MULTI-ACT®
Built by investors for investors

MARKET OUTLOOK
Sensex Analysis - March 2020

A RATIONAL ANALYSIS OF THE SENSEX 2020

- Fundamental Valuation
- Technical Analysis
- Quantitative Analysis
- Behavioral Analysis
- Prospective Return of Constituents

Multi-Act Equity Consultancy Pvt. Ltd.
10th floor, The Ruby Tower, 29 Senapati Bapat Marg, Dadar (W), Mumbai- 400028
Tel +9122 61408989 www.multi-act.com CIN: U67120PN1993PTC074692

April 6, 2020

A Rational Analysis of the Sensex for the Year 2020

We had concluded our SENSEX Rational Analysis Interim review on 30th Aug 2019 by saying **"Considering the multiple negative factors, the probability of the market quoting at or below midband (35,600) is High. Based on our Bottom Up prospective return, the maximum upside we can see is around 39,500. We believe the downside should be restricted to 32,500 which is closer to the ½ Lower limit of our trend line."**
Our interim forecast was for the second half of 2019. The years high was touched in December which was 5.5% above our suggested cap. SENSEX made a low of 36,093 in September, which was 11% above our suggested floor. However, this was higher than the yearly low of 35,352 touched in March

	Suggested	Actual	Gap
Upper bound	39,500	41,682	5.5%
Lower bound	32,500	36,093	11.06%

It is pertinent to note however, that in the first 3 months of 2020, SENSEX has breached our floor by 20% to make a low of 25,981 as markets have corrected due to the anticipated economic impact of the Covid-19 virus.

SENSEX movement in 2019:

High	41,682
Low	35,353
Close	41,254

Covid-19:

The start of 2020 was strong with the coattails of the Corporate Tax cut and an expected recovery. However, sentiment weakened rapidly as the global economy started getting impacted by the Covid 19 related precautions taken by many countries and supply chain disruptions due to the spread in China. This has been further exacerbated as some cases have emerged in India and the country has been in a 21-day lockdown since March 24th.

Fundamental Valuation:

A. Top Down Valuation

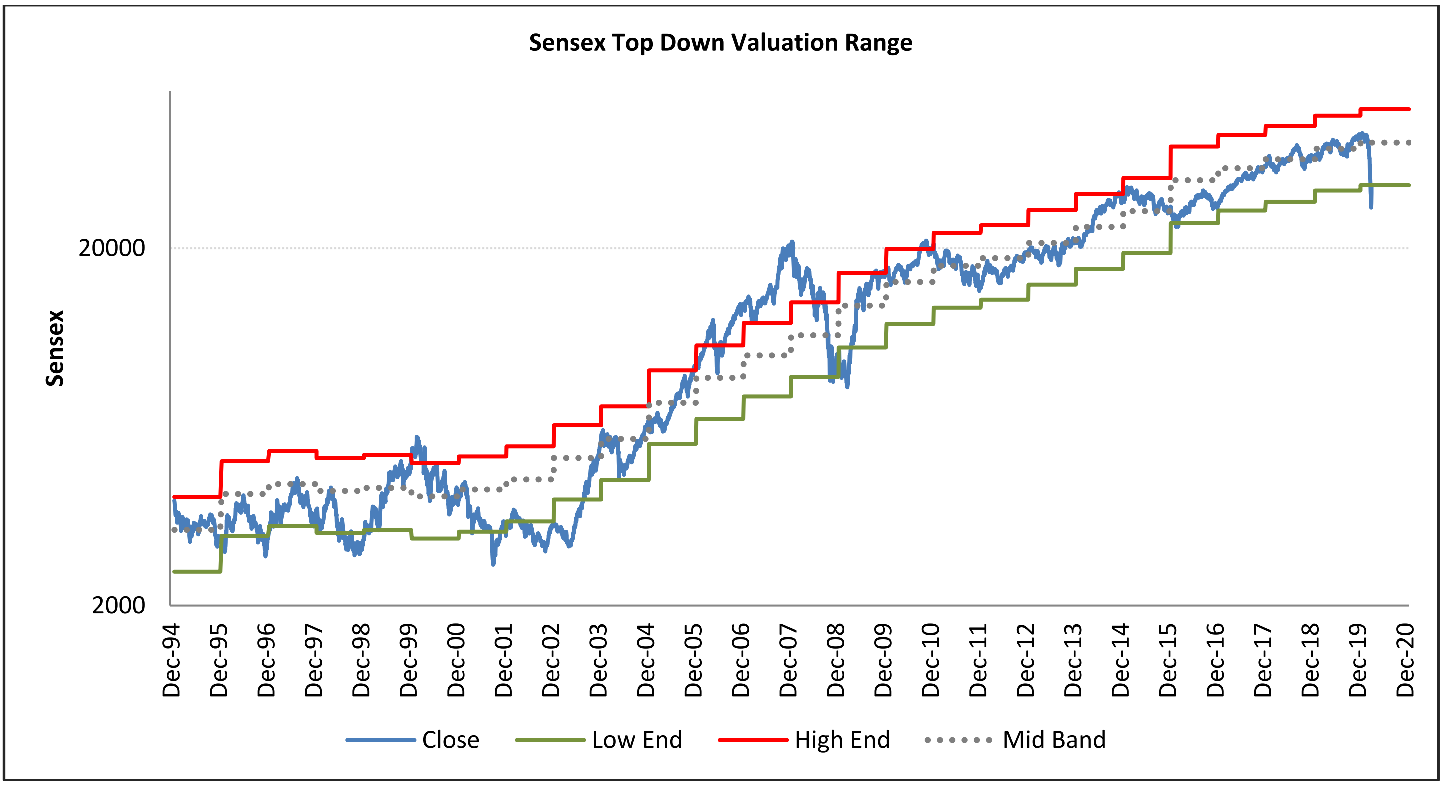
Using our various valuation approaches we estimate the Fundamental Value of the Sensex on a top down basis for Calendar year 2020 as follows:

Sensex Valuation	Low	High
Historical	33,501	49,306
DCF	26,659	46,356
-1/+1 SD PE Band	31,233	52,194
Average	**30,465**	**49,285**

Sensex Valuation range on a Top Down basis for CY 2020: **30,500 – 49,000** with Midband around 40,000. **Our top down valuation approach assumes normalized earnings i.e. using long term historical average of Return on**

Regd. Office: "Katariya Capital", A-19, Vidyut Nagar Society, Lane No. 5, Koregaon Park, Pune – 411 001
Telefax: +91 22 2615 3738, www.multi-act.com

Equity and the Book value. Thus, we are making an implicit assumption that there would be a mean reversion (from current level of below -1 Standard Deviation) of Return on Equity and thus earnings.



