

Greenblatt's Magic Formula and Price Momentum Stock Screener

Our mission is to identify assets that are capital healthy at reasonable valuations. According to our company's value, we need to find assets that are fundamentally good and timely correct in order to capture the opportunity in the market and accumulate value stocks. Therefore, we combine Greenblatt's magic formula and price momentum for our asset's screening.

Greenblatt's Magic Formula

Greenblatt's magic formula is a simple and easy screening method that relies on quantitative screens, and is designed to beat the stock market's average annual returns. It outlines two criteria: companies cost of capital and stock price. The formula helps us to screen good companies, in average, and in a cheaper price, in average.

According to Greenblatt, we need to pay a bargain price when we purchase a share in a company, in other words, we need to purchase an asset that earns more relative to the price we are paying (high earnings yield). Note that we also need to buy a good company rather than the bad one, therefore, we should select assets with higher rates of return (relatively higher ROC). In short, Greenblatt formula helps us to buy above-average companies at below-average prices.

The formula is calculated based on 2 ratios:

1. Earnings Yield = $EBIT / \text{Enterprise Value}$
2. ROIC = $EBIT / (\text{Net Fixed Assets} + \text{Net Working Capital})$

The individual components of this formula are calculated as follows:

- Enterprise Value = Market Cap + Total Debt + Minority Interest + Preferred Stock – Cash & ST Investments
- Net Working Capital = $\text{MAX}(\text{Total Current Assets} - \text{Excess Cash} - (\text{Total Current Liabilities} - (\text{Total Debt} - \text{Long Term Debt})), 0)$

- $\text{Excess Cash} = \text{MAX} (\text{Cash \& ST Equivalents} - 20\% * \text{Net Sales or Revenues}, 0)$
- $\text{Net Fixed Asset} = \text{Total Assets} - \text{Total Current Assets} - \text{Goodwill}$
- $\text{Magic Formula} = \text{Rank} (\text{Rank} (\text{Earnings Yield}) + (\text{Rank} (\text{ROIC})))$

This formula doesn't work on all companies, so Greenblatt advises to set the following filters:

1. Set Market Capitalization to a value greater than 50 million dollars.
2. Exclude utility and financial stocks

The benefit of using Greenblatt formula:

- Focus on strong companies at bargain prices
- Eliminate the potential to cloud operating performance with debt payments and/or taxes
- Instead of using only total assets in the calculation, Greenblatt uses total capital (which includes working capital and net fixed assets) to isolate how much capital a firm needs to operate
- Measures how much of a return we could expect to get if we were to buy the whole business (by dividing earnings-per-share by current share price)

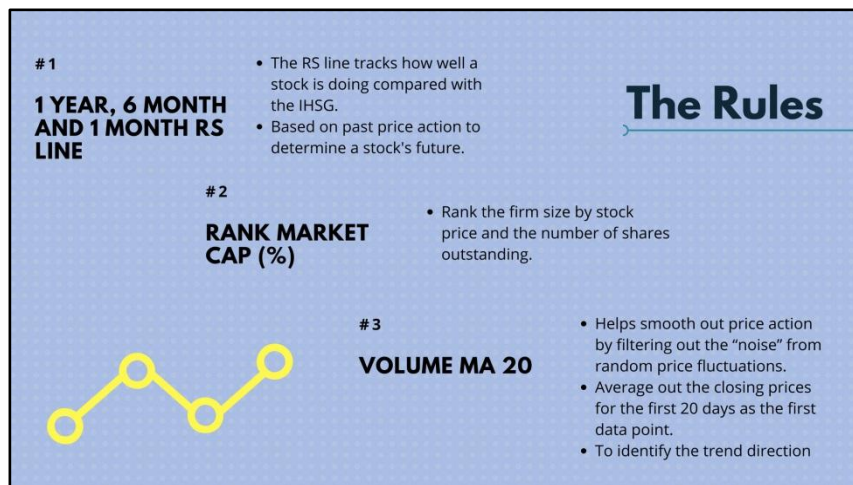
The drawbacks of using Greenblatt magic formula:

- Does not eliminate psychological barriers to investing success
- Does not work much for short-term trading

To cover the Greenblatt's weaknesses, we need another method to capture opportunity for short-term trading. So we screen the 'good' companies from greenblatt formula (high earning yield and return on capital), then use this method to take short-term positioning: price momentum.

