

# USA FINANCIAL TREND TRACKER

April 2019

Monthly Market Data from the Formulaic Trending Money Manager

The USA Financial Trend Tracker is a monthly publication designed to provide an overview and summary to investors about the data USA Financial Portformulas tracks and the trends taking place within the stock market. While some of the information shared is designed to give a general sense for the overall strength of various stock market indices, much of the data shared is used to aid in the formulaic investment management process employed at Portformulas every month to manage investor accounts.

RAM® Score is a patented trending tool that takes into account several dynamic U.S. market and economic indicators. It features a core baseline that allows for correlation between these indicators so they may be combined together for an overall RAM Score. We believe that a positive RAM Score, as a trending tool, signals a more favorable environment for individual equity investing, while a negative RAM Score suggests a less favorable environment for individual equity investments.

The Mapper Scores™ represent the number of stocks within a given index that have met the formulaic criteria for ownership consideration within the Technical Focus Series.

## Standard & Poor's 500 (S&P 500®)

	April 2019	March 2019	February 2019
<b>RAM Score</b>	-0.22	-3.04	-8.01
<b>Mapper Score</b>	47	38	24

RAM Score applied to the S&P 500 Index increased for the current month in comparison to last month.

Of the 500 stocks included in the S&P 500 Index, 47 met the initial formulaic criteria to be considered for ownership in the Freedom SP500 investment strategy. This represents an increase from last month.

## NASDAQ® Composite

	April 2019	March 2019	February 2019
<b>RAM Score</b>	-11.61	-16.56	-19.08
<b>Mapper Score</b>	36	31	18

RAM Score applied to the NASDAQ Composite Index increased for the current month in comparison to last month.

Of the 3,000+ stocks included in the NASDAQ Composite Index, 36 met the initial formulaic criteria to be considered for ownership in the Freedom NSDQ investment strategy. This represents an increase from last month.

## Dow Jones Industrial Average (DJIA®)

	April 2019	March 2019	February 2019
<b>RAM Score</b>	-0.11	2.53	-5.50
<b>Mapper Score</b>	3	4	3

RAM Score applied to the DJIA Index decreased for the current month in comparison to last month.

Of the 30 stocks included in the DJIA Index, 3 met the initial formulaic criteria to be considered for ownership in the Freedom DJ30 investment strategy. This represents a decrease from last month.

## Russell 2000®

	April 2019	March 2019	February 2019
<b>RAM Score</b>	-27.80	-24.03	-34.61
<b>Mapper Score</b>	34	26	19

RAM Score applied to the Russell 2000 Index decreased for the current month in comparison to last month.

Of the 2,000 stocks included in the Russell 2000 Index, 34 met the initial formulaic criteria to be considered for ownership in the Freedom R2000 investment strategy. This represents an increase from last month.

## Russell 3000®

	<i>April 2019</i>	<i>March 2019</i>	<i>February 2019</i>
<b>RAM Score</b>	-2.68	-4.79	-11.22
<b>Mapper Score</b>	103	76	50

RAM Score applied to the Russell 3000 Index increased for the current month in comparison to last month.

Of the 3,000 stocks included in the Russell 3000 Index, 103 met the initial formulaic criteria to be considered for ownership in the Freedom R3000 investment strategy. This represents an increase from last month.

## Standard & Poor's 100 (S&P 100®)

	<i>April 2019</i>	<i>March 2019</i>	<i>February 2019</i>
<b>RAM Score</b>	0.07	-3.80	-6.02
<b>Mapper Score</b>	10	9	4

RAM Score applied to the S&P 100 Index increased for the current month in comparison to last month.

Of the 100 stocks included in the S&P 100 Index, 10 met the initial formulaic criteria to be considered for ownership in the Freedom SP100 investment strategy. This represents an increase from last month.

## Russell 1000®

	<i>April 2019</i>	<i>March 2019</i>	<i>February 2019</i>
<b>RAM Score</b>	-0.56	-3.31	-9.37
<b>Mapper Score</b>	69	50	31

RAM Score applied to the Russell 1000 Index increased for the current month in comparison to last month.

Of the 1,000 stocks included in the Russell 1000 Index, 69 met the initial formulaic criteria to be considered for ownership in the Freedom R1000 investment strategy. This represents an increase from last month.

## NASDAQ-100®

	<i>April 2019</i>	<i>March 2019</i>	<i>February 2019</i>
<b>RAM Score</b>	-9.20	-16.05	-15.43
<b>Mapper Score</b>	7	7	2

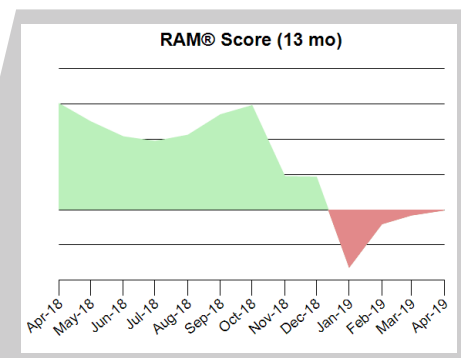
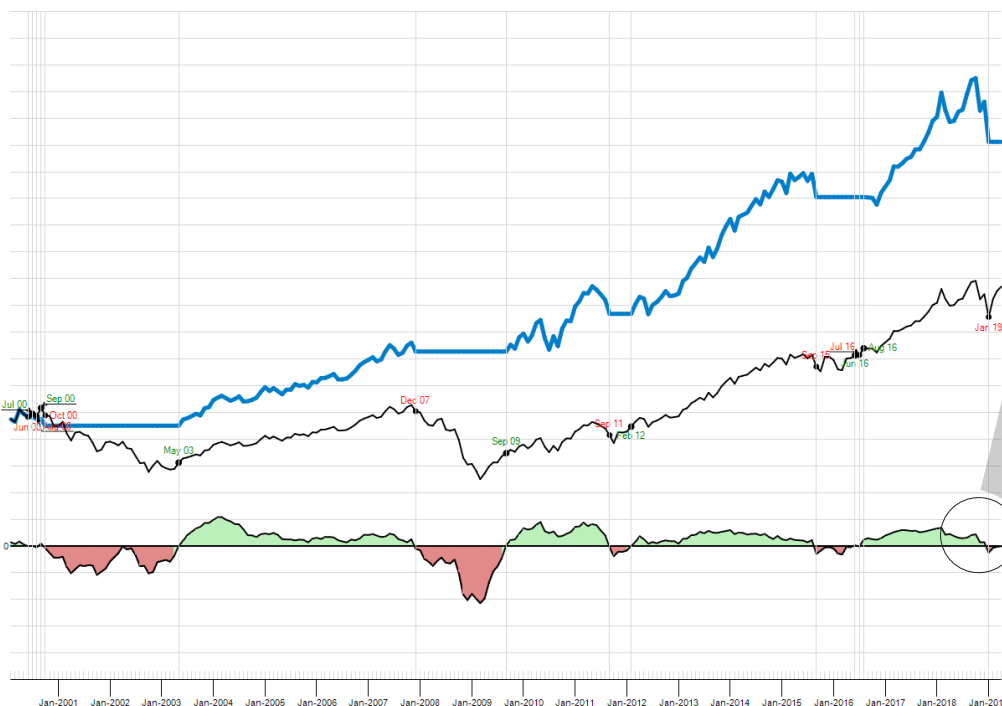
RAM Score applied to the NASDAQ-100 Index increased for the current month in comparison to last month.

Of the 100 stocks included in the NASDAQ-100 Index, 7 met the initial formulaic criteria to be considered for ownership in the Freedom N100 investment strategy. This represents no change from last month.