B. Bottom Up Valuation:

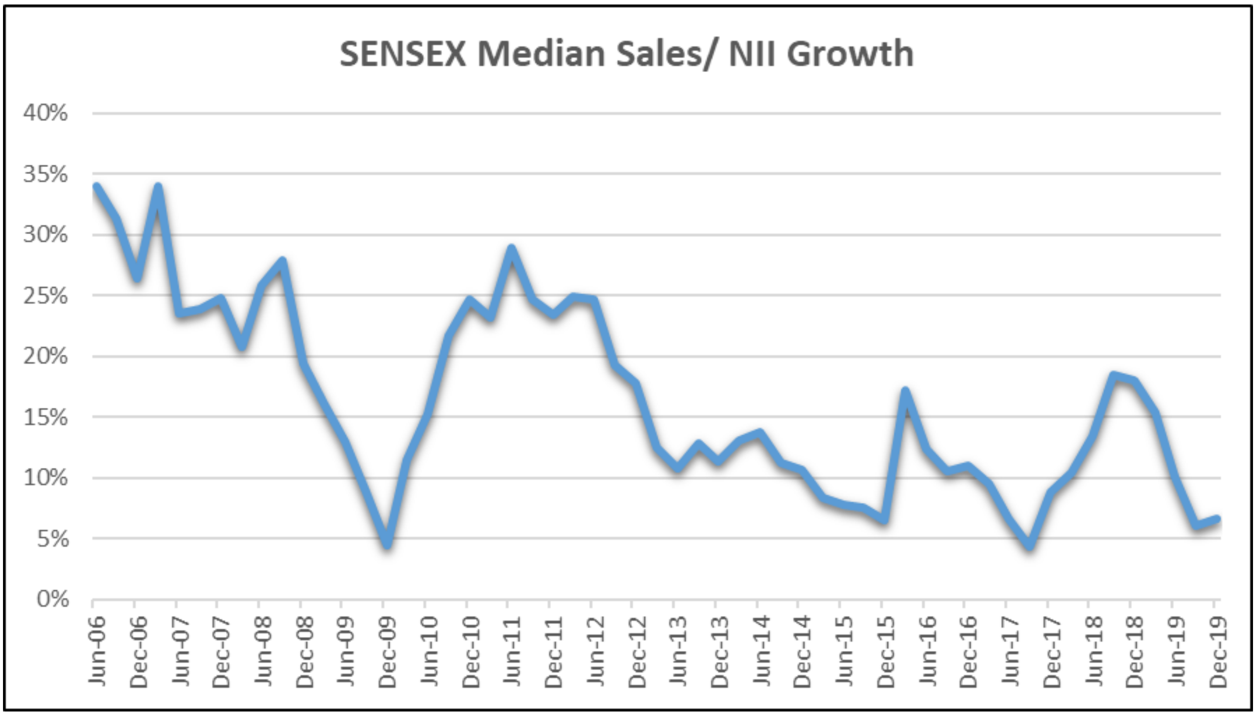
As we have discussed in the past (please refer bottom up valuation section in this link), due to meaningful change in the composition of SENSEX historically, the Top down valuation might not reliable. Thus, we had also introduced a bottom-up valuation methodology. As we have valuation bands for each of the SENSEX Index constituents, we are using the weights of these individual stocks and their respective valuation bands to arrive at the SENSEX Valuation from a bottom up perspective. **Based on the bottom up approach, the valuation band for SENSEX for CY20 comes to around 27,000 – 46,000.**

If we combine both the top down approach and bottom up approach, the valuation band for SENSEX for CY20 comes to around 28,500 – 47,500. The Mid-band would thus be ~38,000.

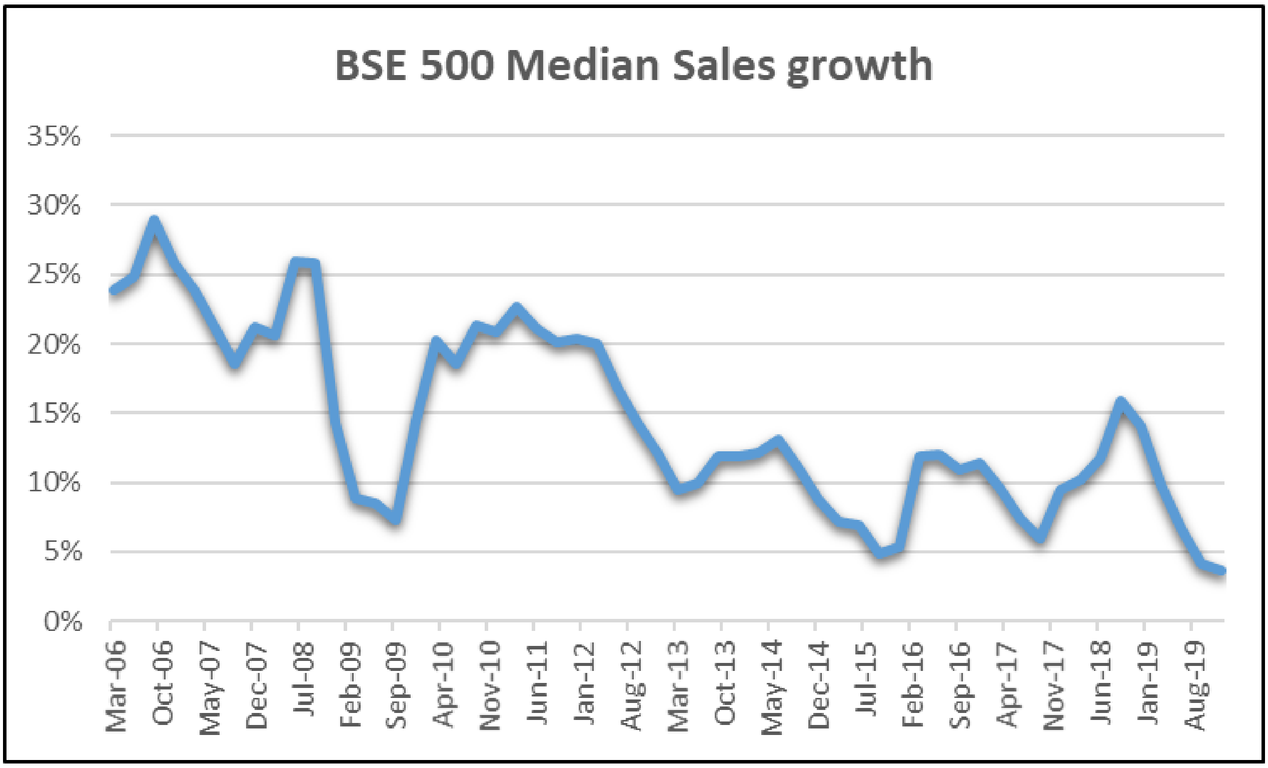
Earnings Momentum:

