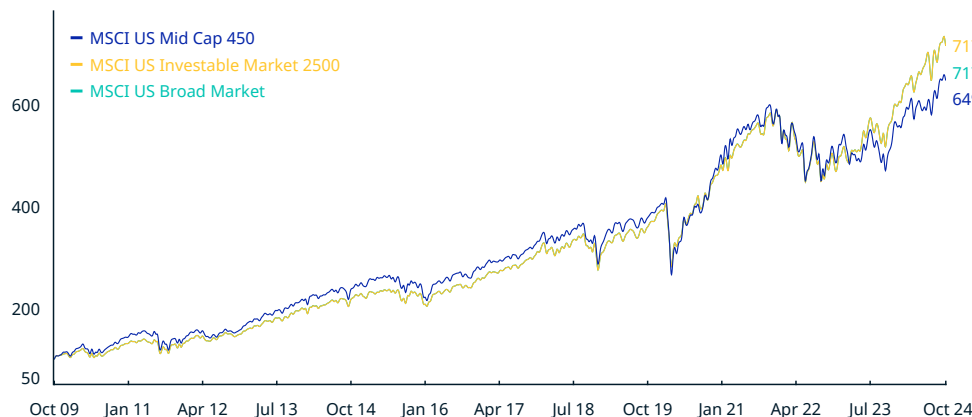


MSCI US Mid Cap 450 Index (USD)

The **MSCI US Mid Cap 450 Index** is comprised of the next largest 450 companies in terms of market capitalization of the US equity market and designed to measure the performance of the mid cap segment. The index represents approximately 16% of the free float-adjusted market capitalization of the US equity market.

For a complete description of the index methodology, please see [Index methodology - MSCI](#).

CUMULATIVE INDEX PERFORMANCE – GROSS RETURNS (USD) (OCT 2009 – OCT 2024)



ANNUAL PERFORMANCE (%)

Year	MSCI US Mid Cap 450	MSCI US Investable Market 2500	MSCI US Broad Market
2023	14.50	26.26	26.21
2022	-16.94	-19.24	-19.23
2021	24.03	26.13	26.10
2020	19.82	21.01	21.02
2019	30.61	31.09	31.07
2018	-8.14	-5.27	-5.28
2017	20.26	21.22	21.21
2016	12.62	12.63	12.67
2015	-0.55	0.61	0.57
2014	13.39	12.71	12.66
2013	36.34	33.51	33.62
2012	16.04	16.40	16.44
2011	-1.91	1.15	1.08
2010	25.69	17.17	17.28

INDEX PERFORMANCE – GROSS RETURNS (%) (OCT 31, 2024)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED				Since May 30, 2003
					3 Yr	5 Yr	10 Yr		
MSCI US Mid Cap 450	-0.30	4.86	36.84	15.24	3.29	11.45	10.46	11.13	
MSCI US Investable Market 2500	-0.72	3.53	38.02	19.77	7.76	14.76	12.53	10.92	
MSCI US Broad Market	-0.72	3.52	38.01	19.75	7.74	14.75	12.52	10.93	

FUNDAMENTALS (OCT 31, 2024)

Div Yld (%)	P/E	P/E Fwd	P/BV
1.46	23.50	18.17	3.03
1.32	27.24	21.41	4.52
1.32	27.42	na	4.51

INDEX RISK AND RETURN CHARACTERISTICS (OCT 31, 2024)

	Turnover (%) ¹	ANNUALIZED STD DEV (%) ²			SHARPE RATIO ^{2,3}			Since May 30, 2003	MAXIMUM DRAWDOWN	
		3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr		(%)	Period YYYY-MM-DD
MSCI US Mid Cap 450	14.23	19.48	21.15	17.45	0.08	0.51	0.56	0.55	58.90	2007-07-13–2009-03-09
MSCI US Investable Market 2500	1.77	17.56	18.68	15.72	0.31	0.71	0.72	0.56	55.29	2007-10-09–2009-03-09
MSCI US Broad Market	1.72	17.56	18.68	15.72	0.31	0.71	0.72	0.65	55.39	2007-10-09–2009-03-09

