

# Nifty Midcap150 Momentum 50 Index

Tracking 50 high momentum  
stocks within the midcap segment



January  
2023

## Introduction

Momentum in physics is defined as ‘mass in motion’. As per the Newton’s first law of motion that says a body will remain in uniform motion in a straight line unless acted upon by an external force. In sports, it is always said that a player who is performing well would continue to perform well and the selection of that player within the team depends upon his past performance and consistency to perform well. In Momentum strategy the stocks are also selected based on their performance in the past with the idea that they will continue to outperform. The investors are attracted to a company whose price is on an upward trajectory thus opening a new way of buying at high and selling at higher, instead of the traditional idea of buying at low and selling at high, generating higher returns.

Momentum remains a simple to understand and popular factor globally as well. Presently there is no theory that explains why the momentum factor works. Some potential explanations are that the investors tend to initially underreact to news affecting stock prices. Investors initially react slowly to new information and then do a quick follow-up on it which drives momentum. And this catchup nature is probably why momentum investing has always been a short-term strategy. It often plays its part over 6 to 12 months.

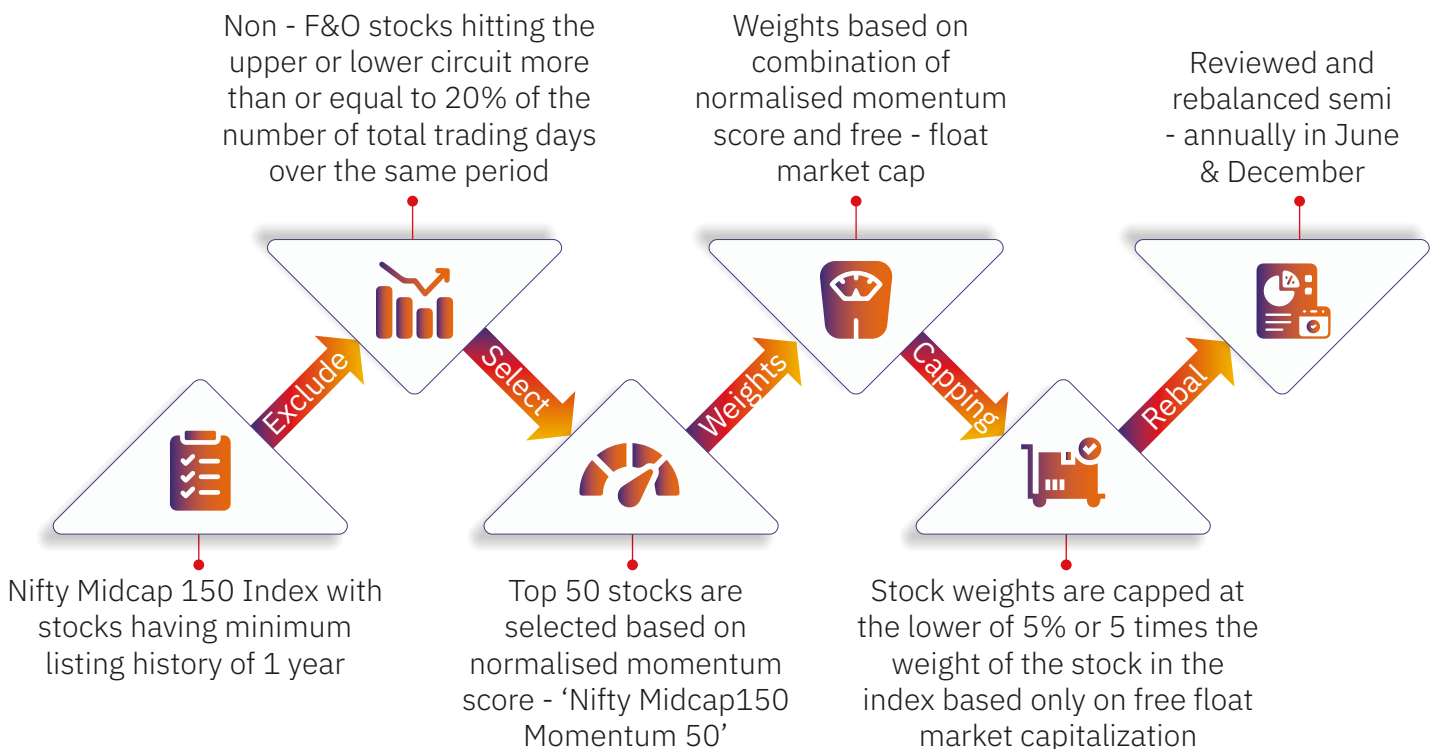
To provide exposure to high momentum stocks within the mid cap space, NSE Indices Limited has developed a new index - Nifty Midcap150 Momentum 50 index - designed to reflect the performance of the top 50 mid cap stocks which have generated high momentum.

