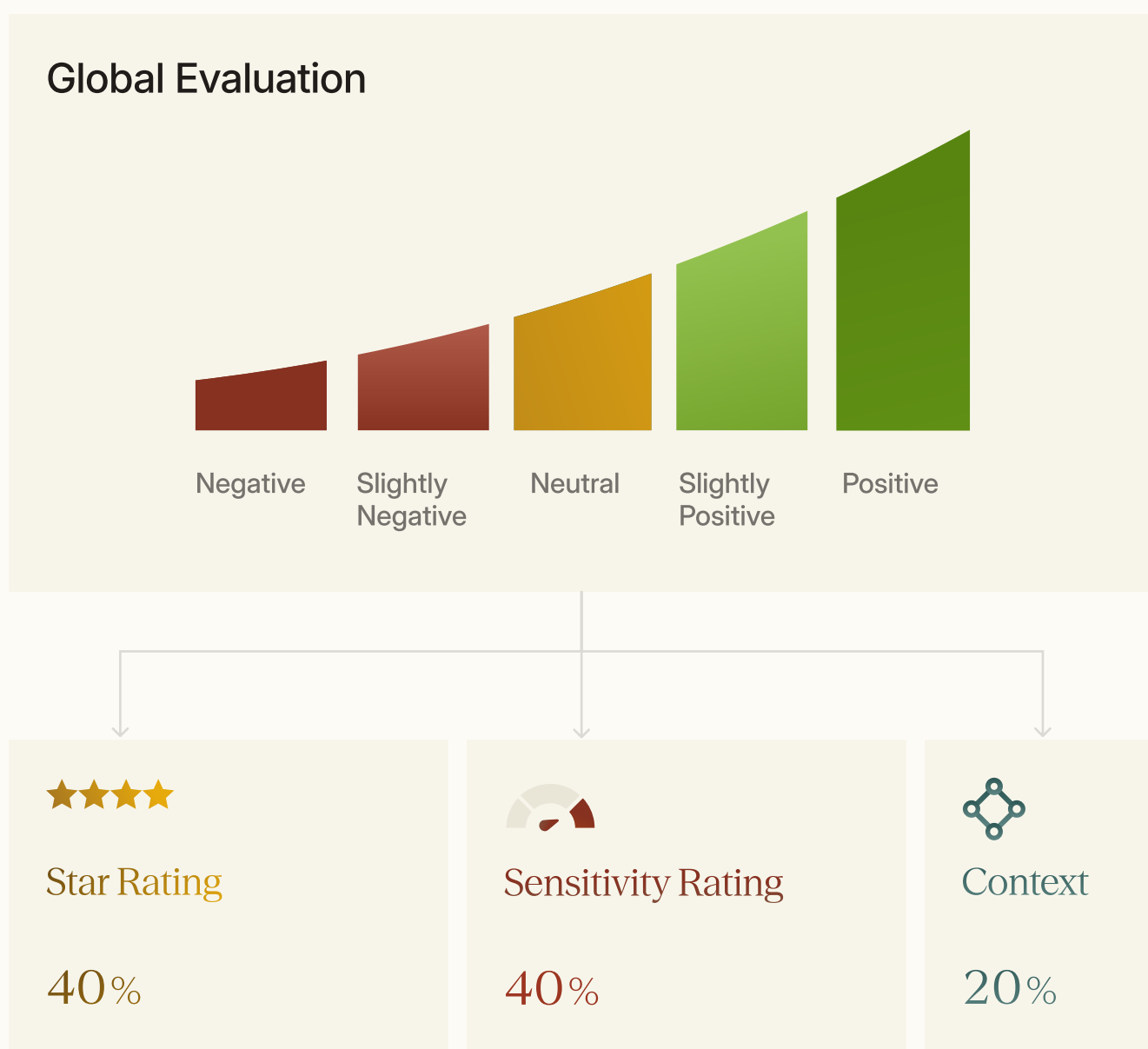


Approach to funds analysis

Global Evaluation

theScreener's Global Evaluation for funds is a general rating that takes fundamental, performance, and risk aspects into account. Funds are categorized into five levels - markets, asset classes, and sub-classes into three levels - based on our unbiased assessment of their quality, sensitivity, and context.

theScreener's proprietary multifactor model combines the world's most popular approaches of financial analysis into a single rating, giving users easy-to-understand assessments. Below is a description of the key pillars.



