Edelweiss | MUTUAL FUND
Ideas create, values protect

Insuring Risk

..using Pro-cyclical approach

“Taking less risk than is optimal is not safer; it just locks in a worse outcome.

Taking more risk than is optimal also results in a worse outcome, and often leads to complete disaster.”

- Aaron Brown

Edelweiss Equity Health Indicator -

A Pro-Cyclical Asset Allocation Model to insure market risk

Different approaches to Asset Allocation

a. *Discretionary Approach* – Decisions based on fund manager's view on the markets
b. *Value based Counter Cyclical Approach* – A Systematic approach of using valuation ratios* to time entry/exit in the markets with the aim of capturing the turnaround in markets
c. *Market indicators based Pro-Cyclical Approach* – A systematic approach of using price, flow and volatility-based indicators to capture upside and limit drawdown. It encompasses all facets of equity investing like Macro, sentiments, liquidity and valuations.

Each method of managing equity exposure has its advantages and disadvantages. However, anecdotal evidence suggests that a pro-cyclical approach has provided much better downside protection during bear cycles while keeping intact the upside participation during bull cycles.

Edelweiss Equity Health Indicator (EEHI) – A Pro-cyclical asset allocation model

Edelweiss AMC - Health Indicator is a proprietary indicator which has a protective approach to hedging that incorporates market direction and volatility to dynamically manage equity exposures. It works on a Pro-cyclical approach of investing i.e. increasing exposure on winning side and reducing exposure on losing side thus harnessing the power of compounding in an effective way.

EHI is built on two key pillars – Market Trend, Health of the Trend. The approach is purely quantitative in nature where indicators are selected and tested for robustness and consistency in different market cycles to realize optimal performance in real-time.

"Classical modern portfolio theory says investors are risk averse and measures risk as volatility. Evidence suggests that that investors are actually loss averse, and therefore drawdown is a more appropriate measure."

Factors in EEHI

1. Analysing Market Trend:

A) Short Term Trend (1 Week/ 2 Week)

The model uses short term trend indicators namely 1-week and 2-week daily moving averages (DMA) to identify short term trend of the market. This indicator helps in changing the net equity exposure swiftly if market changes direction in the short run.

B) Medium Term and Long-Term Trend (1 Month and 3 Month)

The model uses medium and long-term trend indicators namely 1-month and 3-month DMA to identify medium term trend of the market. This indicator helps us to remain aligned with the larger market trend If Nifty trades below these trends levels the net equity levels are reduced accordingly. The net equity levels are increased when Nifty starts trading above these moving averages.

Example: Based on short term and long-term indicators equity exposures are being reduced.

Date	Nifty Levels	Short Term Indicator	Exposure Management
14 March 2018	10410	10370	Exposure Unchanged
15 March 2018	10360	10365	**Exposure reduced**
24 March 2018	10130	10105	**Exposure increased**

230 point of Nifty Fall protection done due to short term indicator

Date	Nifty Levels	Long Term Indicator	Exposure Management
10 October 2016	8710	8708	Exposure Unchanged
11 October 2016	8573	8707	**Exposure reduced**
5 January 2017	8273	8210	**Exposure increased**