# RAM® SCORE APPLIED TO S&P 500

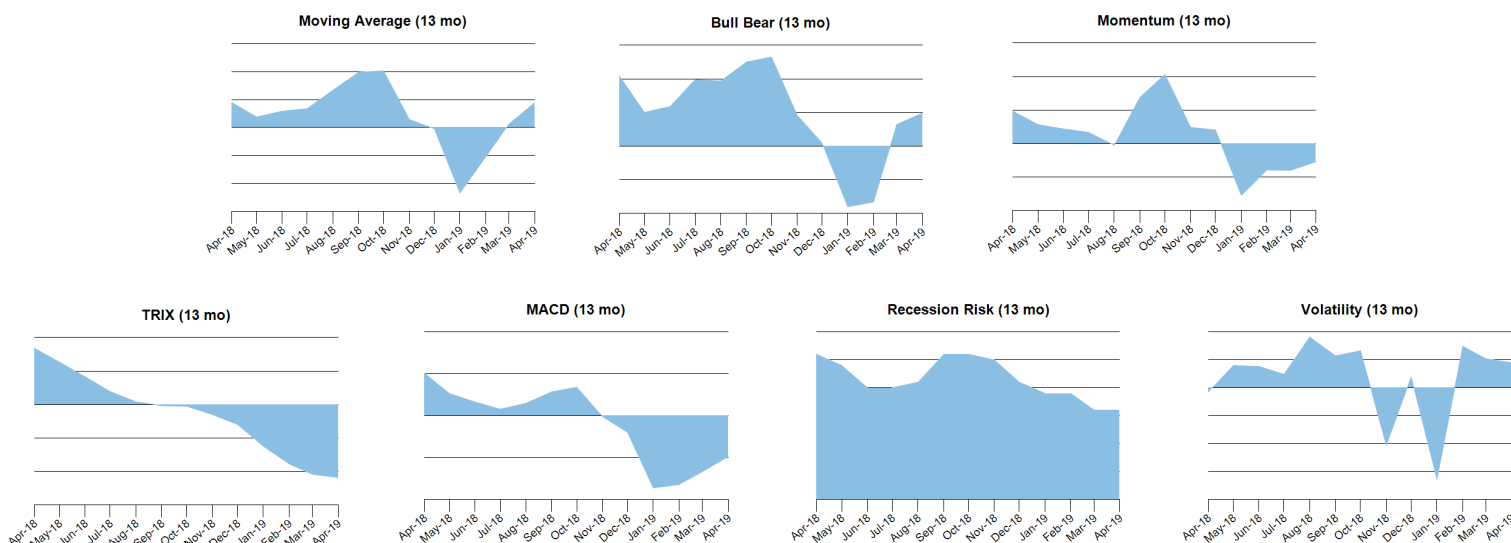
The charts below are designed to provide a historical look at the RAM Score when applied to the S&P 500, as well as a 13-month snapshot to help investors better understand recent changes to the score.

■ S&P 500 w/ RAM Park ■ S&P 500 ■ RAM® Score Pos ■ RAM® Score Neg



## Subcomponent Tracking

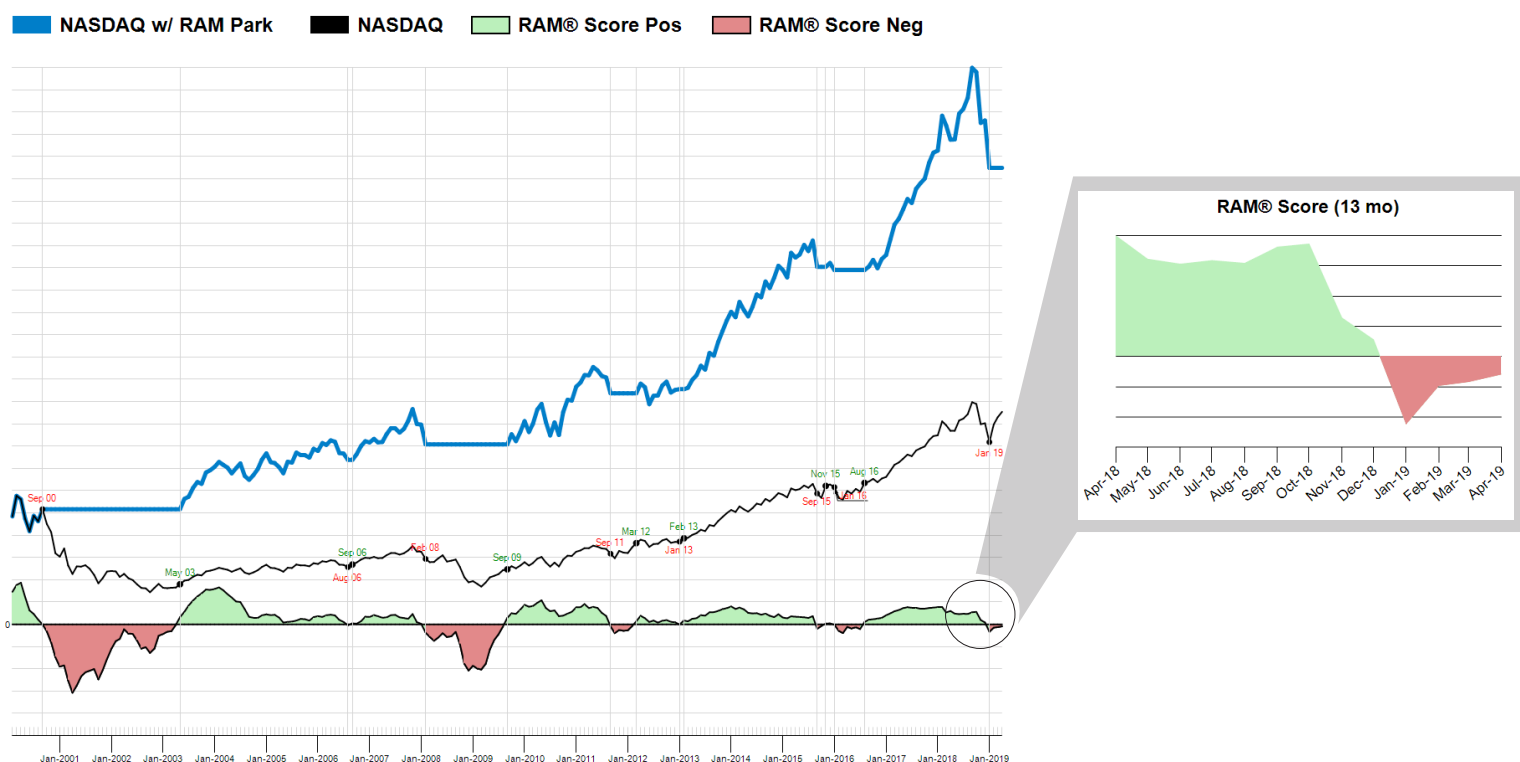
The charts below represent a 13-month snapshot of the various technical stock market and economic indicators that are used to calculate the RAM Score of each index. The charts reflect the patented calculation method for each of the subcomponents of RAM Score, including the exponential moving average (EMA), the Elder-Ray Index (bull and bear power), the triple exponential moving average (TRIX), moving average convergence/divergence (MACD), momentum indicator, the Moody's US Risk of Recession indicator, and the Chicago Board Options Exchange Volatility Index (CBOE VIX).



**About the S&P 500 Index:** This Index is based on the common stock prices of 500 top publicly traded American companies, as determined by Standard & Poor's. In general, it includes both growth stocks and the generally less volatile value stocks. The S&P 500 is not a publicly available investment vehicle and cannot be purchased directly.

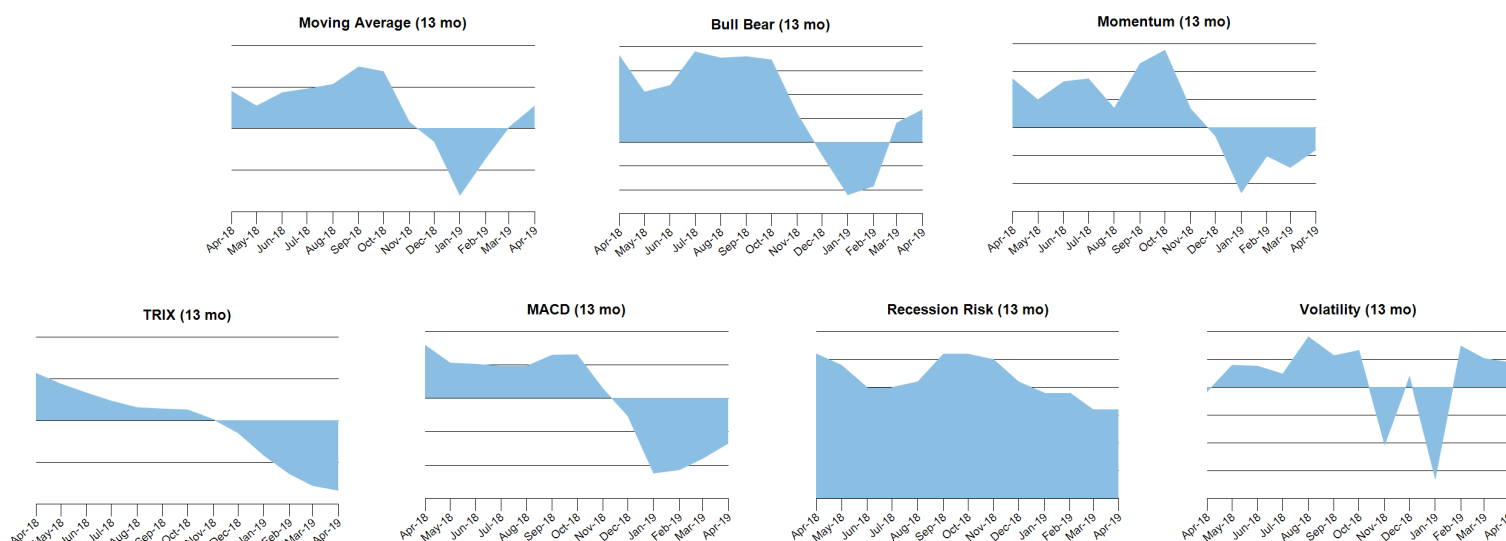
# RAM® SCORE APPLIED TO NASDAQ COMPOSITE INDEX