Components



Star Rating

This 4 - star - rating is unique, as every star has a specific meaning. An instrument can have zero to four stars.

For stocks, markets, and sectors, the stars represent:

- Analysts' consensus
- Valuation
- Technical Trend
- Relative Performance

40%

Each star contributes roughly 10% to the Global Evaluation.



Sensitivity Rating

The proprietary Sensitivity rating takes the following two aspects into account:

- **Bear Market Factor.** Stock's behavior in declining markets relative to the index.
- **Bad News Factor.** Stock's declining behavior in rising markets relative to the index.

40%

The Sensitivity contributes about 40% to the Global Evaluation.



Context

The Global Evaluation is rounded off by an assessment of the stock's context because companies do not exist in a vacuum.

theScreener analyzes both the geographical and the industrial context by rating the quality and sensitivity of contexts similarly to single stocks.

The context is categorized into:

- 4 geographical markets,
- 18 industries, and
- 96 sectors.

20%

The context component contributes roughly 20% to the Global Evaluation.

Star Rating

★★★★★ Information Ratio

The information ratio (IR) is a measure of an asset's returns beyond its benchmark that takes its risk (in form of the tracking error) into account. A positive information ratio means that the asset outperformed the benchmark. The higher the IR, the better the risk is being rewarded.

Formula:

$$\text{IR} = \frac{\text{Asset returns} - \text{Benchmark return}}{\text{Tracking error}}$$

The aggregate of funds in the corresponding geographical investment zone and sub-class is used as the benchmark.

★★★★★ Sharpe Ratio

The Sharpe ratio measures the performance of excess return (or risk premium) per unit of risk (volatility). This is done by taking the "performance" less the risk-free rate of return" (money market) then dividing the result by volatility. The Sharpe number informs us of the assumed risk of an asset, in this case funds, indicating the payoff (excess return) per each unit of risk (volatility point).

The higher the ratio, the better the fund.

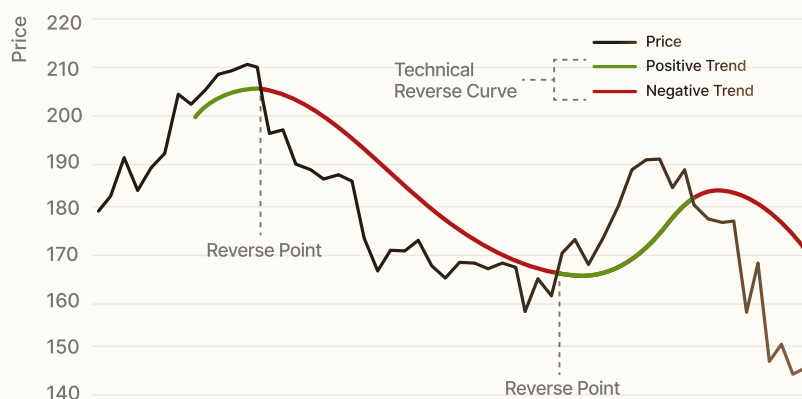
Formula:

$$\text{Sharpe} = \frac{\text{Performance} - \text{Risk free return}}{\text{Volatility}}$$

Star Rating

★★★★★ MT Technical Trend

The Medium - Term Technical Trend indicates the current 40 - day tendency, positive [↗] or negative [↘], and the Reverse Point indicates the price to which this tendency is valid.



★★★★★ Relative Performance

This star indicates the 6 - months performance of a fund relative to its assigned benchmark.

The benchmarks are selected on Asset Class and currency of the fund.

This star is awarded if a fund outperforms its index by at least 2.5% and revoked if the fund underperformed by more than 2.5%.

Sensitivity Rating

The Sensitivity is a relative rating comparing the behavior of a fund to the historical mean of its peers. This rating takes two sensitivity indicators into account, namely the fund's behavior in declining markets (Bear Market Factor) and its downward movement in rising markets (Bad News Factor).

