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30th December 2016

A Rational Analysis of the Sensex for the Year 2017

Review of our Rational Analysis of SENSEX for Year ended December 2016:

The year 2016 had started on a very weak note. Market was driven by global sell off on account of global commodity rout. Sentiment was relatively weak at the start of the year, especially for stocks which had businesses linked to the global economy. In our January Sensex Rational Analysis report for 2016 we had concluded by saying *"the downside risk of 23,500 is quite plausible for the SENSEX. But rather than anchoring on that number, we would focus on the reward vs risk of just under 3:1 (21 %/ 8%) and be more sensitive to hints of any number of positive developments that could move the SENSEX towards the Mid band of our valuation range (31,000)."*

SENSEX continued its weakness in the initial part of the year and touched ~23,000 by February end. But post the signs of a normal monsoon around July and with a recovery in earnings in the March quarter there was a strong recovery in the markets which then touched the high of the year of ~29,000 in September. The Demonetisation announcement has to some extent cut short the rally and the SENSEX is back to where we started at the beginning of the year (~26,000).

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 2017 as follows:

Sensex Valuation	LOW	HIGH
Historical	26,579	40,732
DCF	24,033	40,413
+1/-1 SD PE Band	25,372	42,818
Average	**25,328**	**41,321**

Sensex Valuation range on a Top Down basis for CY 2017: **25,500 – 41,500.**

In past reports we have discussed how we arrive at our estimates of the top down valuation. We look at the valuation of SENSEX on a normalized basis i.e. what should be the valuation in a normalized business environment without getting affected by the cyclicality that the index constituents (i.e. companies in SENSEX) would go through. We have found this to be a better methodology as it takes away the "recency" bias. On a top down basis we are already close to the lower end of the valuation range.