The charts below are designed to provide a historical look at the RAM Score when applied to the NASDAQ Composite Index, as well as a 13-month snapshot to help investors better understand recent changes to the score.



## Subcomponent Tracking

The charts below represent a 13-month snapshot of the various technical stock market and economic indicators that are used to calculate the RAM Score of each index. The charts reflect the patented calculation method for each of the subcomponents of RAM Score, including the exponential moving average (EMA), the Elder-Ray Index (bull and bear power), the triple exponential moving average (TRIX), moving average convergence/divergence (MACD), momentum indicator, the Moody's US Risk of Recession indicator, and the Chicago Board Options Exchange Volatility Index (CBOE VIX).

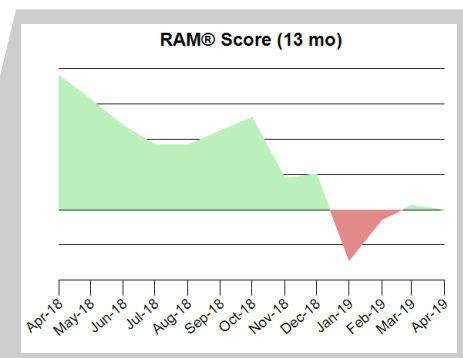
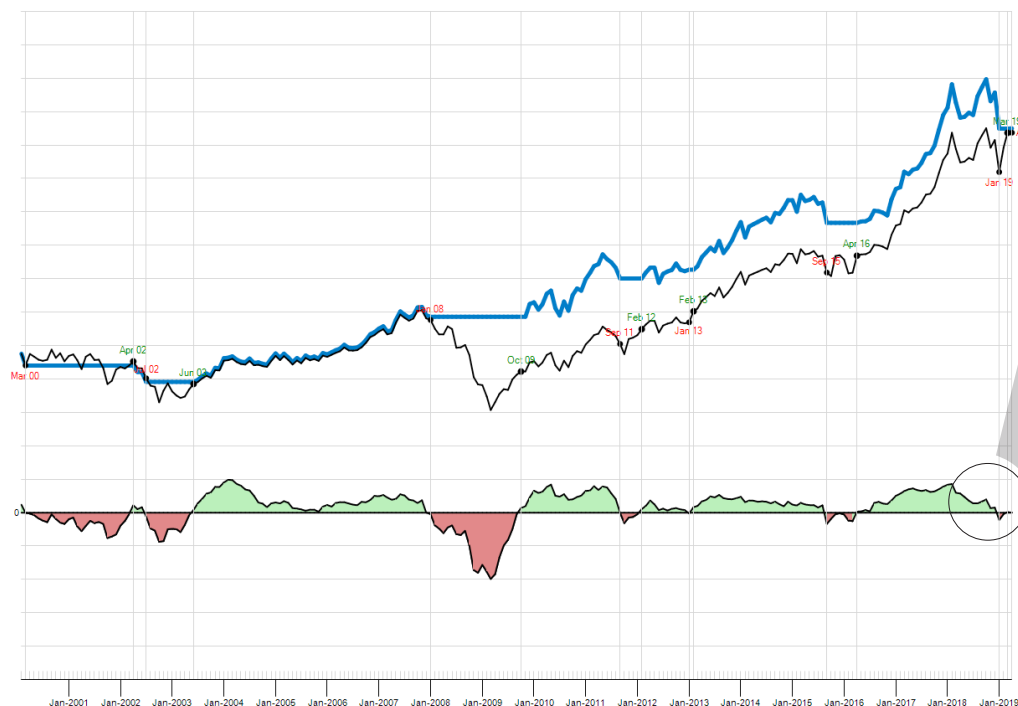


**About the NASDAQ Index:** The NASDAQ Composite Index measures all NASDAQ domestic and international based common-type stocks listed on the Nasdaq Stock Market. This index is generally weighted more toward technology and internet stocks; as a result, the listed companies are generally considered to have strong growth potential but may be prone to higher volatility. The NASDAQ Index is not a publicly available investment vehicle and cannot be purchased directly.

# RAM® SCORE APPLIED TO DJIA

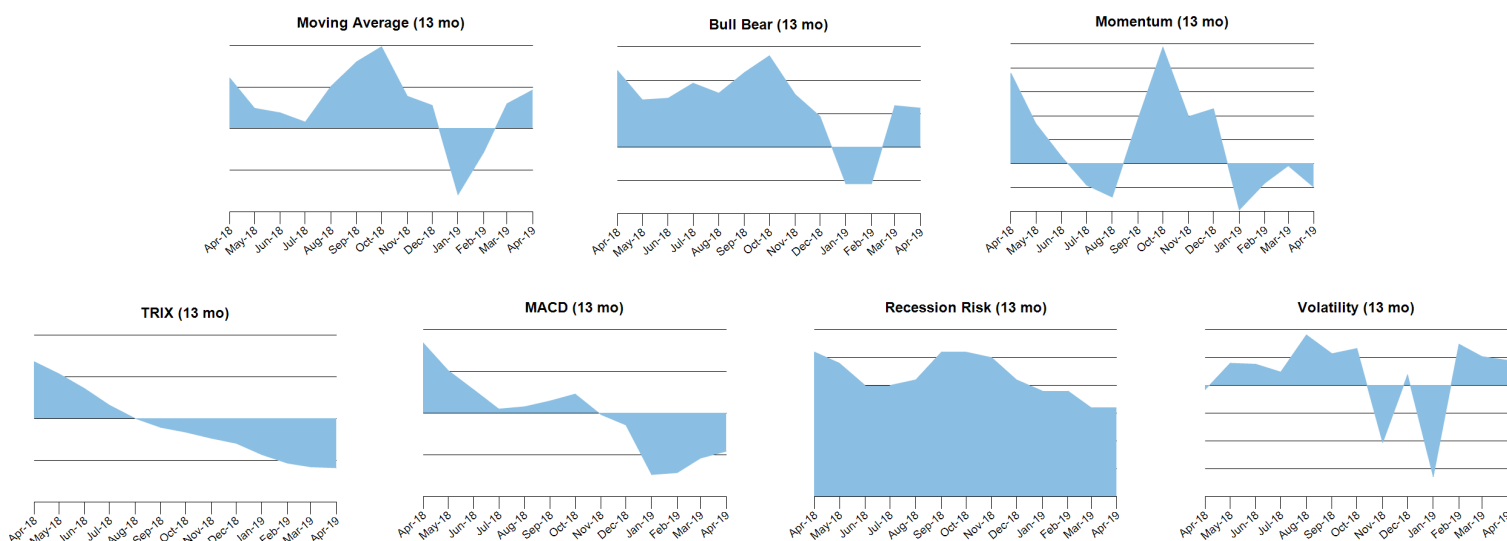
The charts below are designed to provide a historical look at the RAM Score when applied to the DJIA, as well as a 13-month snapshot to help investors better understand recent changes to the score.

■ DJIA w/ RAM Park ■ DJIA ■ RAM® Score Pos ■ RAM® Score Neg



## Subcomponent Tracking

The charts below represent a 13-month snapshot of the various technical stock market and economic indicators that are used to calculate the RAM Score of each index. The charts reflect the patented calculation method for each of the subcomponents of RAM Score, including the exponential moving average (EMA), the Elder-Ray Index (bull and bear power), the triple exponential moving average (TRIX), moving average convergence/divergence (MACD), momentum indicator, the Moody's US Risk of Recession indicator, and the Chicago Board Options Exchange Volatility Index (CBOE VIX).