## About the Nifty Midcap150 Momentum 50 Index

The Nifty Midcap150 Momentum 50 Index aims to track the performance of the top 50 stocks within the Nifty Midcap 150 Index selected based on their momentum score. The Normalized Momentum Score for each company is

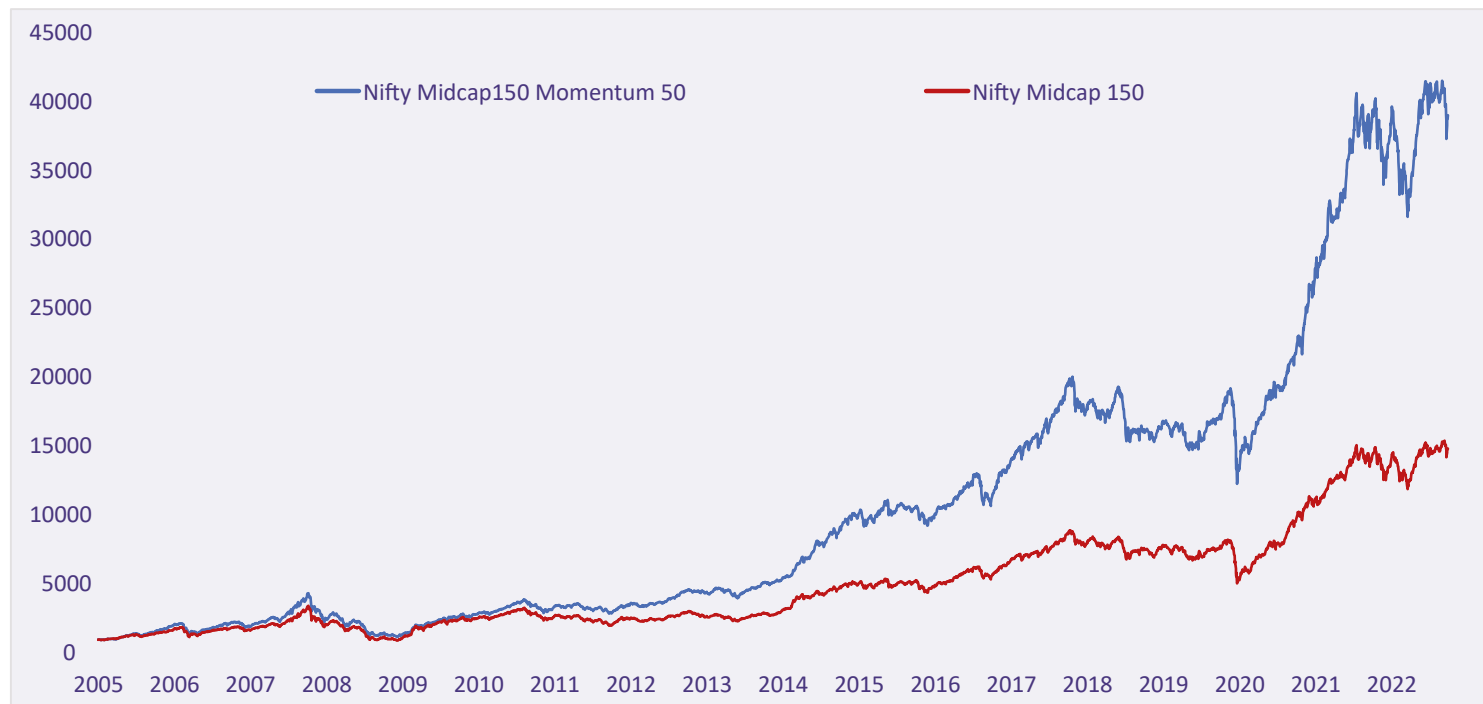
determined based on its 6-month and 12- month price return, adjusted for volatility. Stock weights are based on a combination of the stock’s Normalized Momentum Score and its free-float market capitalization.