Earnings momentum was picking up until the December 2018 quarter. After December, there has been a sharp slowdown in momentum. The severity of the slowdown has been surprising and Management commentary across companies with respect to visibility has not been encouraging either. Though there seemed to be a tinge of recovery on the cards with a middling December 2019 quarter, earnings momentum is expected to be sharply negative for the next few quarters due to the current lockdown and the continued impact of Covid-19 on economic activity.

Regd. Office: "Katariya Capital", A-19, Vidyut Nagar Society, Lane No. 5, Koregaon Park, Pune – 411 001
Telefax: +91 22 2615 3738, www.multi-act.com



As seen in the chart below, the weakness is visible even in BSE 500 companies, which indicates slowdown across the board.

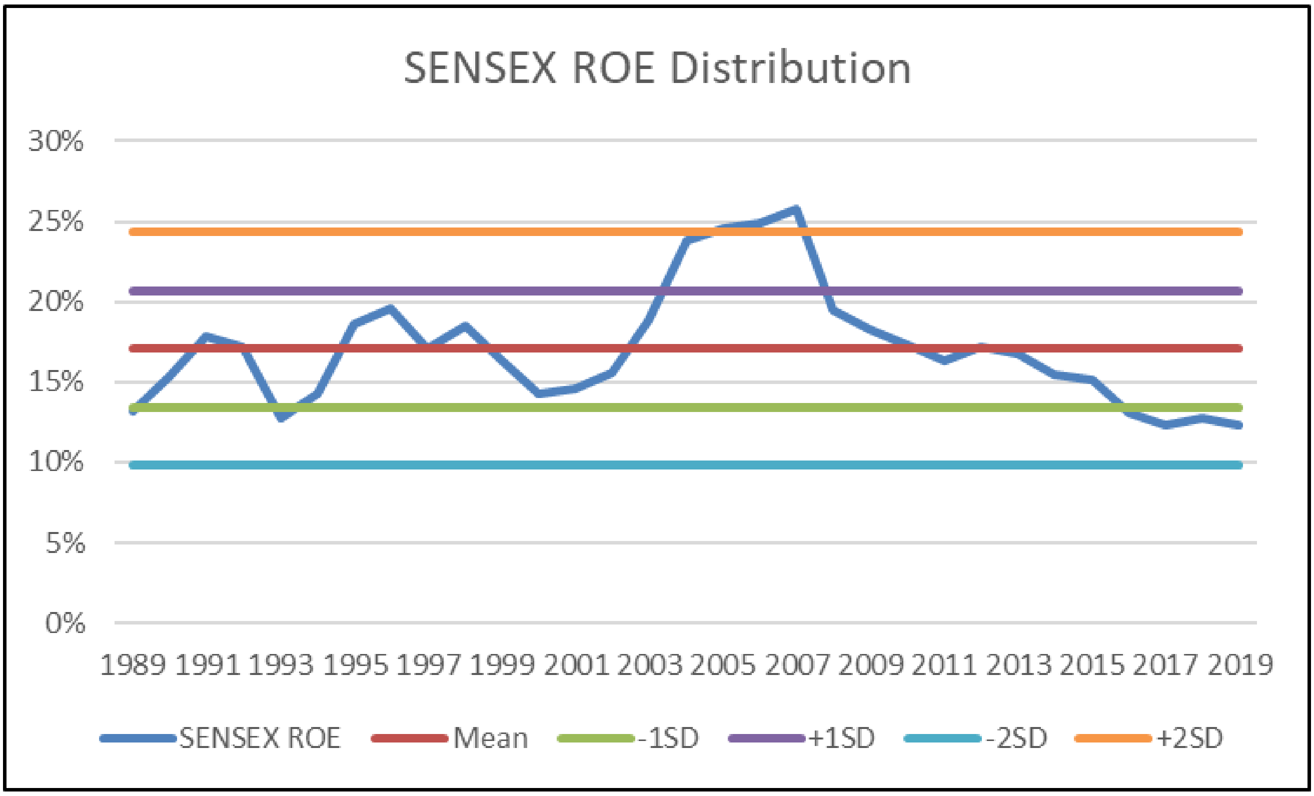


If we look sector wise, the IT sector has been comparatively stronger. Consumption driven sectors like Auto and FMCG are seeing very sharp slowdowns, with Auto being particularly weak the industry has experienced negative comparisons in absolute sales.

Regd. Office: "Katariya Capital", A-19, Vidyut Nagar Society, Lane No. 5, Koregaon Park, Pune – 411 001
Telefax: +91 22 2615 3738, www.multi-act.com

Financials had done reasonably well recently despite some dip in growth. Bailout of Yes bank by other large banks is also seen as a positive from an industry contagion standpoint. However, currently there are worries on the asset quality of banks even in retail lending with India's household debt being higher than ever, fears of systemic defaults given the current lockdown and negative macro trends. Though we believe systemic defaults are unlikely, Earnings Momentum in this sector will be impacted by the low economic activity foreseen over the next few quarters and a lack of clarity about the likely growth in NPA's.

