



## JS-TechTrading

### Description Pullback Strategy

#### Content

General Description and Unique Features of this Script .....	2
Minervini's Trend-Template and the 'Stage-Analysis' of the Markets? .....	2
Selection of stocks and other securities .....	<b>Fehler! Textmarke nicht definiert.</b>
The Trend Template .....	4
The Pullback Strategy .....	5
Relative Strength Index (RSI) .....	6
Moving Average Convergence Divergence (MACD) .....	6
Backtesting – general information .....	7
Backtesting results of the JS-TechTrading pullback strategy .....	8
Backtesting results .....	8
Installation of JS-TechTrading pullback strategy on TradingView .....	<b>Fehler! Textmarke nicht definiert.</b>
Disclaimer .....	<b>Fehler! Textmarke nicht definiert.</b>

## General Description and Unique Features of this Script

Introducing the ultimate trend-following (long-only) strategy that offers a unique feature you won't find anywhere else!

1. Our script/strategy utilizes Mark Minervini's Trend-Template as a qualifier for identifying stocks and other financial securities in confirmed uptrends. Mark Minervini, a 3x US Investment Champion, developed the Trend-Template, which covers eight different and independent characteristics that can be adjusted and optimized in this trend-following strategy to ensure the best results. The strategy will only trigger buy-signals in case the optimized qualifiers are being met.
2. But that's not all! Our strategy is based on supply/demand balance in the market, making it timeless and effective across all timeframes. Whether you're day trading using 1- or 5-min charts or swing-trading using daily charts, this strategy can be applied and works very well.
3. We also incorporate technical indicators such as RSI and MACD to identify low-risk pullback entries in the context of confirmed uptrends. By doing so, the risk profile of this strategy and drawdowns are being reduced to an absolute minimum, giving you peace of mind while trading.

Don't settle for mediocre trading strategies, choose the best with our trend-following strategy that offers unique features you won't find anywhere else. Start trading smarter today and see the results for yourself!

## Minervini's Trend-Template and the 'Stage-Analysis' of the Markets

This strategy is a so-called 'long-only' strategy. This means that we only take long positions, short positions are not considered.

The best market environment for such strategies are periods of stable upward trends in the so-called stage 2 - uptrend.

In stable upward trends, we increase our market exposure and risk.

In sideways markets and downward trends or bear markets, we reduce our exposure very quickly or go 100% to cash and wait for the markets to recover and improve. This allows us to avoid major losses and drawdowns.

**This simple rule gives us a significant advantage over most undisciplined traders and amateurs!**

**'The Trend is your Friend'. This is a very old but true quote.**

**What's behind it???**

- 98% of stocks made their biggest gains in a Phase 2 upward trend.
- If a stock is in a stable uptrend, this is evidence that larger institutions are buying the stock sustainably.
- By focusing on stocks that are in a stable uptrend, the chances of profit are significantly increased.
- In a stable uptrend, investors know exactly what to expect from further price developments. This makes it possible to locate low-risk entry points.

**The goal is not to buy at the lowest price – the goal is to buy at the right price!**

Each stock goes through the same maturity cycle – it starts at stage 1 and ends at stage 4



Stage 1 – Neglect Phase – Consolidation

Stage 2 – Progressive Phase – Accumulation

Stage 3 – Topping Phase – Distribution

Stage 4 – Downtrend – Capitulation

This strategy focuses on identifying stocks in confirmed stage 2 uptrends. This in itself gives us an advantage over long-term investors and less professional traders.

By focusing on stocks in a stage 2 uptrend, we avoid losses in downtrends (stage 4) or less profitable consolidation phases (stages 1 and 3). We are fully invested and put our money to work for us, and we are fully invested when stocks are in their stage 2 uptrends.

**But how can we use technical chart analysis to find stocks that are in a stable stage 2 uptrend?**

Mark Minervini has developed the so-called 'trend template' for this purpose. This is an essential part of our JS-TechTrading pullback strategy. For our watchlists, only those individual values that meet the tough requirements of Minervini's trend template are eligible.

## The Trend Template

- 200d MA increasing over a period of at least 1 month, better 4-5 months or longer
- 150d MA above 200d MA
- 50d MA above 150d MA and 200d MA
- Course above 50d MA, 150d MA and 200d MA
- Ideally, the 50d MA is increasing over at least 1 month
- Price at least 25% above the 52w low
- Price within 25% of 52w high
- High relative strength according to IBD.

We have developed an algorithm (for TradingView) that uses Minervini's trend template as a qualifier. This means that the strategy only generates trading signals in case the selected elements of the trend template are being met. The user is fully flexible to adjust the requirements of this Trend-Template qualifier:

### Minervinis Strategy

Inputs
Properties
Style
Visibility

1. Stock price is above MA 150 and 200 ?
2. MA 150 is above MA 200 ?
3. MA 200 is trending at least 1 month(22 days) ?
4. MA 50 is above both MA 150 and MA 200 ?
5. The current stock price is trading above MA 50?
6. Current stock price is 25% above 52 weeks low ?
7. Current Price is within 25% of 52 week high ?
8. Meet Minervini's Criteria?
9. Enable IBD Qualifier?

IBD RS Threshold 3Months

This strategy is normally applied to the daily chart ideal for selecting individual stocks for trend-following strategies. Nevertheless, Minervini's principles are timeless and this algorithmic strategy with the Trend-Template qualifier can also be applied to any other timeframe.

The qualifier #9 (RS-Ratings) can be modified and optimized in the strategy's settings to fit your individual needs.