Price Momentum

Momentum measures the velocity of price changes as opposed to the actual price levels themselves. Momentum investing take advantage of market volatility by taking short-term positions when stocks is going up and selling them as soon as they show signs of going down, then moving the capital to a new position. By using price momentum, we're looking for better-performing stock than IHSG in the past 1 year and 6 month; the objective is to finding the best stock-option for medium and long term investment.



The benefits of momentum investing:

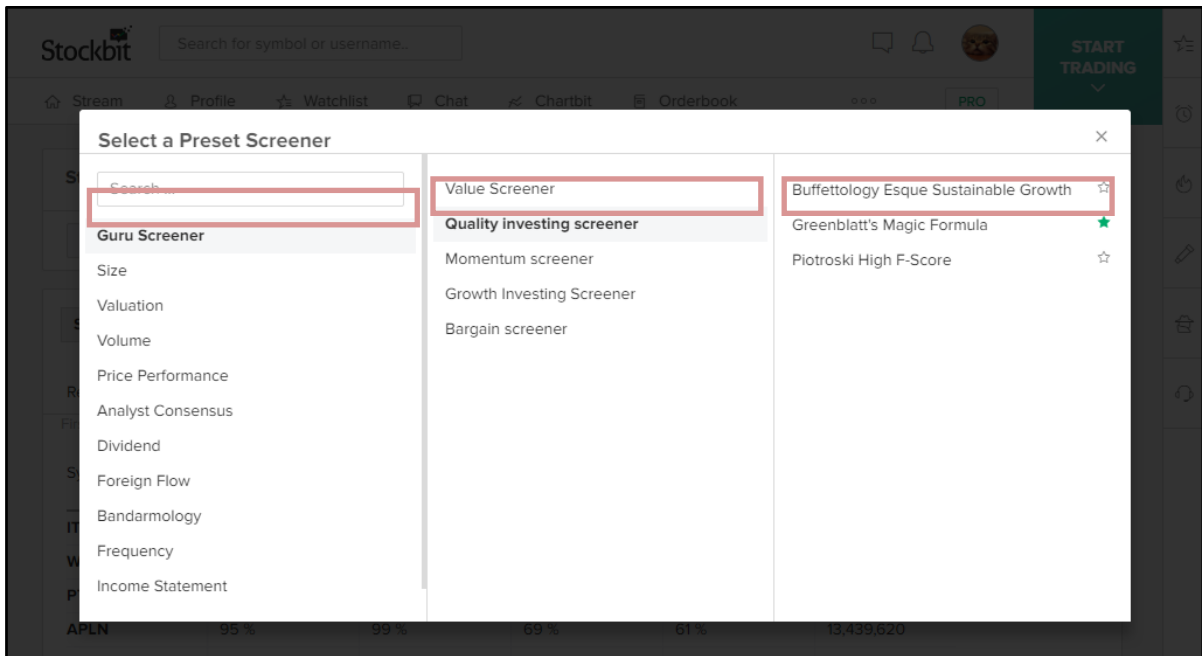
1. Has potential to gain high profits over a short period of time.
2. Maximize Return on Investment by buying stock on their way up and then sell them before the prices start to go back down.
3. Take advantage of investors herding behavior by leading the price increase movement and being the first that sell the stock and gain high return.

Drawback of momentum investing:

1. Risk and return tradeoff.
2. The fees may be expensive because of the high stock turnover.
3. Time consuming because investors need to watch the market details daily.
4. Work best on the bull market when stock prices are expected to rise.