### Exhibit 1: Nifty Midcap150 Momentum 50 Index methodology



## The Nifty Midcap150 Momentum 50 Index has outperformed the Nifty Midcap 150 Index over the long term horizon

Exhibit 2: Nifty Midcap150 Momentum 50 and Nifty Midcap 150 Index performance



Source: NSE Indices. Data as of December 30, 2022

Exhibit 3: Nifty Midcap150 Momentum 50 and Nifty Midcap 150 Index performance table

Period	CAGR Returns		Volatility		Return-risk	
	Nifty Midcap150 Momentum 50	Nifty Midcap 150	Nifty Midcap150 Momentum 50	Nifty Midcap 150	Nifty Midcap150 Momentum 50	Nifty Midcap 150
Since Inception*	22.9%	16.4%	21.6%	21.6%	1.06	0.76
15 years	16.2%	10.6%	21.0%	21.4%	0.77	0.49
10 years	23.9%	17.4%	17.8%	17.8%	1.34	0.98
7 years	20.4%	16.0%	18.9%	18.3%	1.08	0.87
5 years	14.8%	11.2%	20.1%	19.5%	0.73	0.57
3 years	31.4%	24.6%	22.5%	21.7%	1.40	1.13
1 year	0.3%	3.9%	20.6%	19.2%	0.02	0.20

Source: NSE Indices. Data as of December 30, 2022. \* Based on inception date of Apr 1, 2005. Returns based on TRI values; Returns for the period greater than one year are annualized

The Nifty Midcap150 Momentum 50 Index has outperformed the Nifty Midcap 150 Index across horizons of 3, 5, 7, 10 and 15 year. For example, from April 2005 till December 2022, the Nifty Midcap150 Momentum 50 Index has delivered 22.9% CAGR versus 16.4% CAGR for the Nifty Midcap 150 Index. In the last 7 years, the Nifty Midcap150 Momentum 50 Index has delivered 20.4% CAGR versus 16.0% CAGR for the Nifty Midcap 150 Index.

The historical volatility of the Nifty Midcap150 Momentum 50 Index has been higher than the Nifty Midcap 150 Index for 1, 3, 5, 7 and 10 year horizon. For instance, over the 7-year

horizon, the annualized volatility of Nifty Midcap150 Momentum 50 Index is 18.9% as compared to 18.3% of Nifty Midcap 150 Index. However, over the 15-year horizon, the annualized volatility of Nifty Midcap150 Momentum 50 Index is 21.0% compared to 21.4% of Nifty Midcap 150 Index.

The Nifty Midcap150 Momentum 50 Index has a higher return-risk ratio compared to the Nifty Midcap 150 Index for 3, 5, 7, 10 and 15 year horizon, as per exhibit 3 above. For example, over a 10-year horizon for the period, the return-risk ratio of Nifty Midcap150 Momentum 50 Index is 1.34 compared to 0.98 of the Nifty Midcap 150 Index.