In general, it should be noted that ideally all 8/8 trend template criteria are met. Stocks or other securities that meet only some of these 8 criteria can also be very promising candidates for this strategy, provided that backtesting yields good results.

## The Pullback Strategy

For the JS-TechTrading pullback strategy, only stocks and other financial instruments that meet the selected criteria of Mark Minervini's trend template are considered. If not, the strategy will not generate any signals.

Further prerequisites for generating a buy signal is that the individual value is in a **short-term oversold state** (RSI).

When the selling pressure is over and the continuation of the uptrend can be confirmed by the MACD after reaching a price low, a buy signal is issued by the pullback strategy.

Stop-loss limits and profit targets can be set variably.

SL/TP FOR LONG STRATEGIE

Enable Long Strategy

Long Take Profit (%)  Long Stop Loss (%)

SL/TP FOR SHORT STRATEGY

Enable Short Strategy

Stoploss %  Take Profit %

DATE RANGE

Start Date  End Date

Start Month  End Month

Start Year  End Year

## Relative Strength Index (RSI)

The Relative Strength Index (RSI) is a technical indicator developed by Welles Wilder in 1978. The RSI is used to perform a market value analysis and identify the strength of a trend as well as overbought and oversold conditions. The indicator is calculated on a scale from 0 to 100 and shows how much an asset has risen or fallen relative to its own price in recent periods.

The RSI is calculated as the ratio of average profits to average losses over a certain period of time. A high value of the RSI indicates an overbought situation, while a low value indicates an oversold situation. Typically, a value  $> 70$  is considered an overbought threshold and a value  $< 30$  is considered an oversold threshold. A value above 70 signals that a single value may be overvalued and a decrease in price is likely, while a value below 30 signals that a single value may be undervalued and an increase in price is likely.

For example, let's say you're watching a stock XYZ. After a prolonged falling movement, the RSI value of this stock has fallen to 26. This means that the stock is oversold and that it is time for a potential recovery. Therefore, a trader might decide to buy this stock in the hope that it will rise again soon.

## Moving Average Convergence Divergence (MACD)

The MACD (Moving Average Convergence Divergence) is a technical indicator used in both short-term and long-term trading strategies. The indicator was developed by Gerald Appel and is one of the most well-known indicators for the stock market.

The MACD consists of two lines calculated by the difference between two moving averages. The first line is a fast moving average that targets a short period of time. The second line is a slow moving average that targets a longer period of time. In addition, a trigger line is calculated, which consists of another moving average of the MACD line.

The MACD line is the difference between the fast and slow moving average.

The greater the difference between the two lines, the more likely a subsequent price increase. The lower the difference, the more likely a subsequent price drop is.

If the MACD line crosses upwards over the trigger line, this is a buy signal that signals a potential price increase. If the MACD line crosses down below the trigger line, this is a sell signal that signals a potential price weakening.

This strategy is applicable to all timeframes and the relevant parameters for the underlying indicators (RSI and MACD) can be adjusted and optimized as needed.

RSI	
Over Sold Level	<input type="text" value="30"/>
Over Bought Level	<input type="text" value="70"/>
RSI Länge	<input type="text" value="14"/>
MACD	
FastMA Length	<input type="text" value="12"/>
SlowMA Length	<input type="text" value="26"/>
Signallänge	<input type="text" value="9"/>

## Backtesting – general information

Backtesting is an important process in trading where you use historical data to simulate and test a trading strategy. The goal of backtesting is to assess whether a particular trading strategy has been successful in the past and whether it is predictable for future trades.

Backtesting can be done in different ways, depending on the available data and the analysis tools used. A common approach is to use historical price data and technical indicators to simulate decisions about trades. Here, the rules of the trading strategy are applied based on the historical data and the results are monitored to see if the strategy was profitable or not.

An important part of backtesting is checking the validity of the strategy. Several factors are taken into account, such as the bias caused by the "overfitting" problem, the duration of the test period and the use of realistic trading conditions.

## Backtesting results of the JS-TechTrading pullback strategy

The JS-TechTrading pullback strategy was developed and optimized for use on daily charts, but the functionality covers the entire spectrum of all time levels and can be variably adjusted from 1min charts to weekly charts.

In the following backtesting examples, the following parameters were set for the RSI and MACD indicators, as well as a stop-loss limit of 8% and a profit target of 20%.

### Backtesting results

The backtesting (daily charts) was carried out from Jan 2000 to the end of Feb 2023. US stocks were selected that meet all the above requirements for Minervini's trend template. (RSI oversold settings = 40%, MACD settings 12/26/9).

Settings for backtesting are:

- Period from Jan 2000 until now
- Starting capital 100k USD
- Position size = 100% of equity

Profit/loss ratios (hit rates) up to > 50% are achieved and profit factors up to > 2:

US stock	Number of trades	Net profit (%)	Profit factor	Hit rate (%)	Average Loss (%)	Average Profit (%)
IT	21	441	3,1	62	8	20
GL	10	284	5,5	80	8	20
TOL	18	238	3,0	56	8	20
TTC	23	385	3,1	56	8	20
ACGL	19	500	4,5	68	8	20
SANM	21	285	2,2	52	8	20
PHM	24	216	1,9	50	8	20
ULTA	17	168	1,5	59	8	20
DECK	30	445	2,3	52	8	20
ODFL	25	522	2,8	56	8	20
<b>Average</b>	<b>208</b>	<b>348</b>	<b>2,99</b>	<b>59,1</b>	<b>8</b>	<b>20</b>