Return on Equity:
An aspect worth taking into consideration here is Sensex's ROE, which is at a multi decadal low, and has been below the mean for a large part of the last decade.



Our SENSEX Valuation is based on ROE's normalizing and reverting to the mean.
In the current tough economic environment, a lot of weak companies could be materially impacted by a time of reduced economic activity and be forced to exit the market. Potential closures would be primarily be:

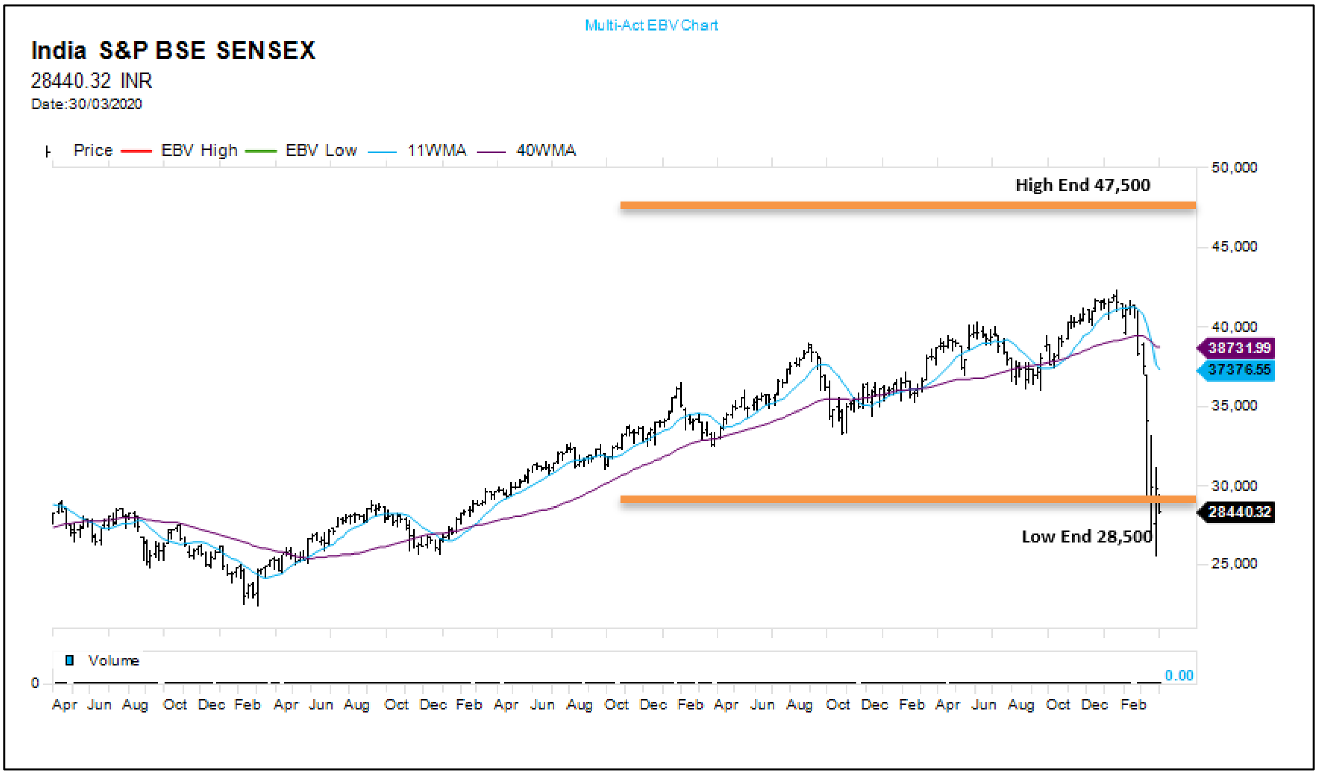
1) Businesses with weaker balance sheets, and
2) Businesses with relatively weaker business models.

These potential exits present the possibility of decreased competitive intensity in the overall economy. As a result, we believe ROE's should trend higher in the medium to long term.

Regd. Office: "Katariya Capital", A-19, Vidyut Nagar Society, Lane No. 5, Koregaon Park, Pune – 411 001
Telefax: +91 22 2615 3738, www.multi-act.com

Technical Analysis:

With the markets correcting in recent months, the chart looks very weak and suggests the market will remain under pressure. The best we can expect is that market will try to carve out some sort of bottom in the next quarter or two and establish a trading range.