300 point of Nifty Fall protection done due to long term indicator

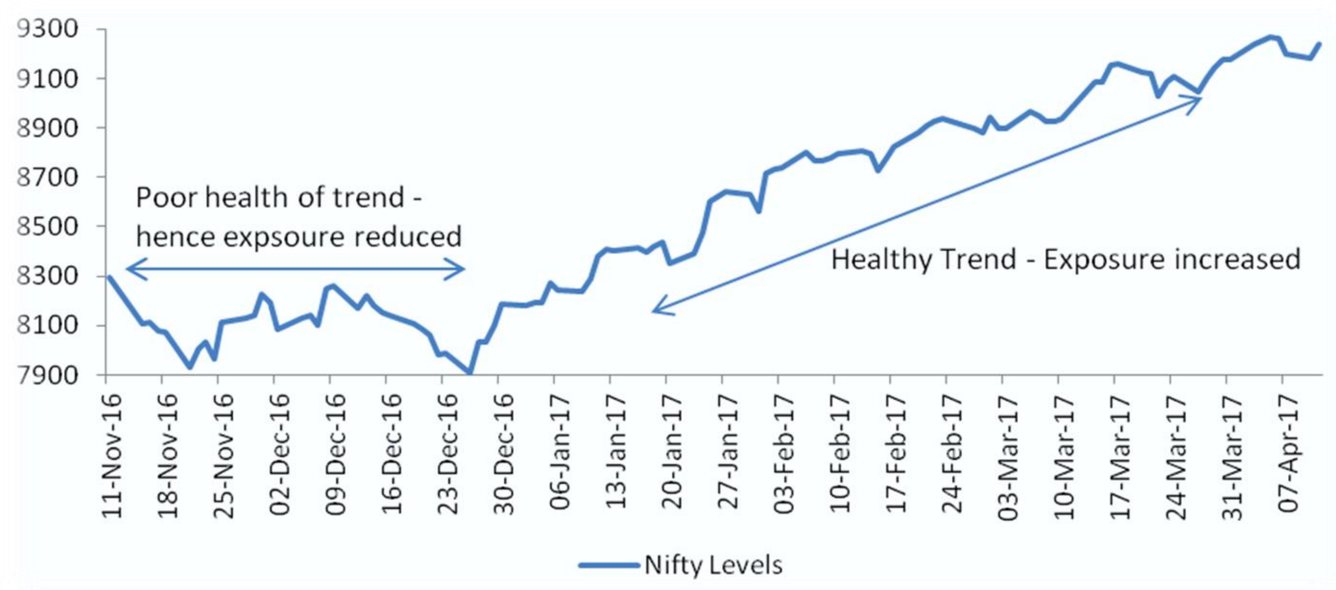
2. Analysing heath of market trend:

Distance to Displacement Ratio

This is a unique indicator that tracks the health of the current market movement. The health of the market is sensed through daily fluctuation in Nifty movements in comparison of actual bi-weekly movement of Nifty. If the magnitude of the fluctuations is relatively larger than actual movement then we tend to term the health of market to be weak and unstable and reduce the net equity exposure levels.

Example:

During December 2016, trend indicators were in positive zone but market health was uncertain. While Nifty movement was restricted within the band of 7950 to 8250 (a displacement of 3%), the period saw lot of intermittent volatility (absolute distance travelled ~14% with drawdown of 3%). Hence, the trend health indicator highlighted caution which helped in avoiding whipsaws during the month as market moved up and down without actually going anywhere. Then, from January to March 2017, the trend health indicator turned positive as Nifty moved in a strong uptrend (from 8200 to 9200, displacement of 12%) with very low volatility (distance travelled 25% with drawdown of 1.5%).



Example of how net equity exposures are reduced when each of the above indicators turn negative

Indicators	Short term Trend	Medium-Long Term Trend	Displacement – Trend health	Net equity exposures (0 to 100%)
Scenario 1	None of the indicator is negative			Up to 100%
Scenario 2	If any one indicator is negative			66% to 100%
Scenario 3	If any two indicators are negative			33% to 66%
Scenario 4	All three indicators are negative			0% to 33%

These are just indicative net exposures

3. Over-riding Factors:

EHI model is mainly quantitative in nature and approach and net equity levels are broadly set using this principle. However, fund manager also uses other indicators and data including macro trends, interest rate cycles, global fund flows, valuations ratios, market breadth in conjunction to assess the health of the market. These override signals are typically applied during key events like elections, budget, central bank policy and any other global or domestic macro announcements for better risk management.

Why Edelweiss Equity Health Indicator?