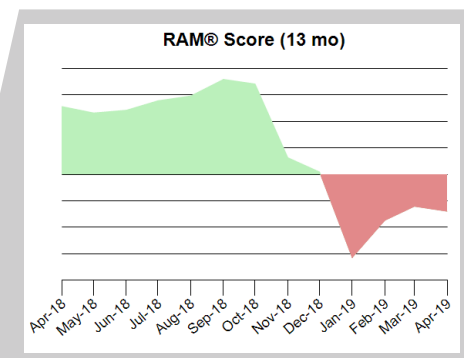
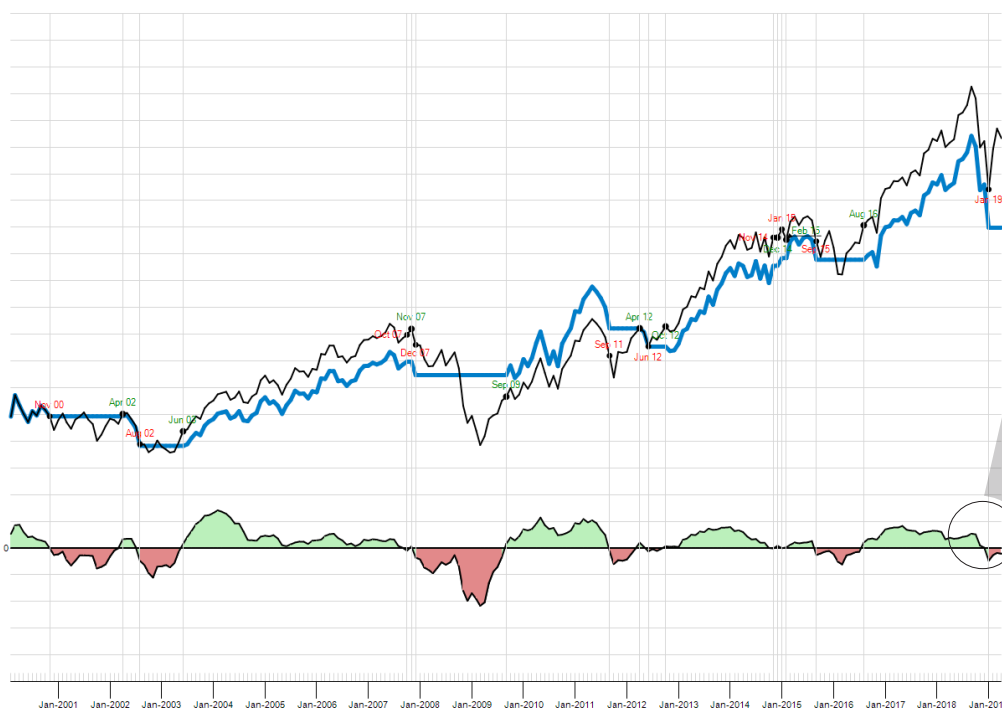


**About the Dow Jones Industrial Average Index:** The Dow Jones Industrial Average, also referred to as The Dow®, is a price-weighted measure of 30 U.S. blue-chip companies. The Dow covers all industries with the exception of transportation and utilities. The DJIA is not a publicly available investment vehicle and cannot be purchased directly.

# RAM® SCORE APPLIED TO RUSSELL 2000

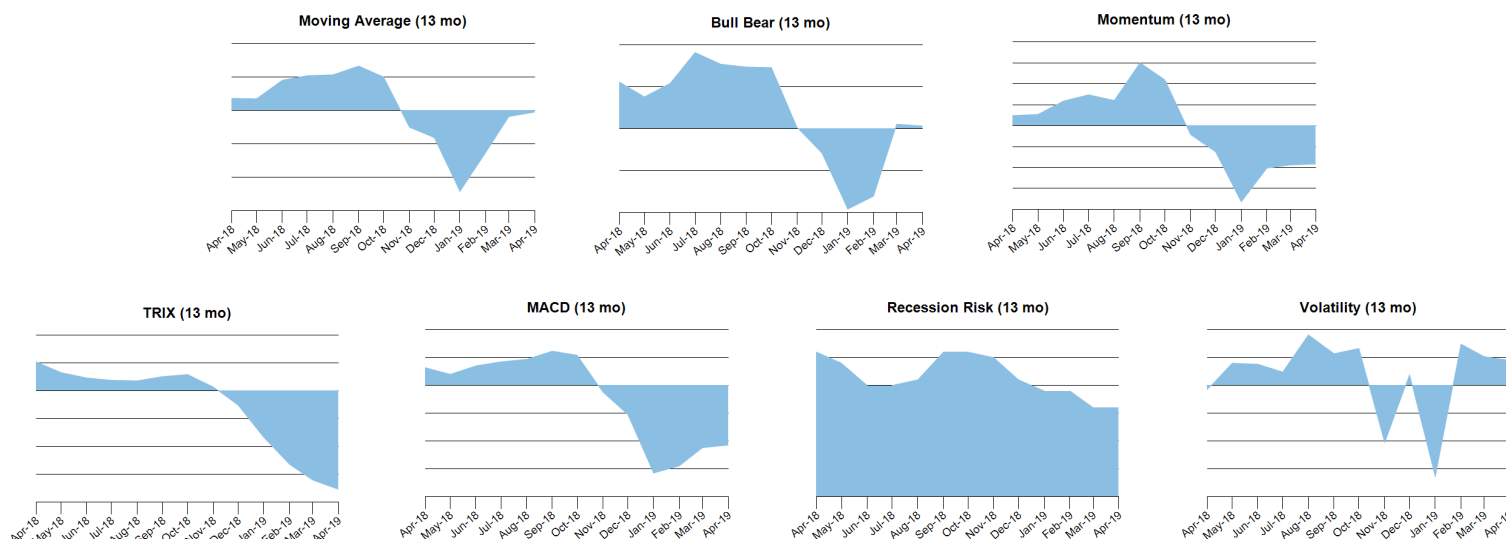
The charts below are designed to provide a historical look at the RAM Score when applied to the Russell 2000, as well as a 13-month snapshot to help investors better understand recent changes to the score.

■ Russell 2000 w/ RAM Park ■ Russell 2000 ■ RAM® Score Pos ■ RAM® Score Neg



## Subcomponent Tracking

The charts below represent a 13-month snapshot of the various technical stock market and economic indicators that are used to calculate the RAM Score of each index. The charts reflect the patented calculation method for each of the subcomponents of RAM Score, including the exponential moving average (EMA), the Elder-Ray Index (bull and bear power), the triple exponential moving average (TRIX), moving average convergence/divergence (MACD), momentum indicator, the Moody's US Risk of Recession indicator, and the Chicago Board Options Exchange Volatility Index (CBOE VIX).



