

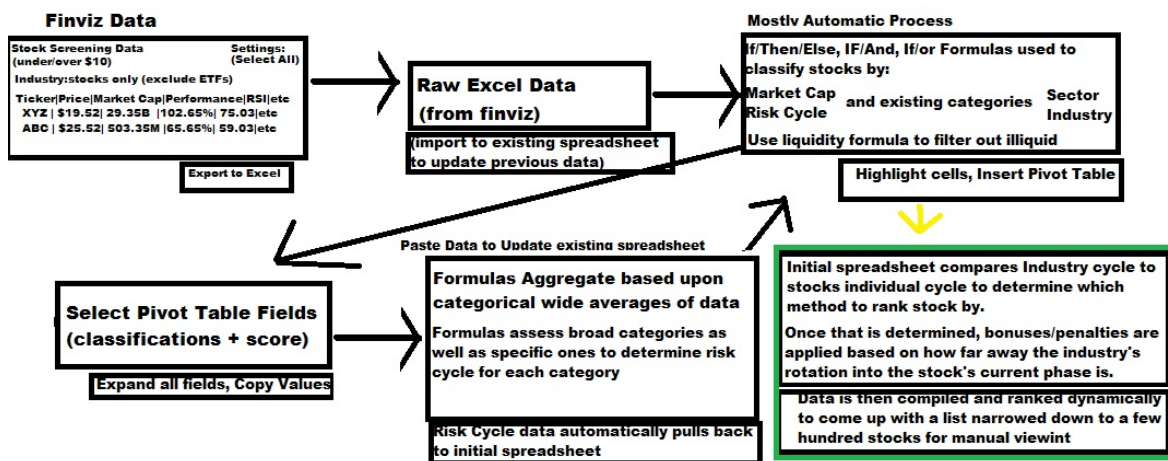
## Planning a Semi-Automated Market Assessment Spreadsheet

The ultimate aim would be a spreadsheet that:

- 1) Provides an overview of the market a bit more efficiently than and/or as a supplement to looking through thousands of charts.
- 2) Allows one to quickly see tables of data that identifies which broad market "classifications" are performing well (categorized by market cap, industry, sector, and most importantly "risk cycle").
- 3) Comes up with some kind of industry average score to not only determine what types of stock are contained in the industry right now, but also how well each risk cycle is performing in the industry and what percentage of each category are performing above a threshold right now and in last week.
- 4) Uses that data to derive some kind of generalized conclusion as to what phase of the cycle each industry is in (and possibly some sort of confidence level).
- 5) Comes up with some sort of unique "score". The way the score is determined changes depending on the stock's classification, the industry classification and the recent performance of similar stocks and the grade of the industry.
- 6) From those ratings, filter stocks into a list of maybe 200-400 names for manual screening and evaluation (with maybe half of those being stocks below \$10, half above \$10).
- 7) Eventually I hope to integrate it with other spreadsheets to (semi)automate other important aspects of trading to individual position management, position sizing, portfolio management, etc.
- 8) Ideally would automatically update data by pulling from the web as opposed to copying and pasting.

The specifics of all of the steps are not yet entirely clear and it is unknown how many of these steps I will actually accomplish. For now my intention is to set up a "framework" for what I intend on creating.

Here is a visualization of how the process will work:



IF the stock meets a specific, strict set of criteria, the stock then gets included. A separate set of filters then gets applied providing sort of an "exceptions" list adding in new stocks to the past list as opposed to a one size fits all approach. The generous filtration in one area might get stricter as another area loosens up its standards. This way those strong enough in standalone categories and adequate enough in others can be included (even if they would have initially been filtered out if you only had one screen). While you prevent a having stocks included that have no business being there, you also avoid the shortage of ideas from being too strict and limited. More importantly, I am only using these screens to simply categorize the stock. Category will influence the ranking depending upon what's likely to be in favor. In this way it will be flexible enough to change the end "rating" a stock has as conditions of the market and industry change to cause that stock to be more or less favorable, just as an intelligent trader would.

However there are some ways to organize the data and filter out some stock that should not be considered in any category.

- 1) For now I am separating stocks over \$10 and under \$10 as separate spreadsheets because I have a feeling I may want to adjust the formulas so that they are treated/filtered differently.
- 2) Liquidity filter: A stock over \$10 will be considered “illiquid” if the average volume times the recent price is less than 300M with exceptions for “trash” rated stocks. A stock under \$10 is considered “illiquid” if  $\text{avg vol} * \text{price}$  is less than \$150M.
- 3) ETFs are not included. If I do decide to use them I want to look at them individually as a separate process rather than including them mixed in with stocks.
- 4) I may use Excel’s internal clock to exclude or notify which stocks are alleged by Finviz data to have earnings coming up in the next 5 days.
- 5) I have not yet determined if I will average an industry score and its categorization by equal weight or market weighted. Nor have I decided if I will determine what “phase” of the risk cycle an industry is by some sort of average score, or by some metric measuring the percentage of stocks in each category relative to another that have met certain performance thresholds in the last week and/or month.

Beyond that I want to rank stocks into one of 7 categories. They are: Quality, Momentum, Laggards, Short Squeeze, “Trash”, too illiquid, and “uncategorized”. If a stock is ranked “short squeeze candidate” all other classifications will get ignored. If stock is ranked “quality”, all other classifications except short squeeze candidate will get ignored.

Here are a few preliminary thoughts on the combinations of screens and filters I will use to determine a stock’s category.

