

## Right Time to Invest in Equity for Ordinary People

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### Abstract

The paper details essential indicators—Simple Moving Average (SMA), Exponential Moving Average (EMA), Moving Average Convergence Divergence (MACD), and Relative Strength Index (RSI)—along with their mathematical formulas. It instructs users to utilize TradingView's monthly candlestick charts, overlay four colored SMAs (9-day red, 21-day green, 50-day yellow, 100-day blue), and add MACD and RSI.

Key investment signals for indices include:

- Monthly candle touching the 100-day SMA (blue line) as the ideal entry point.
- Touching the 50-day SMA (yellow) as a potential opportunity, conditional on reasonable PE and PB ratios (preferably PE near or below 20; avoid if over 30 or significantly overvalued).
- Bullish confirmation: 9-day SMA crossing above 21-day SMA from below, supported by MACD line crossing its signal line upward, with non-overvalued valuations.

Avoid investing during bearish SMA crossovers (downward), high or overvalued PE/PB ratios, MACD downward cross, or RSI approaching or exceeding 80.

**Key Note :** *Simple moving average (SMA), Exponential moving average (EMA), Moving average convergence divergence (MACD), Relative Strength (RSI) etc.*

### Introduction :

Everyone wants to book profit in stock market, but unfortunately some of them get success. Because lack of knowledge. Here I try to give some preliminary concept of entry and exit time for investing in stock market specially in index market of India.

### Mathematical Formula:

#### MACD :

- (i) First find 12 day exponential moving average (EMA) of closing price.
- (ii) Then calculate 26 day EMA of closing price.
- (iii) Subtract the 26 day EMA from 12 day EMA to get MACD line.

Signal Line: Calculate the 9 day EMA of the MACD line.

#### RSI :

#### I. Calculate average gain and average loss:

- (i) Determine the average percentage of gain and the average percentage of loss of the stock price or index over a

period of time.

(ii) During the periods the price increases, losses are considered zero average gain.

(iii) During periods with price decreases gains are considered zero average loss.

## **II. RELATIVE STRENGTH:**

RS: Average pain/Average loss

## **III. Relative Strength INDEX (RSI):**

$$=100 - \frac{100}{(1+RS)}$$

## **SIMPLE MOVING AVERAGE (SMA) :**

Mathematical formula for simple moving average (SMA) is  $SMA = \sum_{k=1}^n A_i/n$

Where  $A_i$  represents the individual values of prices at each of the  $n$  periods.

$n$  : Number of periods used in the calculation.

## **Exponential Moving Average:**

EMA = Current price  $\times$  Multiplier + previous EMA  $\times$  (1-Multiplier)

## **The Multiplier is calculated using the number of periods:**

$$\text{Multiplier} = \frac{2}{(\text{Number of periods} + 1)}$$

If we have Demat account in any brokerages then ok. Otherwise go to “Trading View” then choose a candle monthly. That is a candle represents the value of particular stock or Index in one month.

Then go to indicator, choose simple moving average (SMA) three times. Choose each SMA setting and go to setting :

(i) Choose the period 9 days and choose the colour ‘RED’.

(ii) Choose the another SMA and go to setting and choose the period 21 days and the colour is ‘Green’.

(iii) Choose the third SMA and go to setting, then choose the period 50 days and colour is ‘Yellow’.

(iv) Choose the fourth and last SMA and go to settings, then choose the period 100 days and the colour is ‘Blue’.

We also choose another two indicator ‘MACD’ and ‘RSI’.

This is the initial setting for an Index or a particular stock or index.

To find the correct time to invest we should follow :