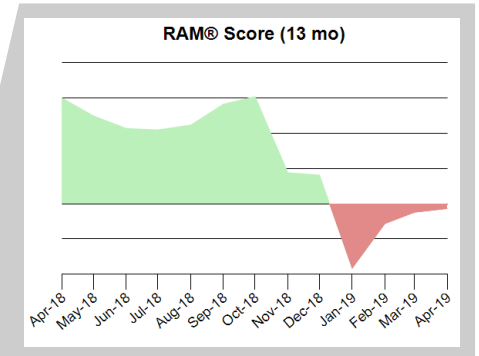
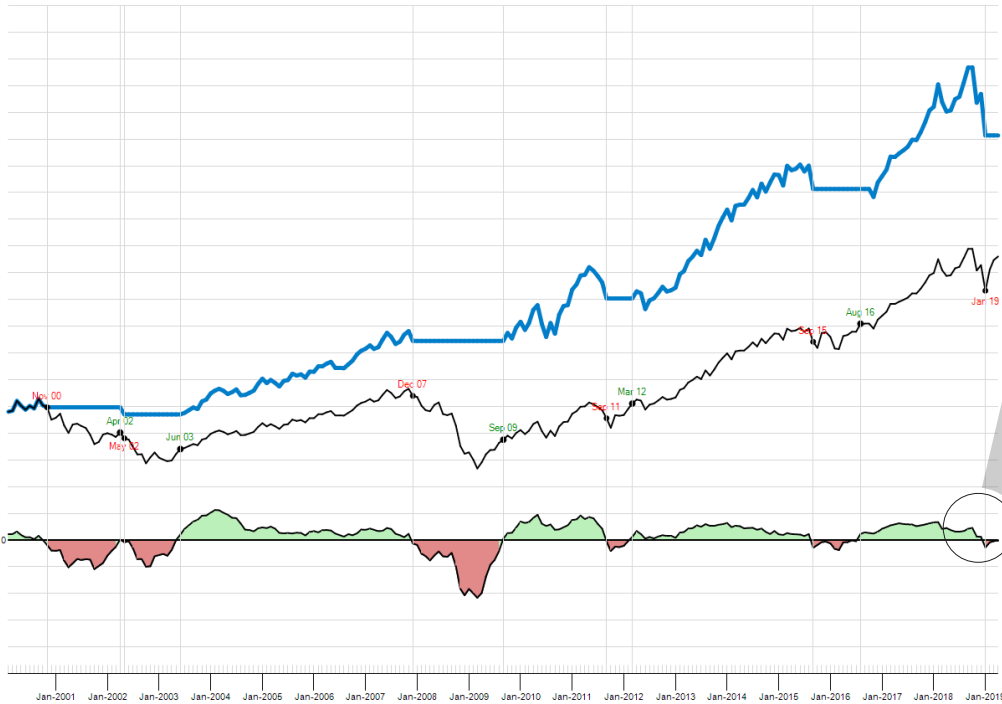
**About the Russell 2000 Index:** The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The Russell 2000 is a subset of the Russell 3000 Index representing approximately 10% of the total market capitalization of that index. It includes approximately 2,000 of the smallest securities based on a combination of their market cap and current index membership. The index is constructed to provide a comprehensive and unbiased small-cap barometer and is completely reconstituted annually to ensure larger stocks do not distort the performance and characteristics of the true small-cap opportunity set. The Russell 2000 is not a publicly available investment vehicle and cannot be purchased directly.



# RAM® SCORE APPLIED TO RUSSELL 3000

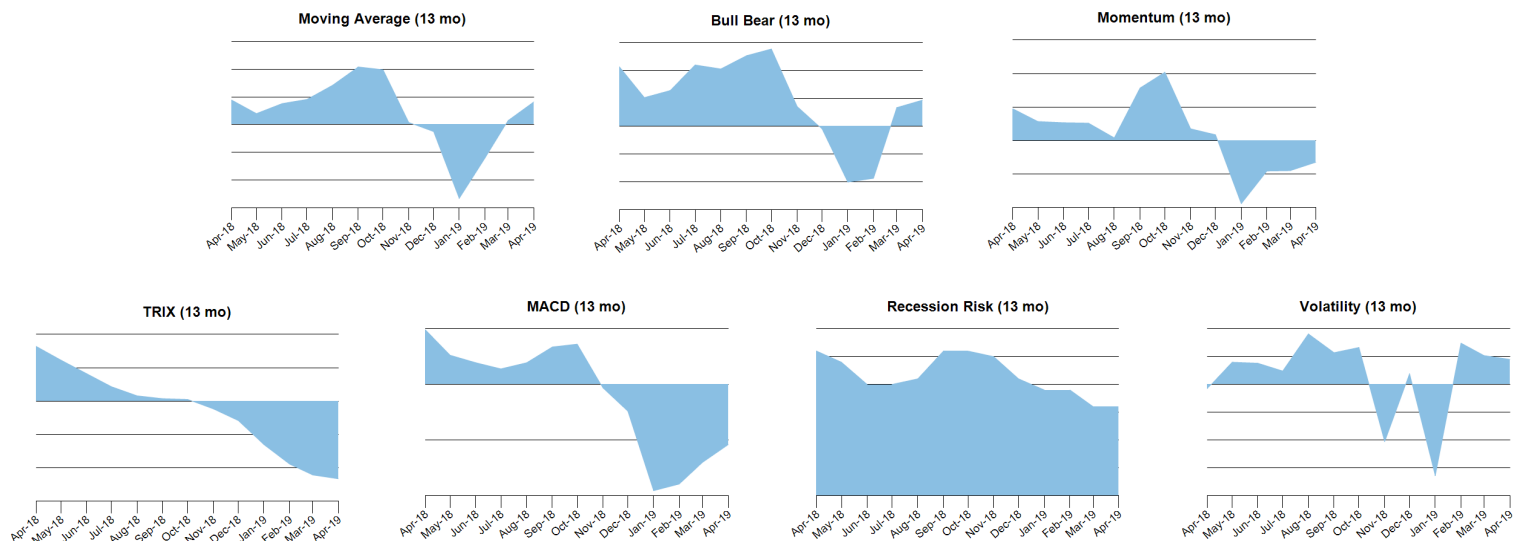
The charts below are designed to provide a historical look at the RAM Score when applied to the Russell 3000, as well as a 13-month snapshot to help investors better understand recent changes to the score.

■ Russell 3000 w/ RAM Park ■ Russell 3000 ■ RAM® Score Pos ■ RAM® Score Neg



## Subcomponent Tracking

The charts below represent a 13-month snapshot of the various technical stock market and economic indicators that are used to calculate the RAM Score of each index. The charts reflect the patented calculation method for each of the subcomponents of RAM Score, including the exponential moving average (EMA), the Elder-Ray Index (bull and bear power), the triple exponential moving average (TRIX), moving average convergence/divergence (MACD), momentum indicator, the Moody's US Risk of Recession indicator, and the Chicago Board Options Exchange Volatility Index (CBOE VIX).

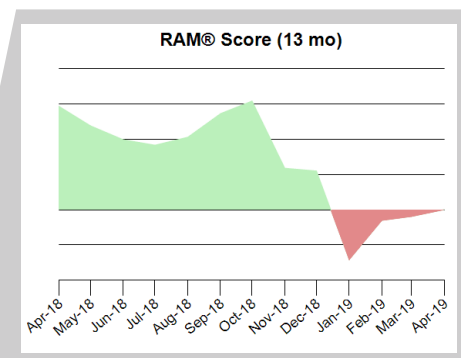
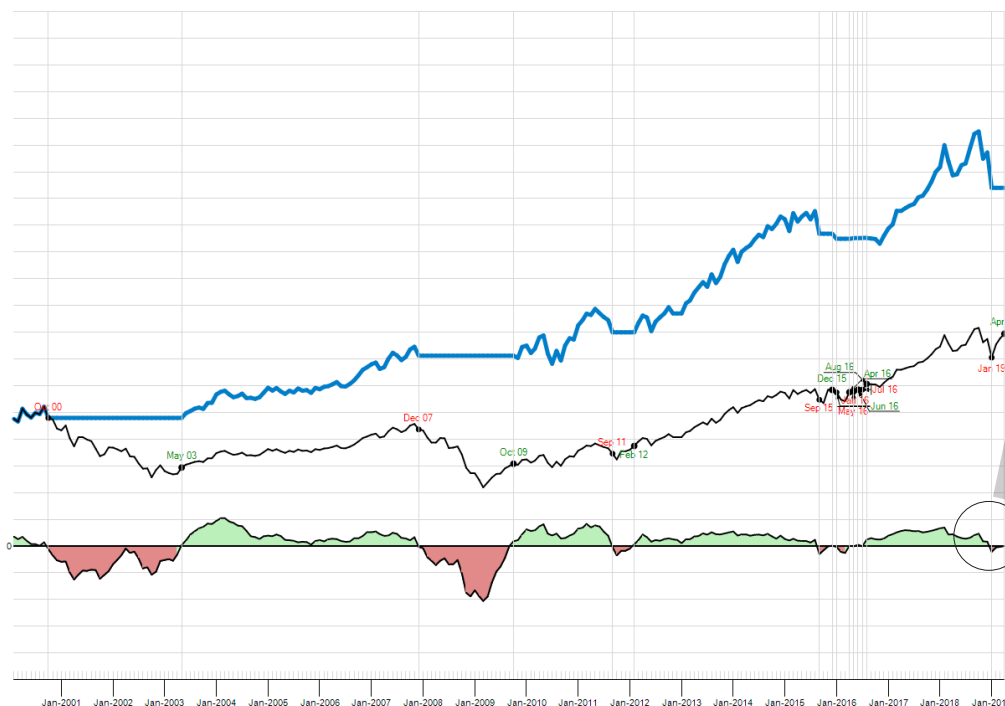


**About the Russell 3000 Index:** The Russell 3000 Index measures the performance of 3,000 publicly traded U.S. companies based on total market capitalization, which represents approximately 98 percent of the "investable" U.S. market. The Russell 3000 is not a publicly available investment vehicle and cannot be purchased directly.

