings	700	Communication Services	4.12
Meituan Class B	3690	Consumer Cyclical	2.51
International Holdings Co PJSC	IHC	Industrials	1.96
ICICI Bank	ICICIBANK	Financial Services	1.88
Xiaomi Corp Class B	1810	Technology	1.78
HDFC Bank	HDFCBANK	Financial Services	1.76
PDD Holdings ADR	PDD	Consumer Cyclical	1.56
Reliance Industries	RELIANCE	Energy	1.43
Samsung Electronics Co	5930	Technology	1.29

Source: Morningstar Direct. Data as of Dec. 31, 2024.

Exhibit 34 Top Holdings: Morningstar Emerging Markets Value TME Index

Constituent	Ticker	Sector	Weighting (%)
Alibaba Group Holding	9988	Consumer Cyclical	4.62
Tencent Holdings	700	Communication Services	3.83
Samsung Electronics Co	5930	Technology	3.33
China Construction Bank Corp Class H	939	Financial Services	2.10
Hon Hai Precision Industry Co	2317	Technology	1.74
SK Hynix	660	Technology	1.65
Reliance Industries	RELIANCE	Energy	1.46
Industrial And Commercial Bank Of China Class H	1398	Financial Services	1.26
Infosys	INFY	Technology	1.16
HDFC Bank	HDFCBANK	Financial Services	1.12

Source: Morningstar Direct. Data as of Dec. 31, 2024.

Appendix 3: Funds That Track Morningstar Broad Style Indexes

Exhibit 35 Funds That Track Morningstar Broad Style Indexes

Name	SecId	Ticker	Domicile	Primary Prospectus Benchmark
BNY Mellon US Large Cap Core Equity ETF	F0000149CO	BKLC	United States	Morningstar US Large Cap TR USD
iShares Morningstar Growth ETF	FEUSA04ACO	ILCG	United States	Morningstar US Large Mid Brd Grt TR USD
iShares Morningstar Value ETF	FEUSA04ACP	ILCV	United States	Morningstar US Large Mid Brd Val TR USD
Lyxor Core Morningstar US (DR) ETF-Dist	F0000109UX	LCUD	Luxembourg	Morningstar US Large-Mid NR USD
iShares Morningstar U.S. Equity ETF	FEUSA04ACN	ILCB	United States	Morningstar US Large-Mid TR USD
NBI U.S. Equity Index O	F000013VX6		Canada	Morningstar US Large-Mid TR USD
NBI U.S. Equity Index INV-2	F000016TJI		Canada	Morningstar US Large-Mid TR USD
iShares Morningstar Mid-Cap Growth ETF	FEUSA04ACR	IMCG	United States	Morningstar US Mid Cap Brd Grt TR USD
iShares Morningstar Mid-Cap Value ETF	FEUSA04ACS	IMCV	United States	Morningstar US Mid Cap Brd Val TR USD
BNY Mellon US Mid Cap Core Equity ETF	F0000149CP	вкмс	United States	Morningstar US Mid Cap TR USD
iShares Morningstar Mid-Cap ETF	FEUSA04ACO	IMCB	United States	Morningstar US Mid Cap TR USD
iShares Morningstar Small-Cap Growth ETF	FEUSA04ACU	ISCG	United States	Morningstar US Small Brd Grt Ext TR USD
iShares Morningstar Small-Cap Value ETF	FEUSA04ACV	ISCV	United States	Morningstar US Small Brd Val Ext TR USD
iShares Morningstar Small-Cap ETF	FEUSA04ACT	ISCB	United States	Morningstar US Small Cap Ext TR USD

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Contact: indexes@morningstar.com

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