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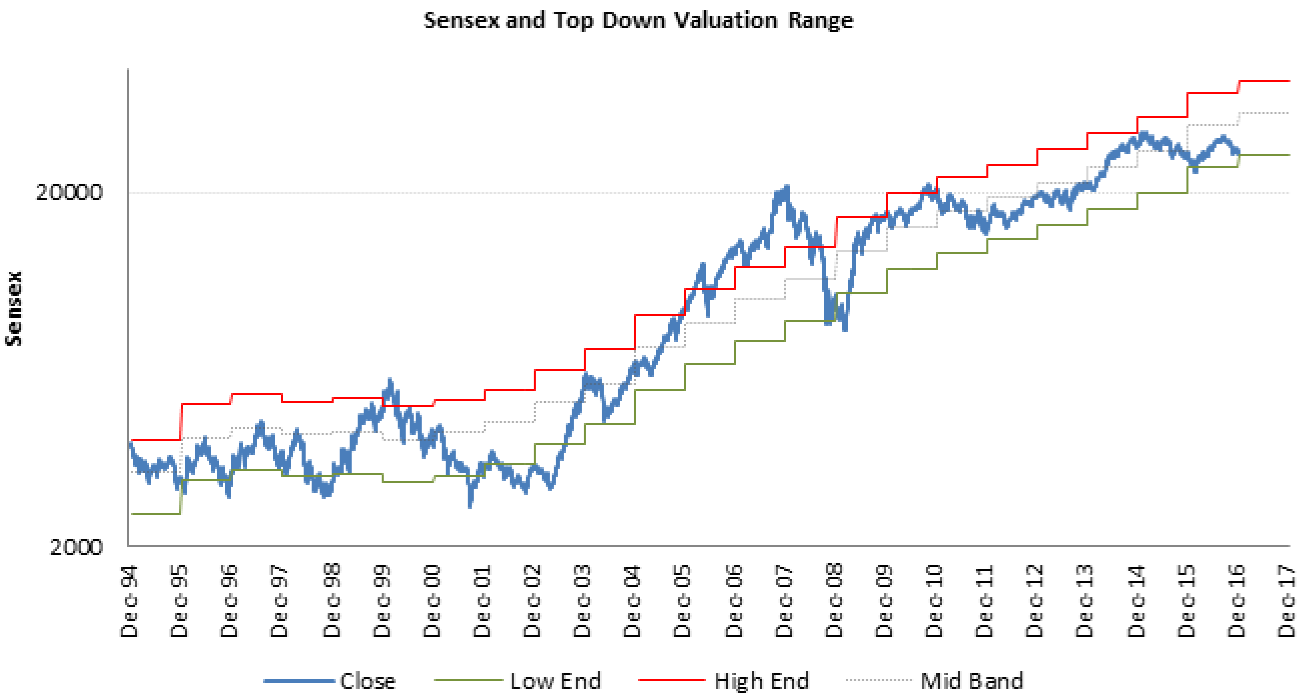
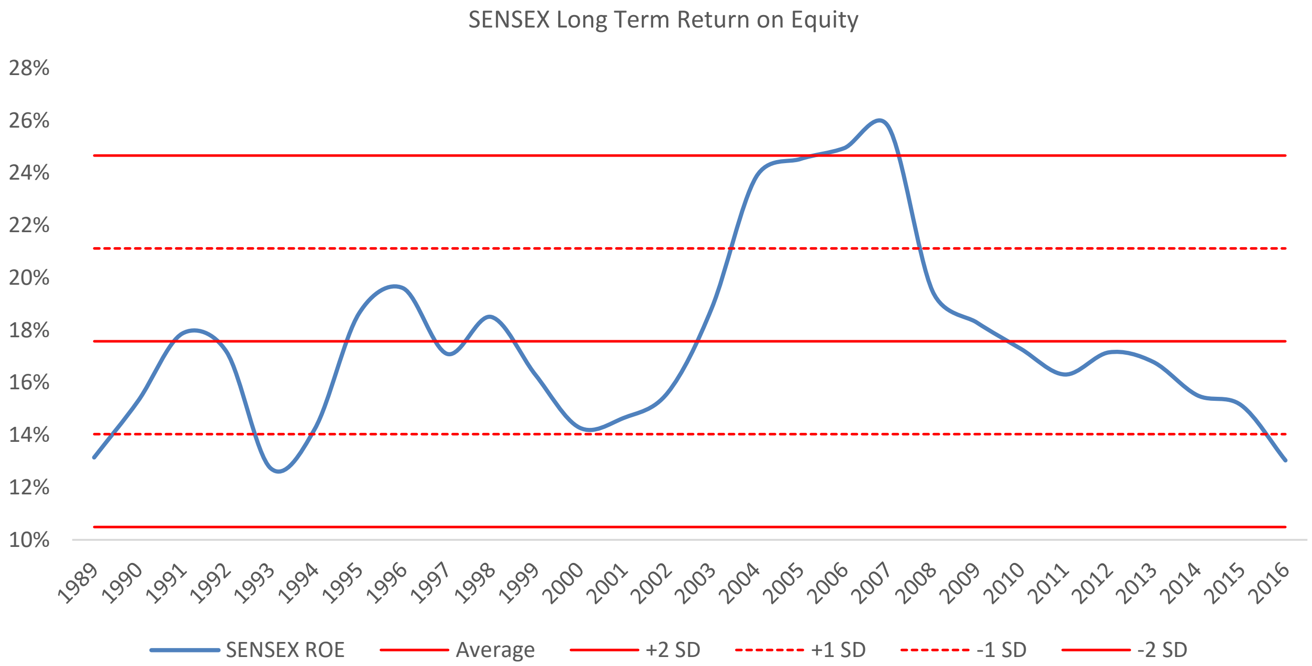


Currently the SENSEX Return on Equity (RoE) is depressed because of the slowdown that we have been going through. As can be seen from the chart below, SENSEX RoE is well below -1 Standard Deviation. In fact we are closer to the earlier lows for the SENSEX RoE. If one were to base the valuation on the current depressed earnings numbers, he would be underestimating the true underlying value of businesses in the Index. We have no reason to believe that demonetization has structurally impacted the earnings power of businesses in the medium to long run or for example the lack of credit growth due to the high NPA's in the banking system is a permanent feature which will not be alleviated in the medium or long term and thus we do not believe that any change in the normalized RoE is warranted.