# RAM® SCORE APPLIED TO S&P 100

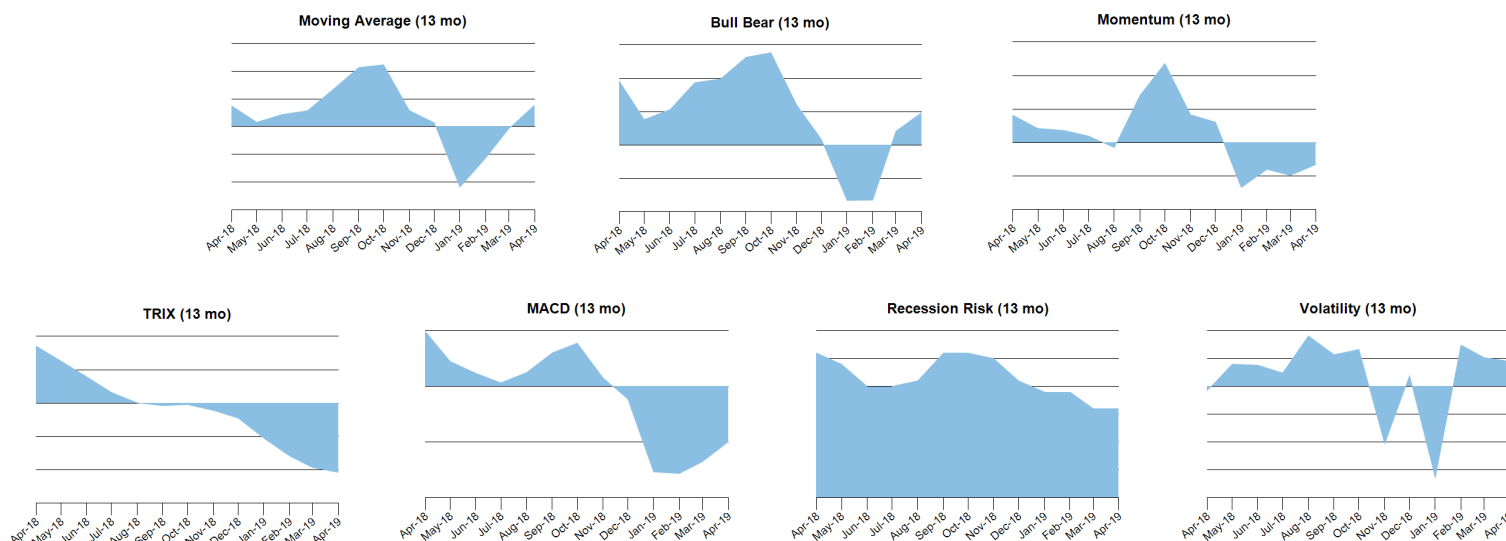
The charts below are designed to provide a historical look at the RAM Score when applied to the S&P 100, as well as a 13-month snapshot to help investors better understand recent changes to the score.

■ S&P 100 w/ RAM Park ■ S&P 100 ■ RAM® Score Pos ■ RAM® Score Neg



## Subcomponent Tracking

The charts below represent a 13-month snapshot of the various technical stock market and economic indicators that are used to calculate the RAM Score of each index. The charts reflect the patented calculation method for each of the subcomponents of RAM Score, including the exponential moving average (EMA), the Elder-Ray Index (bull and bear power), the triple exponential moving average (TRIX), moving average convergence/divergence (MACD), momentum indicator, the Moody's US Risk of Recession indicator, and the Chicago Board Options Exchange Volatility Index (CBOE VIX).

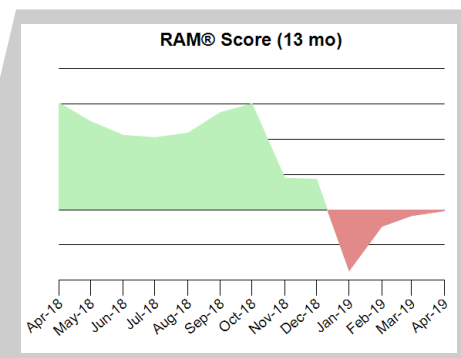
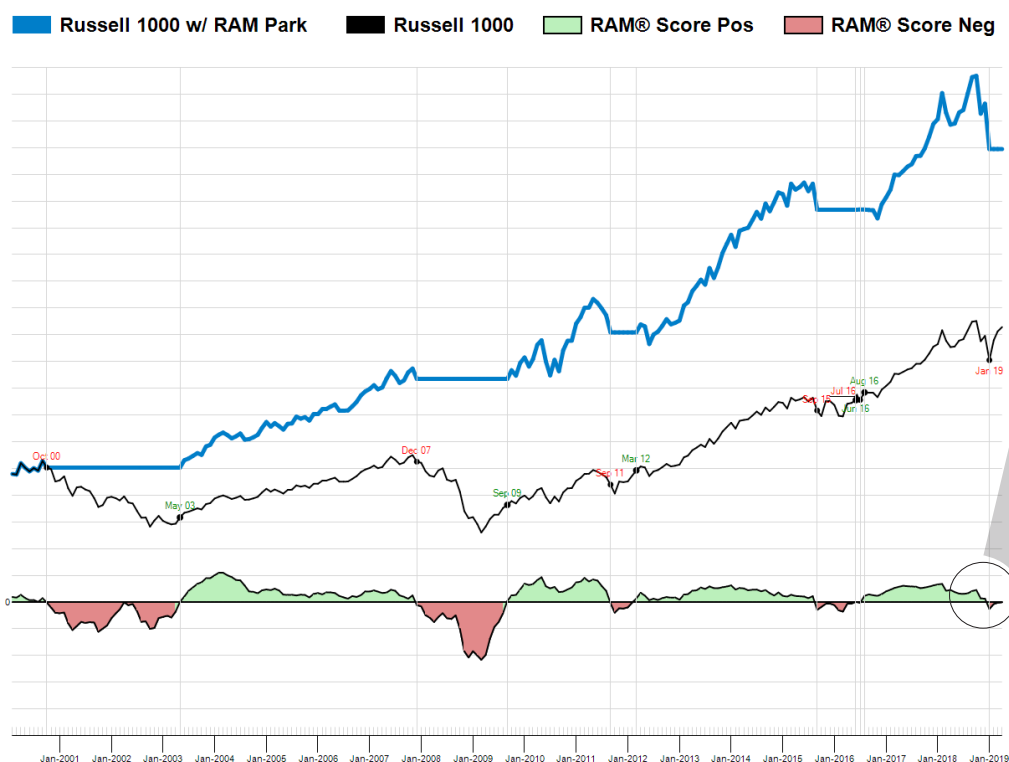


**About the Standard & Poor's 100 Index:** The S&P 100 Index is a subset of the S&P 500 Index. It is composed of 100 leading U.S. stocks with exchange-listed options. The constituents listed in the S&P 100 Index are generally considered to be the largest companies by market capitalization of the S&P 500 and span across multiple industries. The S&P 100 is not a publicly available investment vehicle and cannot be purchased directly.