Stockbit Screener Guideline: Using Greenblatt’s Magic Formula and Price Momentum

1. Choose **Screener** menu on the top side of the Homepage. Click **Preset Screener** then choose **Guru Screener – Quality Investing Screener – Greenblatt’s Magic Formula**.



2. Then automatically the stock result for using **Greenblatt’s Magic Formula** will show up as

Screen Name	Greenblatt's Magic Formula					Edit Screener
Results 1 - 25 of 36 Equities						+ Add Financial Column
First Previous Next Last						
Symbol	Rank (Magic Formula)(%)	Rank (Earnings Yield)(%)	Rank (ROC Greenblatt)	Rank (Market Cap)(%)	Volume MA 20	
ITMG	97 %	84 %	88 %	93 %	2,562,275	
WSKT	96 %	95 %	72 %	92 %	29,721,800	
PTBA	95 %	80 %	88 %	96 %	31,253,085	
APLN	95 %	99 %	69 %	61 %	13,439,620	
JRPT	94 %	86 %	90 %	80 %	5,240,300	
TBLA	93 %	94 %	81 %	69 %	1,536,735	
SRIL	93 %	93 %	81 %	78 %	47,768,204.60	
ASRI	93 %	97 %	79 %	74 %	11,171,760	
DSNG	92 %	85 %	85 %	67 %	1,124,995	
LPPF	91 %	70 %	100 %	92 %	4,240,015	

bellow.

3. Click **Edit Screener** to see the description of the screener method and the rules specification. The Stockbit Screener features allow us to make unlimited modification, such as screening based on the sector, change the stock universe, and even add more the rules. Here we are going to add **Price Momentum** rules using specification as below. Click **Add Rule – Basic Ratio**.

Screen Name Greenblatt's Magic Formula Save Screener

Description

Greenblatt's magic formula merupakan screener berbasis value investing yang dicetuskan oleh seorang manager hedge fund bernama Joel Greenblatt dalam bukunya yang berjudul "Little Book that Beats The Market". Screener ini memfokuskan pada menemukan saham fundamental bagus dengan menggunakan magic formula yang digabungkan dengan Earnings Yield yang tinggi. Metode ini seiring dengan prinsip Greenblatt yaitu "Membeli saham murah pada harga yang juga murah adalah rahasia untuk mendapatkan uang yang banyak".

Stock Universe

IHSG

Screening Rules

Rank (Magic Formula)(%)	>	75	×
Rank (Earnings Yield)(%)	>	0	×
Rank (ROC Greenblatt)	>	0	×
Rank (Market Cap)(%)	>	60	×
Volume MA 20	>	500000	×
1 Year RS Line	>	1	×
6 Month RS Line	>	1	×
1 Month RS Line	<	1	×
Rank (Market Cap)(%)	>	25	×
Volume MA 20	>	100000	×

+ Add a Rule Screen

4. Click **Screen** and here the results.

Results 1 - 6 of 6 Equities									+ Add Financial Column
Symbol	Rank (Magic Formula) (%)	Rank (Earnings Yield)(%)	Rank (ROC Greenblatt)	Rank (Market Cap)(%)	Volume MA 20	1 Year RS Line	6 Month RS Line	1 Month RS Line	
ITMG	97 %	84 %	88 %	93 %	2,562,275	1.35	1.14	0.94	
PTBA	95 %	80 %	88 %	96 %	31,253,085	1.62	1.59	1	
HRUM	87 %	76 %	44 %	76 %	3,137,675	1.27	1.13	0.88	
SMSM	85 %	62 %	96 %	78 %	1,508,175	1.13	1.15	0.98	
MDLN	82 %	89 %	74 %	64 %	2,598,780	1.02	1.03	0.95	
SIDO	80 %	55 %	88 %	84 %	6,766,700	1.58	1.52	0.97	

*Screener results are based on End-of-day data.
*Data are updated at 6pm daily.