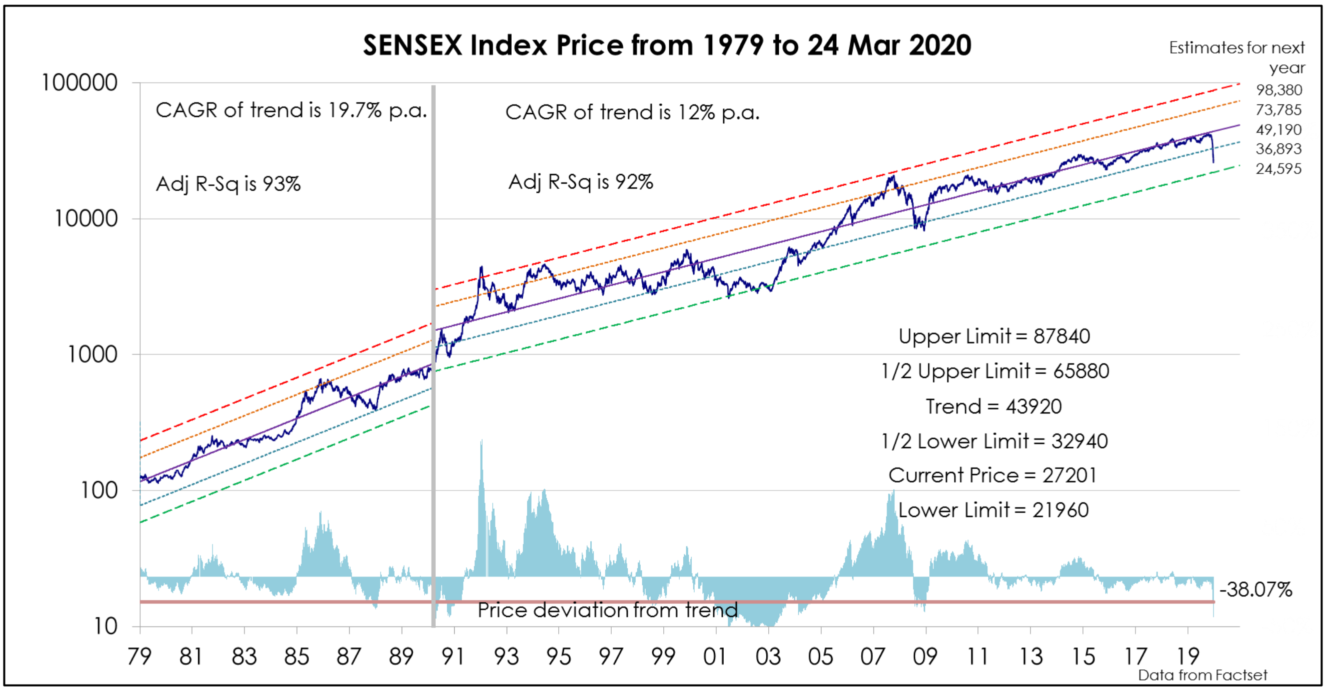


Based on the assessment of our Technical Analysis team, we believe that if SENSEX holds at 27,500-28,000 levels and moves above 30,750-31,250, then it is likely to chart a move to 33,000-33,500. This would also suggest that Sensex has most likely made its bottom at the recent support levels of 25,500-26,000

On the contrary, if Sensex declines from hereon and takes out 25,500-26,000, it is likely to decline to21,000-21,500

Regd. Office: "Katariya Capital", A-19, Vidyut Nagar Society, Lane No. 5, Koregaon Park, Pune – 411 001
Telefax: +91 22 2615 3738, www.multi-act.com

Quantitative Analysis:

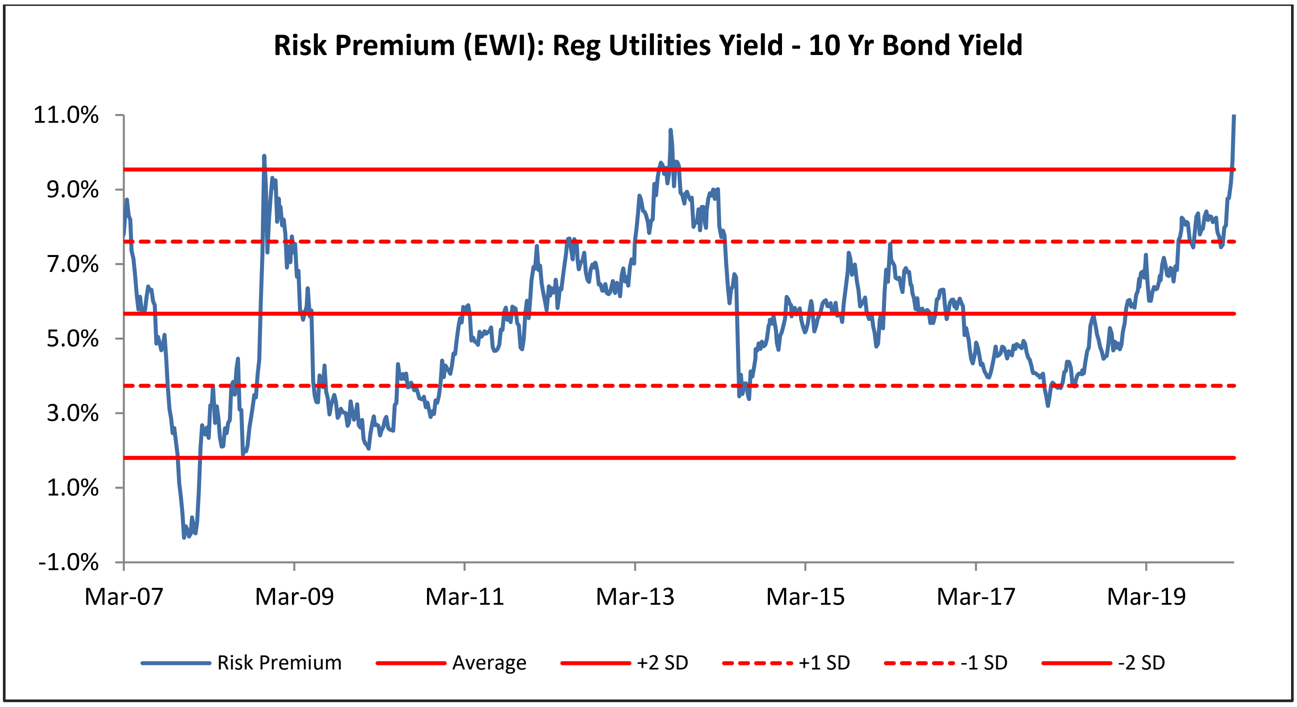


Historically, there has not been a precedent for such a sharp fall in the short period of time as has occurred in March 2020. Currently, technical momentum is poor, with earnings momentum expected to be worse in the coming quarters due to the nationwide lockdown and supply chain disruptions. It is difficult to see the SENSEX coming back to the LT trend line soon unless things improve. Trend value for the SENSEX is ~43900 increasing to 49,000 over the next one year. **Our best estimate based on Trend analysis is that SENSEX should trade between Lower limit to ½ lower limit in the near future.**