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B. Bottom up Valuation:

Till now we have focused mostly on the top down approach to arrive at the valuation band for the SENSEX. This time we are introducing an additional reference point by arriving at the valuation band using valuation bands of individual index constituents. As we have valuation bands for SENSEX Index constituents we are using the weights of these individual stocks and their respective valuation bands to arrive at the SENSEX Valuation band. **Thus based on the bottom up approach the valuation band for SENSEX for CY17 comes to around 19,500 to 35,500.**

If we combine both the top down approach and bottom up approach, the valuation band for SENSEX for CY17 comes to around 22,500 – 38,500

Earnings Momentum:

Post Demonetisation, the earnings momentum that we have seen so far becomes irrelevant and the focus now shifts to how quickly the economy recovers from the short term liquidity crunch brought about by this action. As discussed earlier, we are of the view that the earnings power of most listed businesses is not at risk of being structurally impacted. It is difficult to estimate how long it will take for the recovery to take place and we might witness at least 1-2 quarters of negative earnings momentum.

As the earnings momentum has been negatively impacted in the short term the probability as of now of SENSEX going to the midband of the valuation range ~30,500 immediately seems low. At the same time though, market participants are aware of the short term nature of the current negative earnings momentum and would only start getting concerned if the negative momentum continues beyond 2 quarters. Thus they would take time to judge the impact on earnings momentum beyond 2 quarters and in the meantime we believe the market would be driven purely by sentiment.

Technical Analysis:

Pre-Demonetisation the SENSEX was looking very strong. Post the event the chart has turned neutral to slightly negative and there is a high probability of it turning weak. Technical weakness coupled with negative earnings momentum increases the probability of the SENSEX going down to the lower end of estimated valuation. The market we believe however should find good support at the February low if at all it goes to that level, as that is also around the low end of the valuation wherein valuation support should be strong.

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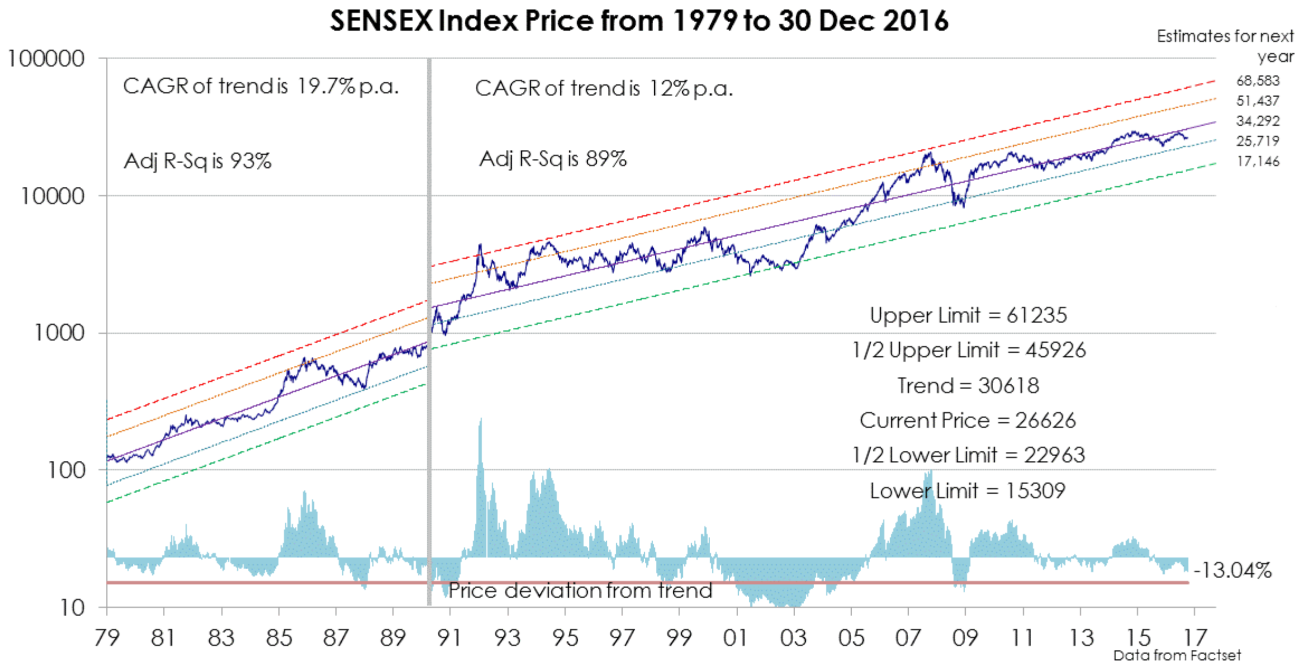
Quantitative Analysis:



Currently, SENSEX is quoting below its historical trend line. In an environment where earnings momentum is negative and technically SENSEX is weak, the index could move to the Half Lower Limit. The half lower limit is 22,700 rising to 25,700 by December 2017.