Quality:

- 1) Institutional ownership above 25%, performance metrics no worse than 10% decline on the week, 5% up over the month, 15% over the quarter, 20% over half year and 30% over the last year, Market cap over \$2B OR liquidity ( $\text{avg vol} * \text{price}$ ) over \$1B.
- 2) Institutional ownership over 25%, price no more than 8% below highs, RSI between 50 and 75.
- 3) Earnings growth Qtr /QTR above 20%, performance in last year positive. EPS growth this year of 15%, EPS growth next year greater than this year... OR EPS growth next 5 years greater than past 5 years AND EPS Growth next 5 years positive.
- 4) Profit Margins >5%, sales growth Q/Q positive, ROE >10% and performance over last year positive, RSI above 40. Debt/equity under 1.

Momentum: IF stock is previously designated as "quality" it does not qualify for consideration as a momentum stock.

1. Within 10% of it's highs, performance for the quarter must be more than half the performance of the year, Performance of the month must be more than half the performance of the quarter. Performance for the year must be positive.
2. Over 100% off of low and within 10% of highs.
3. Within 5% of highs
4. RSI over 65.

Short Squeeze:

Still looking to improve this but I set up multiple formulas looking at different ways a stock has “short squeeze potential”. Then I used combinations of that data including a weighted average to include stocks that reached the minimum in each category, and stocks that reached such high areas in any one of the categories that they qualified as short squeeze candidates, or high enough plus a weighted average over a certain amount.

TRASH: This is the first one that I definitely want treated differently if the stock is over \$10 vs under \$10.

Stocks over \$10 qualifications:

- 1) RSI less than 30 and performance for year less than -10% AND Market cap under \$2B
- 2) RSI less than 50 and performance for year less than -10% AND market cap under \$2B AND price\*avg volume less than \$500M
- 3) Price more than 70% off 52 week high AND market cap under \$2B

Stocks under \$10 qualifications

- 1) RSI less than 40 and performance for year less than -15% AND Market cap under \$5B
- 2) RSI less than 60 and performance for year less than -15% AND market cap under \$5B AND price\*avg volume less than \$750M
- 3) Price more than 70% off 52 week high AND market cap under \$5B
- 4) RSI less than 70 and performance for year less than -15% AND price\*avg volume less than \$300M.

Laggards: I chose this last so I could basically cover practically anything remaining that is not yet ranked:

- 1) RSI under 65 AND no previous classification.
- 2) Stock more than 10% below highs AND no previous classification.

Too Illiquid: (with the exception of some “trash” stocks), the following are marked too illiquid:

Over \$10: volume\*market cap less than \$300M, OR market cap under \$15M

Under \$10: volume\*market cap less than \$150M, OR market cap under \$15M

The remaining stocks are “uncategorized”.

For the time being a stock is given only one single classification at a time which means some classifications had to take priority over others.

I just recently am finishing up the filtering formulas for stocks over \$10 as I have them on a separate tab. I have the idea that I will first rank stocks differently depending on their “score” and then given a bonus/deduction depending on how well it lines up with the cycle that the sector/industry/ market cap size category.

I still have a lot of logistics to figure out to make everything come together, but I feel I have enough to provide a brief “demo” of one possible way you might sort the data and use to objectively look at the market and quickly compile a list of good potential stocks for further evaluation or general “themes”.

Row Labels	Average of market cap short %
⊕ Basic Materials	#DIV/0!
⊕ Conglomerates	0.98%
⊕ Consumer Goods	#DIV/0!
⊕ Financial	#DIV/0!
⊕ Healthcare	#DIV/0!
⊖ Industrial Goods	#DIV/0!
⊕ Aerospace/Defense - Major Diversified	9.56%
⊕ Aerospace/Defense Products & Services	4.24%
⊕ Cement	3.30%
⊕ Diversified Machinery	3.11%
⊕ Farm & Construction Machinery	7.96%
⊕ General Building Materials	3.93%
⊕ General Contractors	1.90%
⊕ Heavy Construction	4.02%
⊕ Industrial Electrical Equipment	3.79%
⊕ Industrial Equipment & Components	1.89%
⊕ Lumber, Wood Production	#DIV/0!
⊕ Machine Tools & Accessories	2.91%
⊕ Manufactured Housing	3.56%
⊕ Metal Fabrication	3.59%
⊕ Pollution & Treatment Controls	2.22%
⊖ Residential Construction	10.10%
⊕ laggard	7.87%
⊕ momentum	4.64%
⊖ short squeeze candidate	17.58%
⊖ microcap	0.00%
NWHM	0.00%
⊖ mid cap	27.10%
KBH	27.10%
⊖ small cap	21.61%
BZH	30.42%
TPH	12.80%
⊕ Small Tools & Accessories	0.72%
⊕ Textile Industrial	1.30%
⊕ Waste Management	3.89%
⊕ Services	4.84%
⊕ Technology	#DIV/0!
⊕ Utilities	2.48%

I have not set up a way to rate each stock initially. How the score is calculated will differ depending upon its category, upon the quality of the setup, etc. It will then likely be given a multiplier based upon the strength of the industry, the strength of stocks by market cap category, and also adjusted based upon what “phase” the “risk cycle” is in in terms of the market as a whole, potentially the sector, and certainly the industry.

Right now I not only need to figure out how to score the stock, but also the industry (and other categories) as a whole. Then I have to come up with a way to grab the best 100-200 ranked stocks over \$10 and 100-200 under \$10 for an easy import back into finviz for evaluation. Additionally, if I can figure this out I have a handful of potential ideas on the horizon.