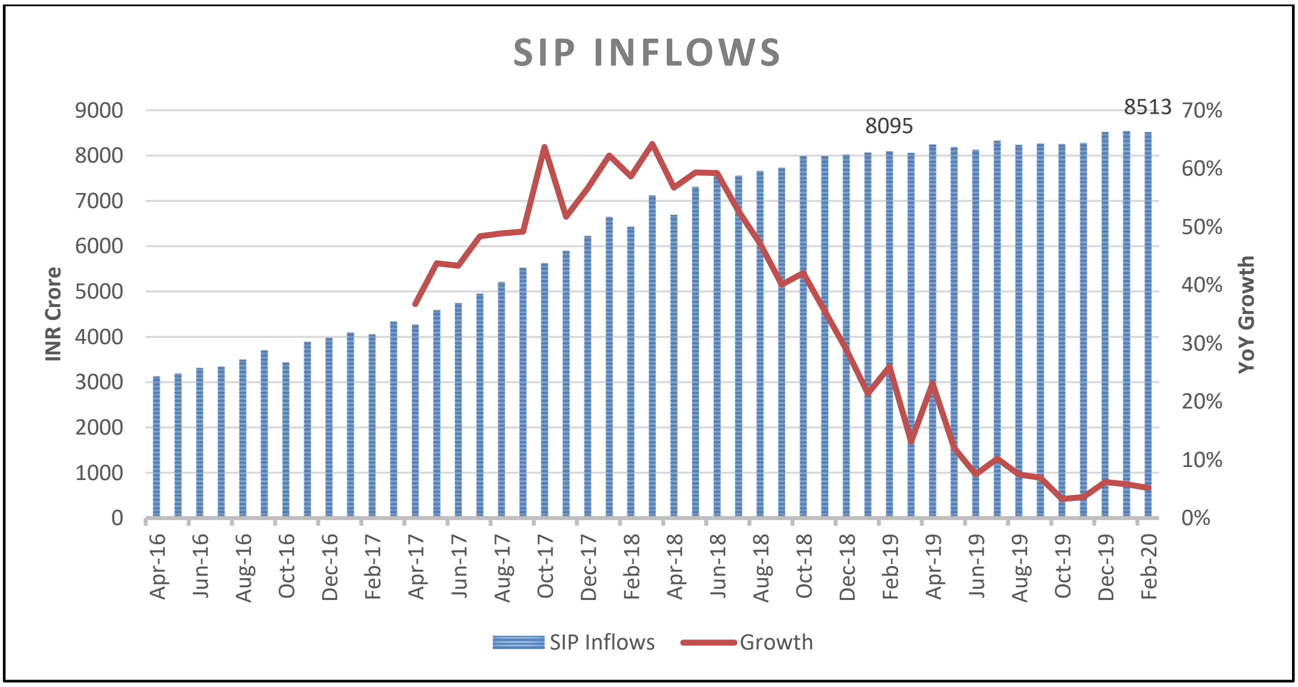
Regd. Office: "Katariya Capital", A-19, Vidyut Nagar Society, Lane No. 5, Koregaon Park, Pune – 411 001
Telefax: +91 22 2615 3738, www.multi-act.com

Behavioral Analysis:

The year 2020 had started on an optimistic note. However, with the Covid-19 situation, there has been a sell-off in the market. We track optimism in the market using the risk premium of utilities over 10-year sovereign bonds. This clearly shows the prevailing pessimism in the market with the premium higher even than +2SD levels and having surpassed levels seen during the GFC in 2008-09.

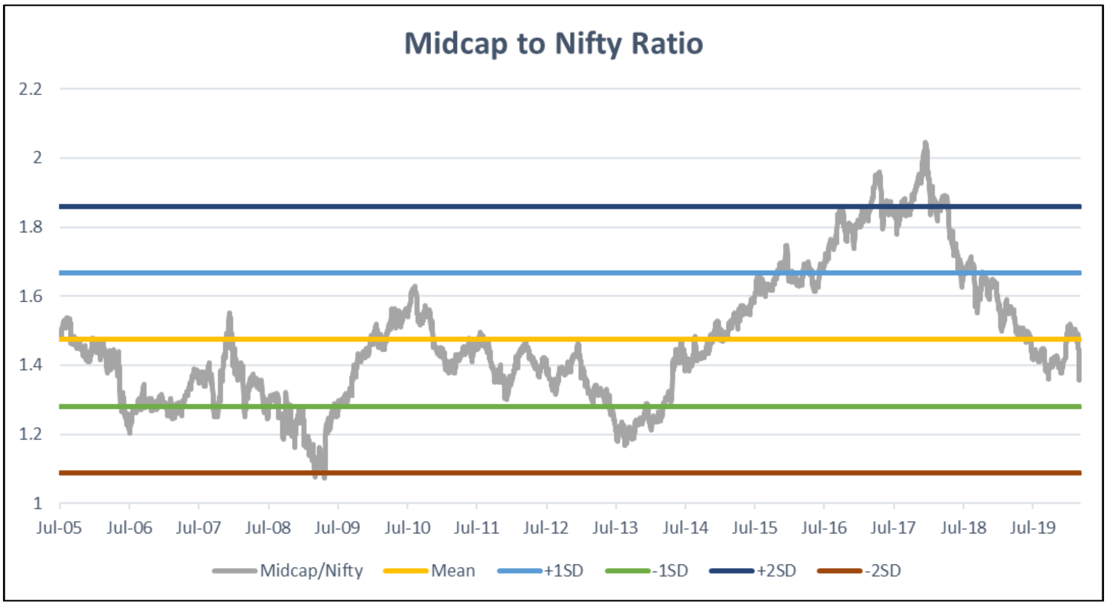


Despite the recent correction, SIP inflows have continued at similar levels over the last few months, however growth has continued to decline. Weakened investor confidence along with changes in the personal tax code could have potentially negative effects on SIP's in the near future.