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Behavioral Analysis:

Sentiment amongst FIIs has soured towards emerging markets post Trump election. His elections as the next US President seems to have ignited inflation expectations and interest rates have started rising in the US. Stronger Dollar and stronger performance of US Indices has probably led to outflows from emerging markets. India which has been an overweight for most FIIs, has seen selling on a daily basis since October by FIIs. The selling has accelerated post the Demonetisation announcement.

On the other hand domestic investors continue to show faith in the Indian market with constant inflows into Mutual Funds. Some portion of the monthly flows is now coming through the Systematic Investment Plan (SIP) route which has smoothed the MF inflow volatility. This positive sentiment amongst the domestic investors continues to be visible in the overvaluation in the mid and small cap space. Only once we see rationalization of valuations in that segment, can we say that sentiment across the board has turned negative/cautious.

Thus even though, none of our proprietary indicators are highlighting the preponderance of either “greed” or “fear” in the market, sentiment seems to be clearly negative from a foreign investor perspective while domestic investors continue to be optimistic. It is difficult at this point to understand what would drive the change in sentiment amongst foreign investors who have experienced poor USD returns in the Indian Market for a long while as compared to US markets and are now extrapolating more of the same.

Total Returns	1 Year	3 Year	5 Year	10 year
BSE Dollex 30	0.8%	7.0%	6.4%	3.9%
S&P 500 Returns	8.1%	9.1%	14.5%	6.9%
Underperformance	-7.3%	-2.1%	-8.0%	-3.0%

Source: S&P Indices

Sentiment of domestic investors could turn sour if the weakness due to demonetization continues as most domestic investors track trailing 1-3 year performance. If such performance does not match the expected return on equity, it won’t take much time for sentiment to turn negative.

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 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 ~12% (or ~29,250 from 28th Dec closing) while the worst case downside is estimated at -20% (or ~21,000) with an average estimate of -4% (or 25,150). Be aware though that this changes every day as new information on valuation, earnings momentum and attitude of market participants to risk changes.

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Conclusion:

We are starting the New Year with a short term negative baggage of market participants expecting some short-term hit to earnings due to Demonetisation. As one would expect, markets have reacted negatively and thus are not far away from the lower end of our valuation range. There are 2 paths that the market could take going forward. If the signs start emerging that the recovery from this event would take longer than say 2 quarters, the market would continue to drift down to the lower end of the valuation range of around 22,500. This is also close to the point where the market had bottomed out in 2016. On the other hand if we see some signs of recovery in the economy, the market might continue to meander around the current level of ~26,000 as, even if there is a recovery, it would be more of a gradual recovery than a sharp one. The probability of the market going to the midband of the valuation range of ~30,500 seems more likely only when market participants start anticipating the end of the negative short-term effects of de-monetization.

Considering the information that we have *as of now* and all the inputs that we are getting from our rational analysis tools (Fundamental, Technical, Quantitative and Behavioral), there is a *high probability* of the SENSEX moving to the lower end of the valuation of ~22,500 or the earlier low that the market had made in February of 2016 in the first quarter/half of CY 2017. But as we had discussed in the January 2016 report, as and when reward vs risk starts improving, a rational investor should start focusing on the possible positive triggers rather than worrying about the limited mark to market downside. As currently the reward to risk (in fact on a top down basis we are almost close to Low End) is looking favourable we believe active managers should be constructive looking for pockets of mispriced stocks rather than worrying about short term downside in the indices that may have to be endured.

Regards

Rohan Samant
Portfolio Manager

Statutory Details: Portfolio Manager – Multi-Act Equity Consultancy Private Limited

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.

g. 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.