

AUGUST 2011

# Russell Stability Indexes™

## Construction and Methodology

The Russell Stability Indexes are designed to be comprehensive representations of the investable global defensive and dynamic equity markets. Defensive and Dynamic Indexes are created by splitting an existing applicable Russell Index in half based on the combination of the stability indicators; the more stable half of the market is called “Defensive,” and the less stable half is called “Dynamic.”

The Russell Defensive Indexes™ measure the performance of companies that have relatively stable business conditions which are historically less sensitive to economic cycles, credit cycles and market volatility based on their stability indicators. The Russell Dynamic Indexes™ measure the performance of companies that historically have relatively less stable business conditions and are more sensitive to those market cycles. The Russell Defensive and Dynamic Indexes complement the existing Russell Style framework – size (small / large) and valuation (growth / value) – expanding the style box into the style cube with the addition of Stability, the Third Dimension of Style™.

The term “probability” is used to indicate the degree of certainty that a stock is defensive or dynamic, based on its relative debt/equity, return on assets (ROA), earnings variability, and total return volatility (52-week and 60-month). This method allows stocks to be represented as having both defensive and dynamic characteristics, while preserving the additive nature of the indexes.

Defensive and Dynamic style indexes may be constructed for any equity universe. The Russell Stability Indexes cover all countries and regions represented in the Russell Index family, including the Russell 3000® Index, which captures 98% of the U.S. equity universe, and the largest 98% of the rest of the global equity universe. The process for assigning defensive and dynamic weights is applied separately to large cap and small cap stocks, consistent with the process of assigning growth and value style probabilities.

### Stability indicators in general

For each base index (for U.S. companies -the Russell 1000® Index and Russell 2000® Index, and for Global ex-U.S. companies - the Russell Global ex-US Large Cap and Russell Global ex-US Small Cap Indexes), there are five specific variables used to determine the probability of being defensive or dynamic: Debt/Equity, Return on Assets (ROA), Earnings Variability and Total Return Volatility (52-week and 60-month frequencies).

Among other things, a company has risks related to balance sheet leverage, economic cycles and industry/product cycles, and weaknesses in its business model. Russell uses debt/equity ratios as a proxy for risks related to balance sheet leverage. Earnings variability is used as a proxy for risks related to economic cycles and industry/product cycles. ROA is used as a proxy for risks related to the strength of a company’s business model. The final component used as an indicator of a company’s risk is the volatility of its stock’s returns. Total return volatility reflects aspects of a company’s stability or risk not captured by the other three inputs to a company’s stability probability.

### General construction considerations

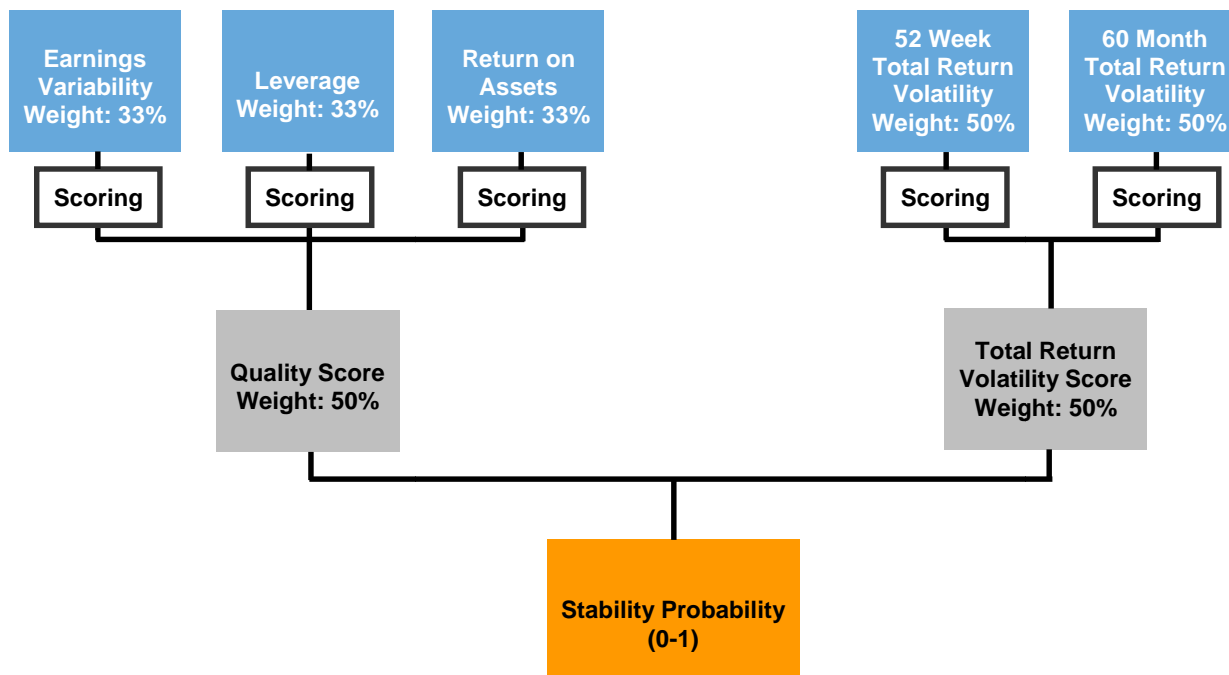
Using the Russell non-linear style algorithm, companies with high stability probabilities are included in the Russell Defensive Indexes. Companies with low stability probabilities are included in the Russell Dynamic Indexes.