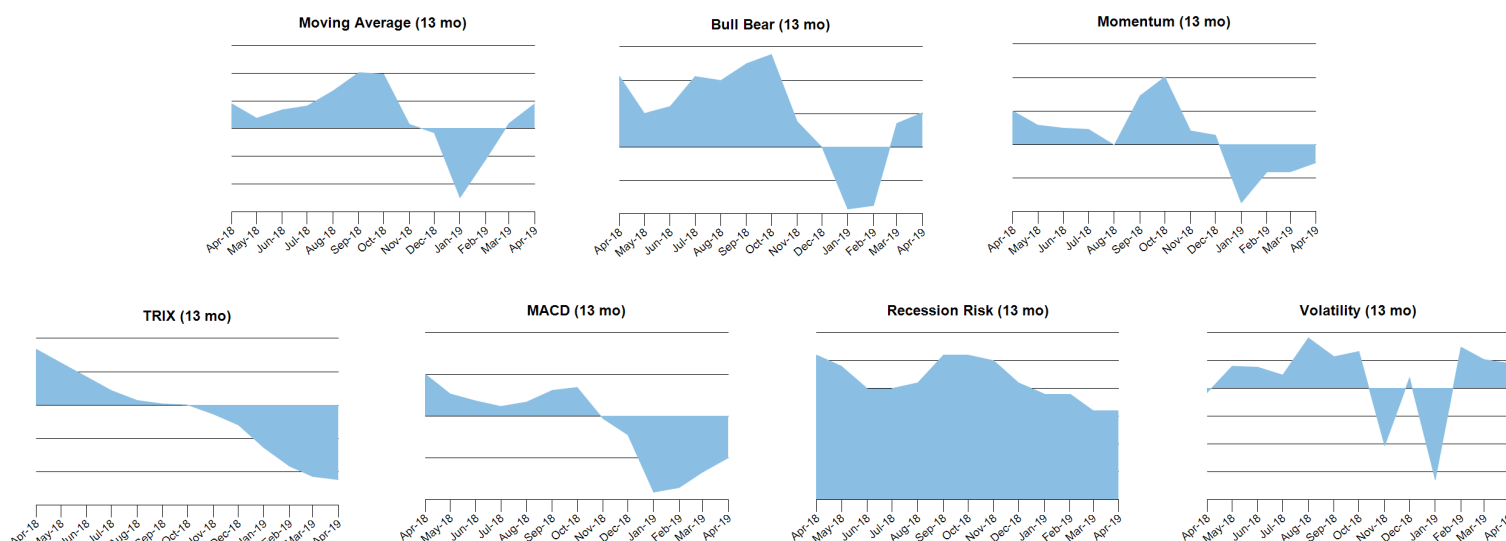
# RAM® SCORE APPLIED TO RUSSELL 1000

The charts below are designed to provide a historical look at the RAM Score when applied to the Russell 1000, as well as a 13-month snapshot to help investors better understand recent changes to the score.



## Subcomponent Tracking

The charts below represent a 13-month snapshot of the various technical stock market and economic indicators that are used to calculate the RAM Score of each index. The charts reflect the patented calculation method for each of the subcomponents of RAM Score, including the exponential moving average (EMA), the Elder-Ray Index (bull and bear power), the triple exponential moving average (TRIX), moving average convergence/divergence (MACD), momentum indicator, the Moody's US Risk of Recession indicator, and the Chicago Board Options Exchange Volatility Index (CBOE VIX).

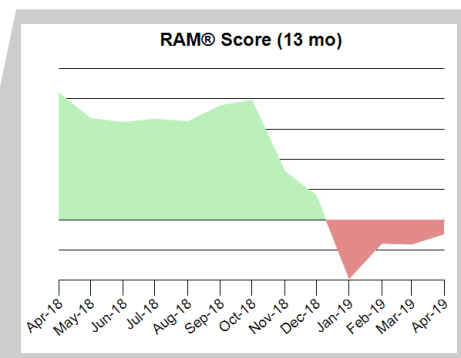
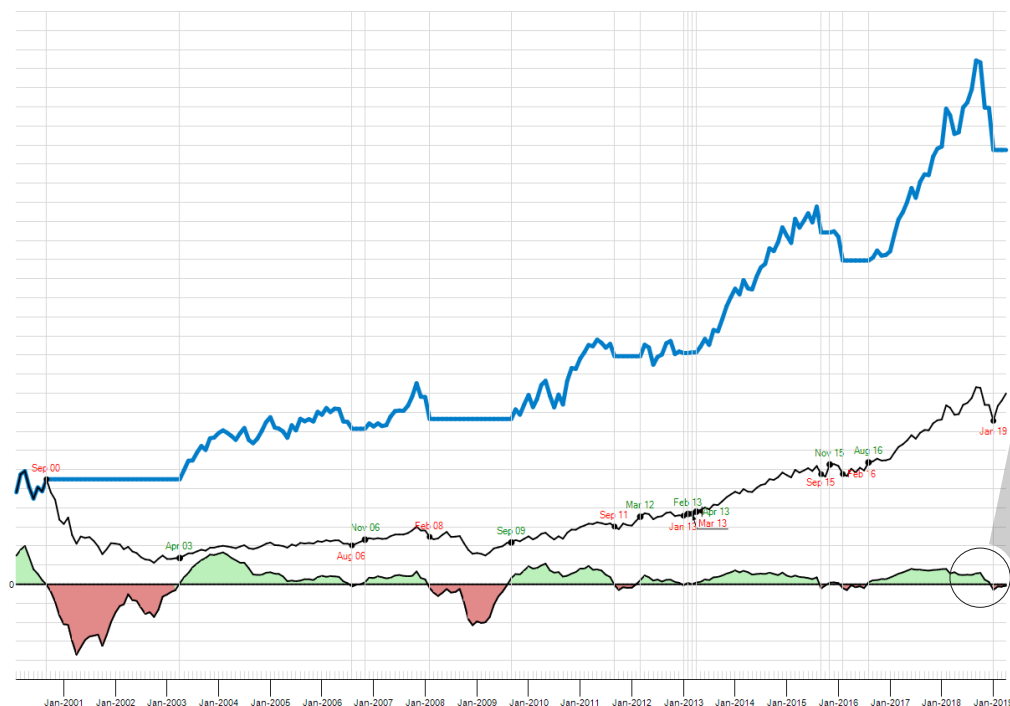


**About the Russell 1000 Index:** The Russell 1000 Index is a subset of the Russell 3000 Index and is composed of the largest securities based upon a combination of market capitalization and current index membership. The index is considered to represent approximately 90% of the United States market capitalization. The smallest company included in the Russell 1000 Index has a market capitalization over \$1.75 billion. The Russell 1000 is not a publicly available investment vehicle and cannot be purchased directly.

# RAM® SCORE APPLIED TO NASDAQ-100

The charts below are designed to provide a historical look at the RAM Score when applied to the NASDAQ-100, as well as a 13-month snapshot to help investors better understand recent changes to the score.

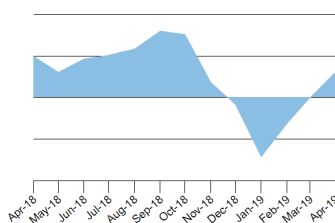
■ Nasdaq 100 w/ RAM Park ■ Nasdaq 100 ■ RAM® Score Pos ■ RAM® Score Neg



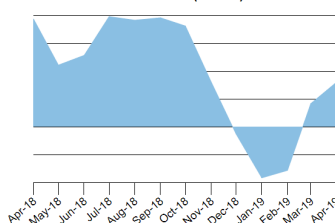
## Subcomponent Tracking

The charts below represent a 13-month snapshot of the various technical stock market and economic indicators that are used to calculate the RAM Score of each index. The charts reflect the patented calculation method for each of the subcomponents of RAM Score, including the exponential moving average (EMA), the Elder-Ray Index (bull and bear power), the triple exponential moving average (TRIX), moving average convergence/divergence (MACD), momentum indicator, the Moody's US Risk of Recession indicator, and the Chicago Board Options Exchange Volatility Index (CBOE VIX).

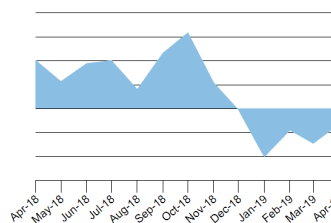
Moving Average (13 mo)



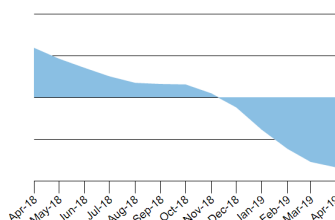
Bull Bear (13 mo)



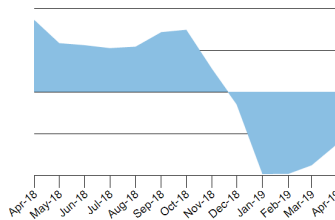
Momentum (13 mo)



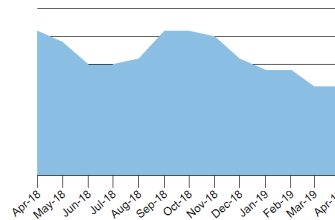
TRIX (13 mo)



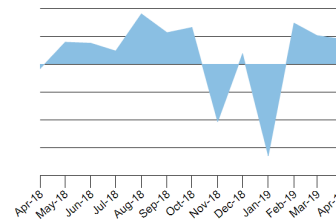
MACD (13 mo)



Recession Risk (13 mo)