#### Exhibit 4: Betas and correlations of Nifty Midcap150 Momentum 50 Index with Nifty Midcap 150 Index by calendar year

Period	$\beta$ Beta relative to Nifty Midcap 150	 Correlation with Nifty Midcap 150
	Nifty Midcap150 Momentum 50	
2005*	1.07	0.96
2006	0.98	0.97
2007	1.11	0.97
2008	1.02	0.98
2009	0.87	0.96
2010	0.89	0.96
2011	0.89	0.97
2012	0.77	0.94
2013	0.79	0.91
2014	0.75	0.90
2015	0.97	0.96
2016	0.95	0.96
2017	1.07	0.96
2018	1.00	0.96
2019	0.91	0.94
2020	0.95	0.97
2021	1.03	0.93
2022	1.04	0.97

Source: NSE Indices.\*Data for the year 2005 is from April 01, 2005, to December 30, 2005.

The beta of the Nifty Midcap150 Momentum 50 Index relative to the Nifty Midcap 150 Index has ranged between 0.75 - 1.11 since CY2005. The Nifty Midcap150 Momentum 50 Index has had a beta less than 1 relative to Nifty Midcap 150 Index in 11 out of 18 calendar years indicating a lower

sensitivity to the movements of Nifty Midcap 150 Index. It recorded highest beta of 1.11 in the CY 2007 and the lowest beta of 0.75 in the CY 2014. However, the Nifty Midcap150 Momentum 50 index is highly correlated with the Nifty Midcap 150 Index with the correlation ranging between 0.90 to 0.98.

## The Nifty Midcap150 Momentum 50 Index has outperformed the Nifty Midcap 150 Index in 13 years out of the last 18 calendar years

Exhibit 5: Performance of the Nifty Midcap150 Momentum 50 and Nifty Midcap 150 Index by calendar year

CY	Nifty Midcap150 Momentum 50	Nifty Midcap 150
2005*	57.91%	43.36%
2006	40.50%	28.49%
2007	86.15%	78.17%
2008	-65.08%	-64.94%
2009	87.95%	113.87%
2010	31.32%	20.07%
2011	-17.33%	-31.01%
2012	55.57%	46.69%
2013	12.43%	-1.28%
2014	75.58%	62.67%
2015	17.50%	9.70%
2016	5.98%	6.53%
2017	74.20%	55.73%
2018	-16.98%	-12.62%
2019	5.61%	0.62%
2020	26.86%	25.56%
2021	78.29%	48.16%
2022	0.33%	3.91%

Source: NSE Indices. \* return for 2005 is calculated from April 01, 2005, to December 30, 2005. The cells in green (red) are the calendar years when the Nifty Midcap150 Momentum 50 outperformed (underperformed) the Nifty Midcap150 Index

The Nifty Midcap150 Momentum 50 Index has outperformed the Nifty Midcap 150 Index in 13 out of the last 18 calendar years from CY2005-22. The magnitude of the outperformance or underperformance of the Nifty Midcap150 Momentum 50 Index over the Nifty Midcap 150 Index has varied across several calendar years. For example, in CY2017, the Nifty Midcap150 Momentum 50 Index outperformed the

Nifty Midcap 150 Index by ~18%, returning ~74.20% in absolute terms compared to the ~55.73% return of the Nifty Midcap 150 Index. However, on the downside in CY2009, the Nifty Midcap150 Momentum 50 Index has delivered 87.95% returns compared to 113.87% for the Nifty Midcap 150 Index highlighting the magnitude of the outperformance and underperformance.