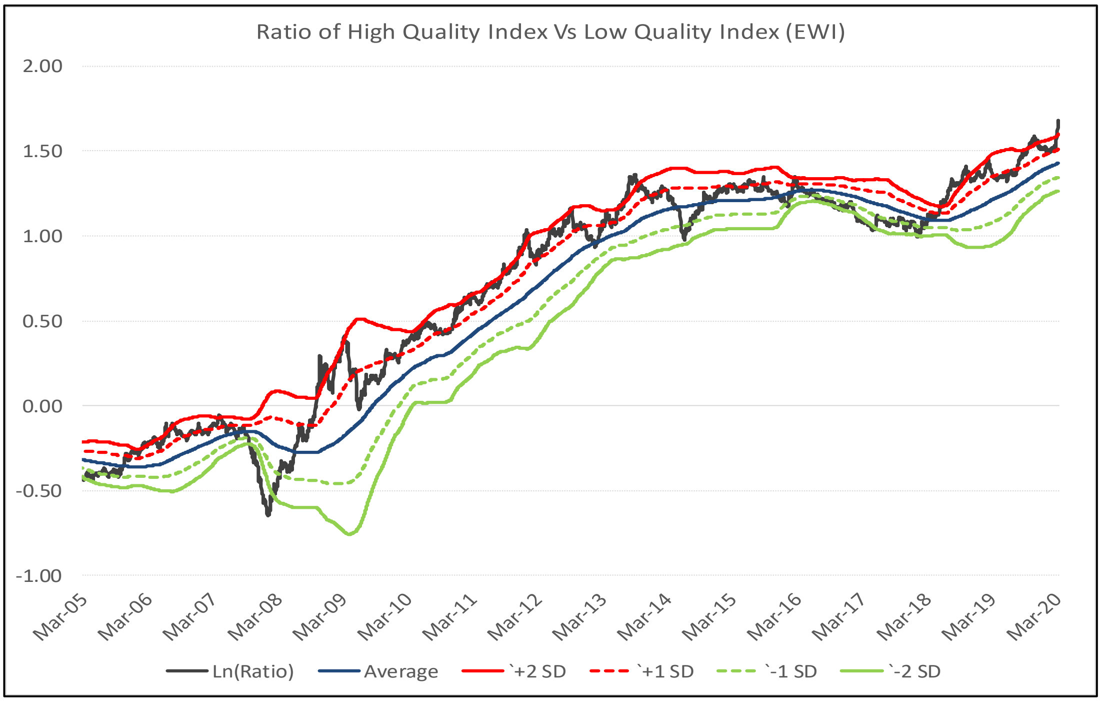


Regd. Office: "Katariya Capital", A-19, Vidyut Nagar Society, Lane No. 5, Koregaon Park, Pune – 411 001
Telefax: +91 22 2615 3738, www.multi-act.com

The Midcap/NIFTY Ratio is a good ratio to assess risk appetite in the market. A higher ratio indicates that market participants are relatively willing to take more risk. This ratio has corrected sharply over the last two years and is now near -1 SD. Thus, broadly the sentiment seems to be at its weakest ebb since the Midcaps started rallying in 2014. It would not surprise us to see this ratio at -2SD.



Another aspect we would like to highlight here is the divergence between the performance of the High-Quality and Low-Quality stocks. Using indices based on our internal assessment of quality, we see that the ratio of high quality to low quality has accentuated further in the last month or so as it has breached +2 standard deviations. In the broad-based correction the market has seen, HQ index has continued to outperform the LQ index. This is on expected lines given the pessimism in the market, which generally leads to investors becoming more quality conscious and having a preference for defensive, high ROE companies.



Regd. Office: "Katariya Capital", A-19, Vidyut Nagar Society, Lane No. 5, Koregaon Park, Pune – 411 001
Telefax: +91 22 2615 3738, www.multi-act.com

Prospective Return of Constituents:

Based on our rational analysis framework (fundamental, technical, quantitative & behavioral) we arrive at a best case and worst-case prospective return estimate for individual stocks. This is a more immediate estimate of projected prices of individual constituents in the next 6 to 9 months. This is again a bottom up approach. Using the Sensex constituent and their weights we estimate the prospective return for the Sensex as well. Based on the prospective return of individual constituents, the best upside case for Sensex seems to be 29.5% (or ~38,600) while the worst-case downside is estimated at -2.8% (29,000) with an average estimate of 13.5% (or ~33,800). Be aware though that this changes every day as new information on valuation, earnings momentum and technical momentum comes in and can only be used a near term guide.

Conclusion:

A summary of Upper bound and lower bound of the SENSEX based on various approaches is as follows:

Approach	Lower Bound	Upper Bound
Fundamental	28,500	47,000
Technical	27,500	33,500
Quantitative	24,000	37,000
Prospective Return of Constituents	29,000	38,500

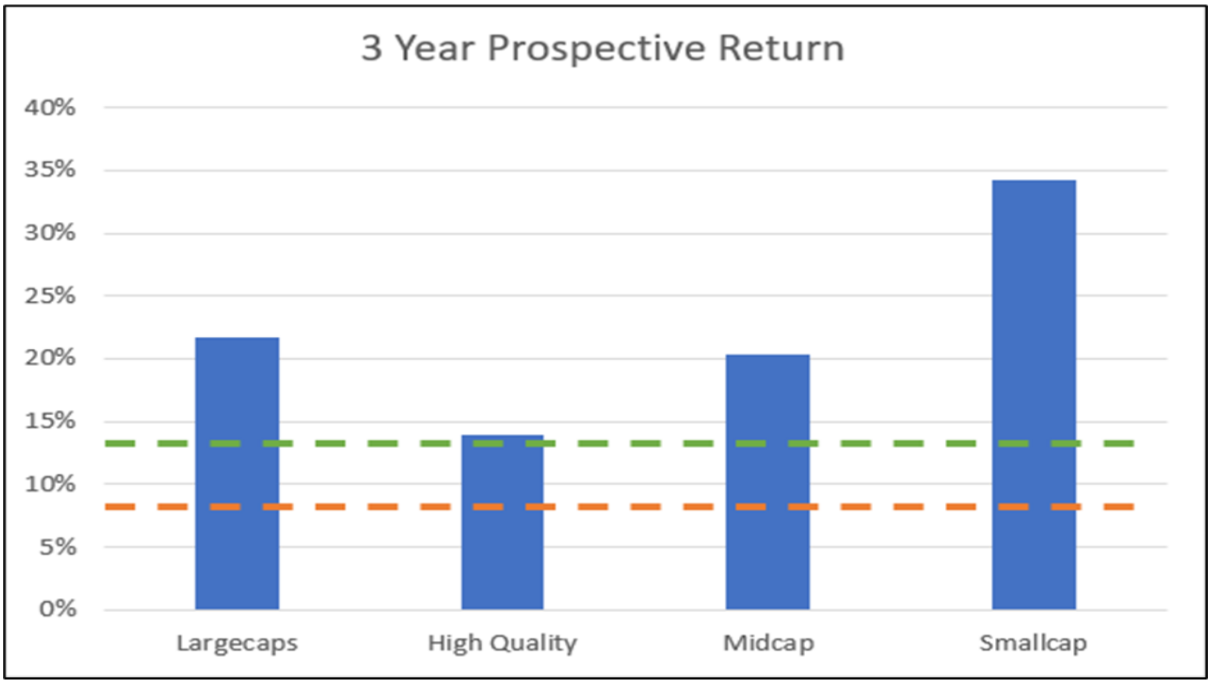
We have seen a sharp deterioration of business momentum in the last few quarters. Thus, we have negative business momentum coupled with poor domestic and global macro. The only positive factor in recent times has been the Flows into Mutual Funds which have lent some support to the market. However, this could change amid the large correction in the market and change in the personal tax code. The tax cuts announced by the Govt would only have an impact in the medium to long term.