¹ Last 12 months ² Based on monthly gross returns data

³ Based on NY FED Overnight SOFR from Sep 1 2021 & on ICE LIBOR 1M prior that date

MSCI US Mid Cap 450 Index (USD)

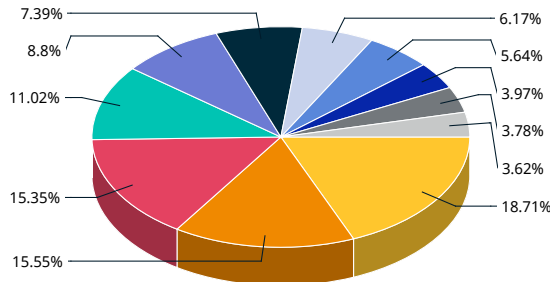
INDEX CHARACTERISTICS

MSCI US Mid Cap 450	
Number of Constituents	457
Mkt Cap (USD Millions)	
Index	6,664,462.81
Largest	50,448.81
Smallest	845.75
Average	14,583.07
Median	12,423.24

TOP 10 CONSTITUENTS

	Float Adj Mkt Cap (USD Billions)	Index Wt. (%)	Sector
ROYAL CARIBBEAN GROUP	50.45	0.76	Cons Discr
FAIR ISAAC CORP	49.25	0.74	Info Tech
QUANTA SERVICES	44.16	0.66	Industrials
VISTRA ENERGY	43.42	0.65	Utilities
CBRE GROUP	40.18	0.60	Real Estate
GARTNER	39.01	0.59	Info Tech
VERTIV HOLDINGS A	38.87	0.58	Industrials
INGERSOLL-RAND	38.73	0.58	Industrials
HOWMET AEROSPACE	38.67	0.58	Industrials
MICROSTRATEGY	38.57	0.58	Info Tech
Total	421.30	6.32	

SECTOR WEIGHTS



- Industrials 18.71%
- Financials 15.55%
- Information Technology 15.35%
- Consumer Discretionary 11.02%
- Health Care 8.8%
- Real Estate 7.39%
- Materials 6.17%
- Utilities 5.64%
- Consumer Staples 3.97%
- Communication Services 3.78%
- Energy 3.62%

The MSCI US Mid Cap 450 Index was launched on Mar 27, 2003. Data prior to the launch date is back-tested test (i.e. calculations of how the index might have performed over that time period had the index existed). There are frequently material differences between back-tested performance and actual results. Past performance -- whether actual or back-tested -- is no indication or guarantee of future performance.

ABOUT MSCI

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 45 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process. To learn more, please visit www.msci.com.

The information contained herein (the "Information") may not be reproduced or disseminated in whole or in part without prior written permission from MSCI. The Information may not be used to verify or correct other data, to create indexes, risk models, or analytics, or in connection with issuing, offering, sponsoring, managing or marketing any securities, portfolios, financial products or other investment vehicles. Historical data and analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. None of the Information or MSCI index or other product or service constitutes an offer to buy or sell, or a promotion or recommendation of, any security, financial instrument or product or trading strategy. Further, none of the Information or any MSCI index is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. The Information is provided "as is" and the user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF MSCI INC. OR ANY OF ITS SUBSIDIARIES OR ITS OR THEIR DIRECT OR INDIRECT SUPPLIERS OR ANY THIRD PARTY INVOLVED IN THE MAKING OR COMPILING OF THE INFORMATION (EACH, AN "MSCI PARTY") MAKES ANY WARRANTIES OR REPRESENTATIONS AND, TO THE MAXIMUM EXTENT PERMITTED BY LAW, EACH MSCI PARTY HEREBY EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. WITHOUT LIMITING ANY OF THE FOREGOING AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, IN NO EVENT SHALL ANY OF THE MSCI PARTIES HAVE ANY LIABILITY REGARDING ANY OF THE INFORMATION FOR ANY DIRECT, INDIRECT, SPECIAL, PUNITIVE, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR ANY OTHER DAMAGES EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited.

© 2024 MSCI Inc. All rights reserved.