## The Nifty Midcap150 Momentum 50 Index has outperformed the Nifty Midcap 150 Index on a daily rolling return basis

### Exhibit No 6: Instances of outperformance of the Nifty Midcap150 Momentum 50 Index vs Nifty Midcap 150 Index on daily rolling return basis

#### Percentage of total instances of Outperformance and Underperformance vs Nifty Midcap 150 Index on daily rolling return basis

Investment Horizon	Nifty Midcap 150 Momentum 50 Index				
	Instances of Underperformance vs Nifty Midcap 150 Index	Instances of Underperformance vs Nifty Midcap 150 Index			
	Excess Return frequency <0% CAGR	Excess Return frequency >=0% CAGR	Excess Return (0-2% CAGR)	Excess Return (2-4% CAGR)	Excess Return (>4% CAGR)
10 years	0.0%	100.0%	0.0%	0.0%	100.0%
7 years	0.0%	100.0%	0.0%	0.7%	99.3%
5 years	0.0%	100.0%	3.1%	22.5%	74.4%
3 years	12.8%	87.2%	8.3%	14.5%	64.4%
2 years	13.7%	86.3%	5.8%	15.5%	65.0%
1 year	21.1%	78.9%	7.3%	5.8%	65.8%















Source: NSE Indices. Instances of outperformance or underperformance calculated using daily rolling returns. Data as on December 30, 2022

Historically, the Nifty Midcap150 Momentum 50 Index has outperformed the Nifty Midcap 150 Index 100% of the times over the 10-year, 7-year and 5-year horizon and the number of instances fall to 78.9% over the 1-year horizon on the daily rolling return basis indicating a lower magnitude of outperformance over the short-term horizons.

From exhibit 6 above, we observe that for the 5 years daily rolling return, 74.4% of times the momentum index outperformed the parent index with excess returns more than 4% p.a.

The Nifty Midcap150 Momentum 50 is presently overweight to Financial Services, Capital Goods & Automobile and Auto Components and underweight to Healthcare and Consumer Durables

Exhibit No 7: Sector exposure of the Nifty Midcap150 Momentum 50 Index and Nifty Midcap 150 Index

Sectors	Nifty Midcap150 Momentum 50 Index	Nifty Midcap 150 Index
 Financial Services	26.74	20.46
 Capital Goods	18.76	12.32
 Automobile and Auto Components	15.86	8.44
 Consumer Services	10.42	5.95
 Fast Moving Consumer Goods	5.93	4.32
 Chemicals	5.65	6.82
 Healthcare	4.21	10.46
 Realty	3.22	3.20
 Metals & Mining	3.16	2.76
 Textiles	2.23	1.94
 Power	1.93	1.73
 Consumer Durables	1.57	5.66
 Services	0.32	2.19
 Others	-	13.76

Source – NSE Indices. Data as on December 30, 2022


















The Nifty Midcap150 Momentum 50 Index selects stocks which have high normalized momentum scores, which in turn is based on their 6-month and 12-month price return, adjusted for daily price return volatility. The Nifty Midcap150 Momentum 50 Index as on December 30, 2022, has higher exposure to Financial Services, Capital Goods, Automobile and Auto Components compared to Nifty Midcap 150 Index. On the flip side, sectors like Consumer Durables, Healthcare

and Services sector were underweight compared to Nifty Midcap 150 Index for the same period.

As on December 30, 2022, ~61% of the portfolio weight of the Nifty Midcap 150 Momentum 50 Index is exposed to Financial services (26.7%), Capital goods (18.8%) and Automobile and auto components (15.9%), whereas the cumulative weight of these sectors is 41.2% in the Nifty Midcap 150 Index.

## The Nifty Midcap150 Momentum 50 Index adapts to changing market conditions and increases the weight to current outperforming sectors

Exhibit No 8: Sector exposure of the Nifty Midcap150 Momentum 50 Index for previous 5 calendar years