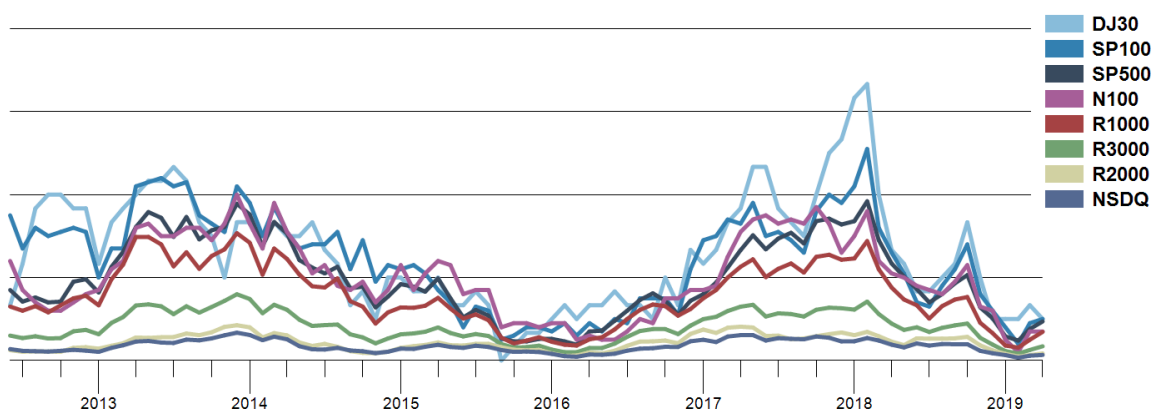
Volatility (13 mo)



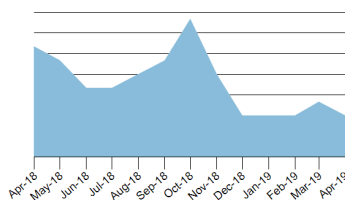
**About the Nasdaq-100 Index:** The Nasdaq-100 Index is composed of the 100 largest non-financial companies that are listed on the NASDAQ. It is a modified capitalization-weighted index with weighting determined in accordance with market capitalization. The index consists of a broad range of sectors including industrial, technology, retail, telecommunication, biotechnology, health care, transportation, media and service companies. The index has a regularly scheduled re-ranking of its constituents annually in December. The NASDAQ-100 is not a publicly available investment vehicle and cannot be purchased directly.

# MAPPER SCORE™ OVERVIEW

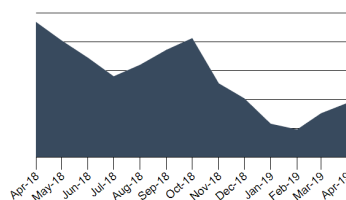
This data is used within the Technical Focus Series investment strategies.



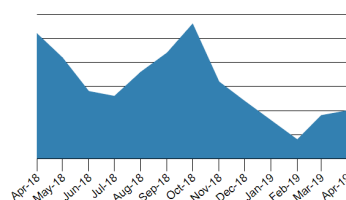
Mapper Score™ for Dow 30  
Stocks Mapped = 3  
Mapper Score = 10.00%



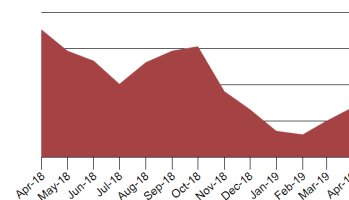
Mapper Score™ for S&P 500  
Stocks Mapped = 47  
Mapper Score = 9.40%



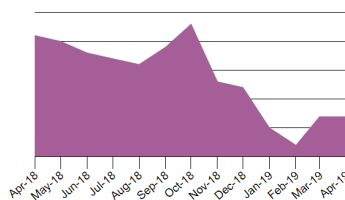
Mapper Score™ for S&P 100  
Stocks Mapped = 10  
Mapper Score = 10.00%



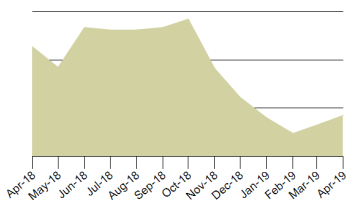
Mapper Score™ for Russell 1000  
Stocks Mapped = 69  
Mapper Score = 6.90%



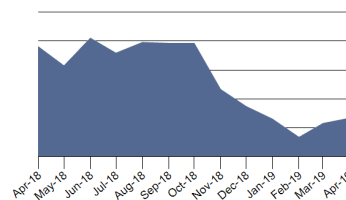
Mapper Score™ for NASDAQ 100  
Stocks Mapped = 7  
Mapper Score = 7.00%



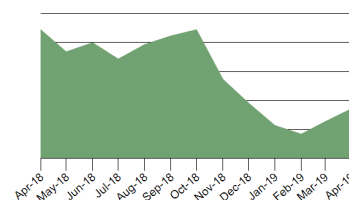
Mapper Score™ for Russell 2000  
Stocks Mapped = 34  
Mapper Score = 1.70%



Mapper Score™ for NASDAQ  
Stocks Mapped = 36  
Mapper Score = 1.33%



Mapper Score™ for Russell 3000  
Stocks Mapped = 103  
Mapper Score = 3.43%



**About the Mapper Score:** Mapper Score is a proprietary trending tool that takes into account several dynamic components of the underlying stocks represented within an index. The technical criteria used seeks to identify specific stocks within an index that are demonstrating strength in a number of technical areas. The Mapper Score is a representation of how many stocks within a given index are meeting minimum requirements to be considered for portfolio inclusion. We believe that the higher the percentage of qualifying stocks, the greater the strength of the overall index at that point in time.

Please note that there are a number of important disclosures that must be considered before investing in Portformulas. Please read the information and disclosures contained in Portformulas' hypothetical carefully before investing. Any performance figures referenced herein are hypothetical and are not indicative of future results. Purchases and sales of securities within Portformulas' various strategies may be made without regard to how long you have been invested, which could result in tax implications.

### **RAM Score and Mapper Score General Disclosures**

These illustrations do not represent any particular Portformula® strategy nor is it intended to recommend any Portformula strategy or the RAM Score feature. The information on this page simply attempts to illustrate how our firm's RAM Score Allocation Management feature operates. This feature can be applied to many Portformula models at no additional cost.

RAM Score utilizing the S&P 500 was not developed until January 2010. Prior to January 2010, clients were utilizing RAM Score's predecessor, RAM. Clients utilizing RAM may have had different results than those reflected above. RAM Score movement prior to 2010 is hypothetical and based on retroactive application of RAM Score's indicators to market and economic conditions existing at the time. RAM Score utilizing various other indices as a benchmark were not developed until 2016. Illustrations utilizing the application of these formulas is hypothetical based upon how we believe this feature would have responded to previous market conditions. Portformulas was not managing assets prior to 2007.

It is important to understand that RAM Score is only a tool designed to assist our firm's management of your account. RAM Score does not guarantee any specific results or performance and even with RAM Score on your account, it is possible that your account will lose value. RAM Score moves assets into or out of the market based on various economic and market indicators. It is possible that the market will move positively while you are not invested or negatively while you are invested, resulting in losses. Any Portformula strategy may under-perform or produce negative results.

RAM Score is a management tool that utilizes Portformulas' patented scoring system. Services discussed herein may be covered by United States Patent No. 8,630,940. Additional patents pending.

These illustrations utilize various well-known indices in an effort to provide a recognizable frame of reference, and correspond with the various pools of assets that Portformulas strategies analyze. Indices such as those illustrated are not publicly available investment vehicles and cannot be purchased.

### **About the Fundamental Focus Series**

The Fundamental Focus Series investment strategies use RAM Score plus qualitative and quantitative qualification criteria to select targeted holdings across multiple indexes. Its primary selection criteria focus is on the fundamental data of each company that fits the initial universe of stocks being considered for portfolio inclusion.

### **About the Technical Focus Series**

The Technical Focus Series investment strategies provide for the optional addition of RAM Score applied to the specific stock market index being evaluated. These investment strategies evaluate technical data as it relates to the price movement of the particular stocks within the index being evaluated for portfolio inclusion.

**Portformula Investment Strategy - Exclusively from Portformulas** IMPORTANT NOTICE: Past performance is no guarantee of future results and your actual results may vary. Investing carries an inherent element of risk. Potential for substantial loss in principal and income exists. You should only invest in Portformulas upon receiving and reading the Portformulas ADV. Portformulas is an SEC registered investment advisor. SEC File No. 801-67442. SEC registration does not imply a certain level of skill or training. © 2009 – 2019 USA Financial Portformulas.