There are three sensitivity levels



Low Sensitivity

Both sensitivity indicators are below the mean of its peers.



Moderate Sensitivity

At least one sensitivity indicator is above the mean of its peers, but not by more than one standard deviation.



High Sensitivity

At least one sensitivity indicator is more than one standard deviation above the mean of its peers.

Sensitivity Rating

Bear Market Factor



The Bear Market Factor describes a fund's behavior in a declining market.

Mathematically, it is the mean 52-week difference between the reference index and the fund in declining markets (in basis points).

Negative values mean that the title lost less than the reference index; positive values mean that the title tends to lose even more than the reference index.

Bad News Factor



The Bad News Factor describes the magnitude of a fund's downward movement in a rising market. If a fund falls while its reference index goes up, it can be assumed that the fund's performance has been affected by bad news – hence the name, Bad News Factor.

Mathematically, it is the mean difference between the asset class and the fund whenever the fund price declined while the asset class rose. The Bad News Factor is expressed in basis points and the analysis period is the last 52 weeks.

The larger the Bad News Factor, the more a fund has been sensitive to bad news.

Context

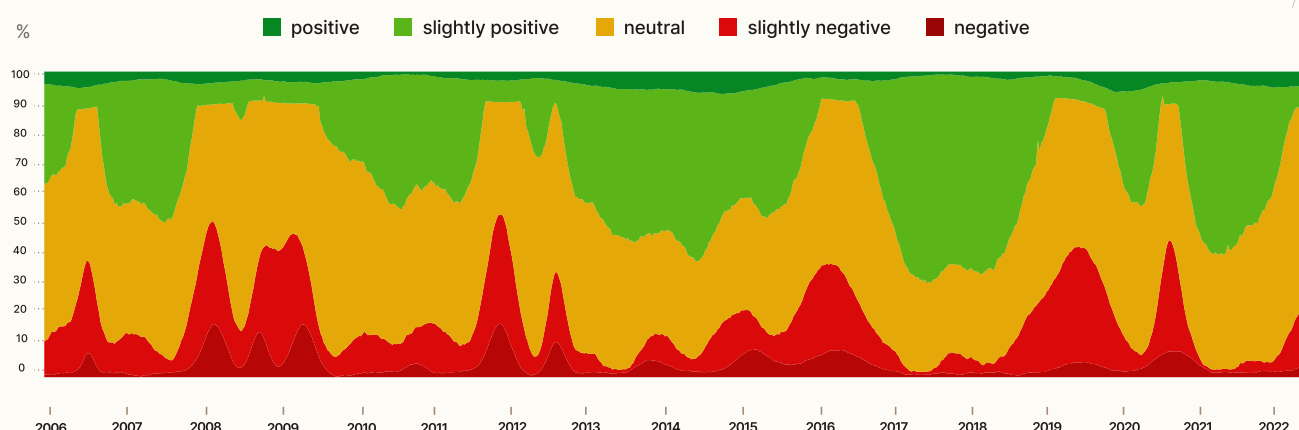
20% of theScreener's Global Evaluation consists of the context analysis.

This analysis combines theScreener's quality and sensitivity assessment into a three - level scale (positive, neutral, negative).

Every fund is categorized geographically and by benchmark. We distinguish between four geographical markets: Europe (EP), USA (US), Pacific (PA), and World (WO); and 7 asset classes.

The Global Evaluation for funds is an indicator that, on average, remains unchanged for 214 days. However, this is not equivalent for all rating levels. Negative and slightly negative ratings change twice as often (on average every 107 days). Neutral, slightly positive, and positive ratings change every 204, 265, and 177 days respectively.

Global Evaluation Funds



	Negative	Slightly Negative	Neutral	Slightly Positive	Positive
Mean	4.18%	12.47%	43.66%	36.94%	2.75%
Min	0.18%	1.64%	29.70%	7.77%	0.00%
Max	18.24%	38.71%	75.63%	59.41%	8.76%
Std. Dev	4.54%	8.00%	7.35%	12.59%	1.065%