Sectors	2022	2021	2020	2019	2018
 Financial Services	26.74	2.68	5.09	20.60	16.05
 Capital Goods	18.76	14.46	5.51	3.55	9.78
 Automobile and Auto Components	15.86	6.48	7.07	-	3.29
 Consumer Services	10.42	4.41	7.65	13.79	13.00
 Fast Moving Consumer Goods	5.93	3.31	7.22	4.02	5.59
 Chemicals	5.65	11.09	15.80	6.93	3.02
 Healthcare	4.21	6.30	26.98	18.69	22.38
 Realty	3.22	4.15	1.79	3.90	1.66
 Metals & Mining	3.16	-	-	-	-
 Textiles	2.23	2.47	-	-	3.58
 Power	1.93	6.07	1.49	2.23	4.77
 Consumer Durables	1.57	8.50	5.43	13.83	6.13
 Services	0.32	-	1.03	1.27	-
 Diversified	-	-	0.56	0.64	1.84
 Construction Materials	-	1.91	1.27	1.81	-
 Information Technology	-	25.75	7.20	0.78	7.63
 Oil, Gas & Consumable Fuels	-	2.42	4.69	7.95	-
 Telecommunication	-	-	1.24	-	1.27

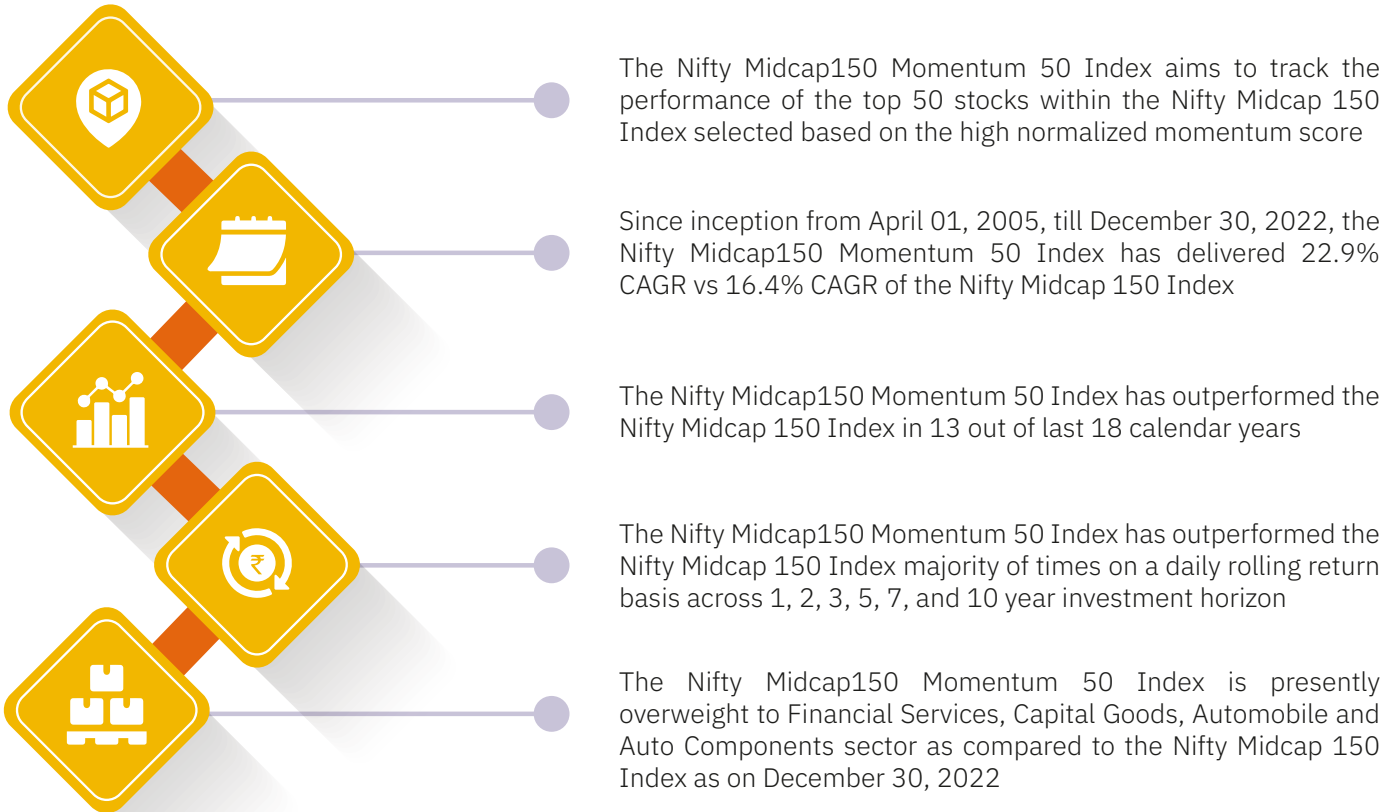
Source – NSE Indices. Each column represents the index portfolio as on the December 31<sup>st</sup> of the relevant calendar year