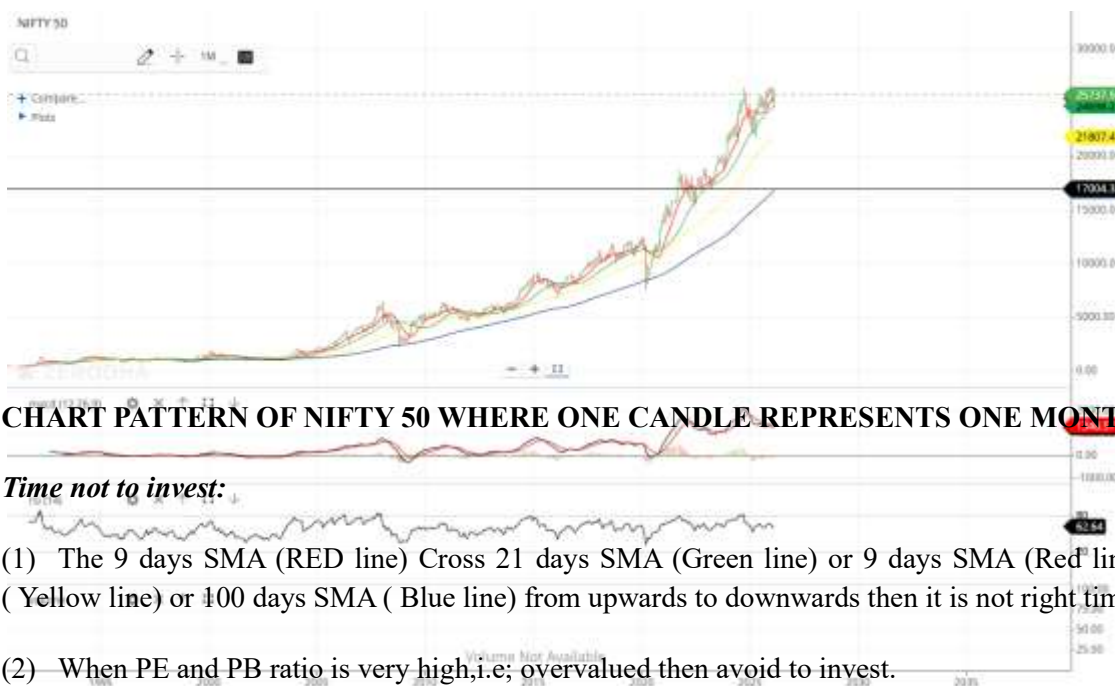
(i) If we observe index like ‘Nifty 50’ and the monthly candle touches 100 SMA *i.e.*; Blue line then it is perfect time to invest in specific index *i.e.*; in ‘Nifty 50’. But note that it is not be observed for a particular stock.

(ii) If monthly candle touches 50 SMA. *i.e.*; ‘Yellow’ line then we think to invest but we have to follow more instructions like PE ratio and PB ratio. If PE and PB ratio are overvalued then we should avoid to invest. If PE and PB

ratio bellow or equal to intrinsic value then we can invest to INDEX.

(iii) If the 21 days SMA (i.e., 'Green' line) is cut by 9 days (i.e., 'Red' line) and the 'Red' line cuts the 'Green' line from downwards to upwards consecutively 'MACD' line cuts the signal line from downwards to upwards and PE, PB ratio not overvalued then it is time to invest.

For example let's see 'Nifty 50'. If 'Red' line cuts the 'Green' line from downwards to upwards and MACD crosses the signal from downwards to upwards and PE ratio is greater than 30 then we should avoid to invest in 'NIFTY 50'. If PE ratio less than 20 or nearly 20 then it is more suitable time to invest.



### CHART PATTERN OF NIFTY 50 WHERE ONE CANDLE REPRESENTS ONE MONTH

#### Time not to invest:

- (1) The 9 days SMA (RED line) Cross 21 days SMA (Green line) or 9 days SMA (Red line) Cross 50 days SMA ( Yellow line) or 100 days SMA ( Blue line) from upwards to downwards then it is not right time to invest.
- (2) When PE and PB ratio is very high,i.e; overvalued then avoid to invest.
- (3) MACD line cuts the signal from upwards to downwards then it is not right time to invest.
- (4) RSI is greater than 80 or near about 80 then avoid to invest.

#### Conclusion :

If some one follows the above rule then the person get clear idea about the time period of investing. The person can perform better about investing if he acquired knowledge about candle stick pattern like bullish engulfing, bearish engulfing, bullish marubozu, bearish marubozu, bullish hammer, bearish hammer, bullish pin bar, bearish pin bar, bullish harami, bearish harami, bullish spinning top, bearish spinning top *etc.* All the above data is for use only investing purpose not trading purpose. The person becomes more expert with time if he or she continuously stay with market.

#### References :

- (1) The Indian stock market simplified, Pankaj Ladha & Anant Ladha.
- (2) The intelligent investor, Benjamin Graham.