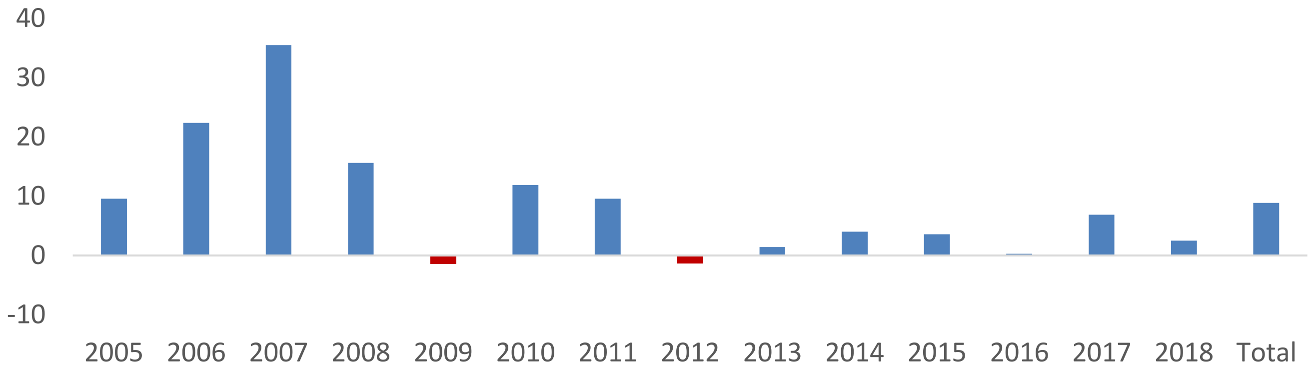
- **Systematic process driven approach**
    - Discretionary decisions based on 'gut feeling' or news generally fail over a longer time period. It also has poor hit ratio and rarely replicable. Recent events such as Brexit, Demonetisation, US elections etc. have manifested out to an unexpected outcome for the equity markets.
- **Avoids timing of market reversal**
    - Market reversals are more difficult to predict as reversals take longer than anticipated, resulting in portfolios suffering large drawdown. Timing the reversals looking at historical valuation ratios have typical drawback of having hindsight syndrome.

- **Higher Insurance Cost**
    - Counter Cyclical or Static Asset Allocation models may carry a very heavy allocation to debt for the sole purpose of protecting against rare tail events in risky assets. Like having more than 40% allocation to non-equity assets throughout bull cycle is too high a cost to insure from any probable downside.
- **Captures bigger trends and limits drawdown**
    - Wealth is created by capturing bigger trends on upside and limiting the drawdown on the way downside. EHI by the nature captures the winning trend and reduces the exposure in a losing trend.
- **Superior risk adjusted returns**
    - EHI smoothens the ride in a volatile equity market, thus enhancing risk adjusted returns for an investor

Performance of Edelweiss EHI and counter cyclical approach

- EEHI has out-performed counter cyclical model in 12 out of 14 calendar years.
- During bear years EEHI has protected downside much better than Counter cyclical models.
- Overall, since 2005 EEHI has outperformed Nifty and counter cyclical model by a reasonable margin.

YoY (%) Return Differential (Procyclical - Counter Cyclical)



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Nifty 50	36.3	39.8	54.8	-51.8	75.8	17.9	-24.6	27.7	6.8	31.4	-4.1	3.0	28.6	2	12.9
Counter Cyclical	21.6	19.3	11.8	-18.3	60.4	7.2	-14	21.5	5.0	19.5	-1.1	4.1	13.4	0.8	9.8
Pro-cyclical	31.2	41.7	47.3	-2.7	59	19.1	-4.4	20.2	6.4	23.5	2.5	4.3	20.3	3.3	18.7

The returns of EHI and counter cyclical approach is calculated based on dynamic equity exposure management of Nifty 50 Index in range of 0%-100% through respective methods
For 2018 the returns are till 30-April-2018. Source: NSE, Bloomberg, Internal Research

Disclaimer: EEIH is a propriety tool and is meant to be used by Edelweiss AMC only. The process of the model explained above is for the information of the recipients and should not replicated in any manner. The tool and the model itself is not sufficient to and should not be used for the development of any investment strategy. Edelweiss Asset Management Limited (EAML) does not take the responsibility / liability nor does it undertake the authenticity of the figures/data provided therein. EAML makes no warranty about the accuracy of the tool/model. The examples do not claim to represent the performance of any security/index/investments. Consequently, EAML or any of its Directors, Officers, Employees and personnel do not accept any responsibility for the editorial content or its accuracy, completeness or reliability and hereby disclaim any liability with regards to the same. This communication is intended only for distributors and advisors of Edelweiss AMC. Date: 16th May 2018

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