Categories of Indicators based on the types of data that is entered in them

1. OHLC Data/Volume
2. Pure Price Time series
3. Alt data – Value, sentiment etc

**Pure Price Time Series Indicators Table:**

Note: Takes the OHLC data from the relevant data providers, and condenses it down to a single price array.

|  |  |  |
| --- | --- | --- |
| Sl No. | Indicator Name | Notes |
|  | Moving Averages (MA) | Used as a state variable (whether the current price is above or below the moving average). In the future, can be used in relation to historical data. |
|  | Directional Movement (DM) | Used as a non-linear indicator, where we can find the numerical divergence from the mean. |
|  | Bollinger Arrays (Bol) | High usage state variable, which is x standard deviations above or below the moving average price array |
|  | Turtle Indicator | Based on Highest and Lowest Price in the price array within the lookback. |
|  | Linear Regression | State Variable, where either the slope of the linear regression line is positive or negative.  Can be used as a stateless variable, with actual predictive capabilities. |
|  | Predictive Linear Regression for Mean Reversion (Intraday) | Uses R-squared values to weight predictive price values within the training period. |
|  | Volatility Compression Based Mean reversion (Intraday) | Uses Vol of the price array, in order to predict mean reversion |
|  | Predictive Margining based Trend | Uses |

**OHLC/Volume Time Series Data Indicators Table:**

Note: Caveat – May be correlated data, and may not provide real diversification benefit

|  |  |  |
| --- | --- | --- |
| Sl No. | Indicator Name | Notes |
|  | Accumulation/Distribution | An Indicator that might still add some uncorrelation, taking trend data and adding volume to it. |
|  | Stochastic Oscillator |  |
|  | Pattern recognition | Seeing differences between Open, High, Close and Low to have insights about future price. |
|  | Turtle indicators | Using High and Low values, as opposed to taking the high and low values from the typical price array |

**Alt Data:**

Reason for usage:

**Rebalancing Logic:**

**Thesis for Diversification:**

1. **First Level of Diversification:** Diversifying across strategies, is equal to diversifying across asset classes, same they are equal to different return drivers. Since all models use trend following, there might be situations in excessively trending markets (assuming that separate strategies are trading the same basket of stocks) where the correlations between all the strategies go to one. The corollary of this, is that a few securities will be seen have a very large allocation within that part of the portfolio.
2. **Second Level of Diversification:** Diversifying across baskets of different securities. Models could be made, in order to first construct a basket of securities. Previously used linear trend following models can be added as an overlay. Basket Construction can be used as an analogue to factor investing, with a trend following overlay.
3. **Third Level of Diversification:** Diversifying across Global Markets, using same metrics and models, but with a long-time frame of rebalancing (e.g.: 1 year)
4. **Fourth Level of Diversification:** Besides moving across asset classes and strategies, miscellaneous systems of diversification such as intra day trading systems, and leveraged trading systems