Our conclusion considering the aforementioned trends is that the SENSEX should trade around 24,000 at low if Covid-19, and thus restrictions on daily life, prevail beyond 6 months in some form. On the other hand, if we are able to get back to normal (from economic perspective) in a shorter period of time we could see SENSEX move back to 37,000. A few indicators that could act as potential green shoots for these are a slowdown in Covid-19 cases worldwide, improvement in recovery rate and some positive news on the development of a vaccine. **We are relying primarily on our quantitative analysis given that SENSEX has, at worst, traded between the lower limit and ½ of lower limit during previous corrections.** It is pertinent to the note that the market is currently at peak pessimism. The Risk/ Reward currently is extremely favorable if any of the potential positives were to play out. We will revisit the situation in our interim review report.

3 Year prospective return:

The SENSEX analysis report is restricted only to the 30-stock index and from a one-year perspective. But to understand how the broader markets are placed from a medium-term perspective, we analyze the 3-year prospective return of different segments of the market. Below chart shows 3-year prospective return for Large Caps, Midcaps and Small caps and High-Quality stocks. Please note that prospective returns have been calculated assuming mean reversion of valuation multiples and trend growth. Thus, if valuation multiples at the end of 3 years remain elevated, the returns could be higher and on the other hand if the valuation multiples at the end of 3 years are below historical averages, the returns could be lower. The orange line indicates the historical risk-free rate and the green line indicates the historical equity return.

Regd. Office: "Katariya Capital", A-19, Vidyut Nagar Society, Lane No. 5, Koregaon Park, Pune – 411 001
Telefax: +91 22 2615 3738, www.multi-act.com



We have taken the index constituents of BSE100 (Largecaps), BSE Midcap, BSE Smallcap and Multi-Act High Quality universe. We have then calculated median PE and median EPS growth historically. Median has been used to remove outliers. For the purpose of calculating 3-year prospective return we have assumed that earnings growth would grow at historical average rate and valuation multiples would revert back to mean from where they are currently prevailing.

Post the correction in March, prospective returns have continued to increase compared to our previous analysis.

3-year prospective return	Mar-20	Jul-19
Large Cap	22%	12%
High Quality	14%	11%
Mid-Caps	20%	6%
Small Caps	34%	13%

3-year prospective returns are now higher than the historical equity return for all the segments.

Regards,

Aman Agarwal
Research Associate

Rohan Samant
Sr. Portfolio Manager

Regd. Office: "Katariya Capital", A-19, Vidyut Nagar Society, Lane No. 5, Koregaon Park, Pune – 411 001
Telefax: +91 22 2615 3738, www.multi-act.com

Statutory Details: Portfolio Manager – Multi-Act Equity Consultancy Private Limited (Registration No. INP000002965)

Disclaimer

This document has been solely prepared for educational and illustrative purposes. The information contained herein does not constitute any guidelines or recommendations on any course of action to be followed by the investor.

The information is prepared on the basis of publicly available information, internally developed data and other sources believed to be reliable. Multi-Act Equity Consultancy Private Limited (MAECL) does not solicit any course of action based on the information provided by it and the investor is advised to exercise independent judgment and act upon the same based on its/his/her sole discretion based on their own investigations and risk-reward preferences.

The information is meant for general reading purpose and is not meant to serve as a professional guide.

MAECL, its associates or any of their respective directors, employees, affiliates or representatives do not assume any responsibility for, or warrant the accuracy, completeness, adequacy and reliability of such information and consequently are not liable for any decisions taken based on the same. This information is not intended to be an offer or solicitation for the purchase or sale of any security or financial product. For any information on COVID-19, please refer to official announcements and communications of the Government.

MAECL is not responsible for any error or inaccuracy or any losses suffered on account of any information contained in this document. Neither MAECL nor any of its associates, directors, employees, affiliates or representatives shall be liable for any direct, indirect, special, incidental, consequential, punitive or exemplary damages, including lost profits arising in any way from the information provided by it.

The contents herein – information or views – do not amount to distribution, guidelines, an offer or solicitation of any offer to buy or sell any securities or financial instruments, directly or indirectly, in the United States of America (US), in Canada, in jurisdictions where such distribution or offer is not authorized and in FATF non-compliant jurisdiction and are particularly not for US persons (being persons resident in the US, corporations, partnerships or other entities created or organized in or under the laws of the US or any person falling within the definition of the term “US person” under Regulation S promulgated under the US Securities Act of 1933, as amended) and persons of Canada.

Risk factors

General risk factors

a. Securities investments are subject to market risks and there is no assurance or guarantee that the objective of the investments will be achieved.

b. Past performance of the Portfolio Manager or its affiliates does not indicate its future performance.

c. Investors are not being offered any guaranteed or assured returns i.e., either of principal or appreciation on the Portfolio.

d. As with any investment in securities, value of the Client’s Portfolio can go up or down depending on the factors and forces affecting the capital market.

e. External risks such as war, natural calamities, and policy changes of local / international markets may affect stock markets.

f. The Portfolio Manager has renewed SEBI PMS registration effective October 14, 2014 and has commenced its portfolio management activities with effect from January 2011. However, the Portfolio Manager has more than 10 years of experience in managing its own funds invested in the domestic market.

Regd. Office: “Katariya Capital”, A-19, Vidyut Nagar Society, Lane No. 5, Koregaon Park, Pune – 411 001
Telefax: +91 22 2615 3738, www.multi-act.com