The Momentum factor's basic premise is that stocks that have outperformed recently may continue to outperform, and vice versa. Thus, the Nifty Midcap150 Momentum 50 Index aims to overweight outperforming stocks/sectors relative to its parent Index and adapts itself as the market outperformers change. As of December 31, 2021, Information Technology and Capital Goods were the two largest sectors of the Nifty Midcap150 Momentum 50 Index and compared to the Financial Services and Capital Goods as on December 30, 2022. The Information Technology sector had outperformed the broader market through 2021 – the Nifty IT Index returned 62.35% vs 48.16% for the Nifty Midcap 150 Index in CY 2021. Hence Information Technology had a higher weight in the Nifty Midcap150 Momentum 50 Index as of December 31, 2021. However, CY 2022 saw a change in market leadership, with Information Technology underperforming and Financial Services outperforming. Now the Nifty

Midcap150 Momentum 50 Index has adapted itself, and currently the Financial Services sector's weight in the Index has increased to 26.74% as of December 30, 2022, from 2.68% as of December 31, 2021.

In exhibit 8 above, we can see how the sector weights have changed through time. For example, on December 31, 2018, Information Technology had 7.63% weight, but this reduced to zero as of December 30, 2022. Additionally, the Index has always had some exposure to the Healthcare and Financial Services sectors over the last 5 years, though the weights have varied significantly through the periods. For example, as of end 2021, Financial Services had 2.68% weight and one year later the weight increased to 26.74%. The idea is that Nifty Midcap150 Momentum 50 Index seeks to capture those sectors that would have exhibited higher momentum.

## Signing off...



For more information on the Index methodology and factsheet, please visit us at [www.nseindia.com](http://www.nseindia.com)

## About NSE Indices Limited:

NSE Indices Limited (formerly known as India Index Services & Products Ltd. - IISL), a subsidiary of NSE, provides a variety of indices and index related services for the capital markets. The company focuses on the index as a core product. The company owns and manages a portfolio of indices under the Nifty brand of NSE, including the flagship index, the Nifty 50. Nifty equity indices comprises of broad-based benchmark indices, sectoral indices, strategy indices, thematic indices and customised indices. NSE Indices Limited also maintains

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fixed income indices based on Government of India securities, corporate bonds, money market instruments and hybrid indices. Many investment products based on Nifty indices have been developed within India and abroad. These include index based derivatives traded on NSE, NSE IFSC and Singapore Exchange Ltd. (SGX) and a number of index funds and exchange traded funds. The flagship 'Nifty 50' index is widely tracked and traded as the benchmark for Indian Capital Markets.

## Contact Details

### Analytical contact

Aman Singhania, CFA, FRM

Vice President and Head – Products (NSE- Indices)

+91-22-26598214

[asinghania@nse.co.in](mailto:asinghania@nse.co.in)

### Vrushali Rane

Manager – Products (NSE- Indices)

[vrane@nse.co.in](mailto:vrane@nse.co.in)

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### Contact:

Email: [indices@nse.co.in](mailto:indices@nse.co.in)

Tel: +91 22 26598386

Address: Exchange Plaza, Bandra Kurla Complex,  
Bandra (East), Mumbai– 400 051(India)