Russell has assigned the label “Quality” to the score resulting from an equal weight of the three accounting-based indicators (Earnings Variability, Debt/Equity ratios, and ROA). Together, these three variables comprise 50% of the stability probability. The “Volatility” score makes up the other half of the stability probability, and is based on an equal weight of the stock’s past year’s weekly total return volatility and the past 5 years’ monthly total return volatility.

A company may be included in both the defensive and dynamic indexes based on its stability probability. However, the number of shares for each index will be divided based on its stability probability. The total shares will be the same as the parent index.

### Detailed construction and methodology

The stability of a company, also referred to as the stability probability, is determined by combining the quality variables with total return volatility. The Quality score (derived by combining the three quality variables) represents 50% of the stability score while Volatility score (derived by total return volatility) represents the other 50%.



### **Quality score (comprises 50% of the overall stability probability)**

There are three stability indicators which comprise the Quality score: Debt/Equity, Pre-Tax ROA, and Earnings Variability. Each indicator comprises one third of the Quality score. Annual attribute data is used for global ex-U.S. companies to create global-relative defensive and dynamic indexes. Quarterly attribute data is used to create the U.S. defensive and dynamic indexes.

**Debt/Equity:** The debt/equity ratio for global ex-U.S. companies is based on the most recent annual report. The debt/equity ratio for U.S. companies is based on the most recent quarterly SEC filing. Negative debt/equity numbers will not be used to calculate debt/equity. Rather, negative debt/equity is excluded in the analysis and the indicator for this company will be set to zero/dynamic.

**Pre-Tax ROA:** The pre-tax ROA for global ex-U.S. companies is based on the annual year-end pre-tax income divided by the average of the latest year-end and previous year-end assets (latest year-end assets + previous year-end assets)/2). The pre-tax ROA for U.S. companies is based on the last 12 months' pre-tax income divided by the average of the assets for the previous year (current assets + same quarter one year prior)/2).

**Earnings Variability:** The earnings variability is computed by dividing the standard deviation of the company's earnings-per-share (EPS) by the company's median earnings for the previous 5 years. This scaling normalizes the information to make each company directly comparable to other companies regardless of the relative level of EPS. If there are less than 5 annual EPS observations, the earnings variability is considered NULL, and standard deviation will not be calculated (see "Missing values" below).

Note: U.S. companies require 20 quarters of data in order to calculate earnings variability, which is based on the standard error of the linear EPS trend regression. If there are less than 20 EPS observations (or standard error is equal to zero), earnings variability is considered NULL and standard error will not be calculated (see "Missing values" below). The rationale for using the standard error is that if there is a trend in the EPS over time, then the trend itself should not contribute to EPS variability. The standard error is then divided by the median EPS (of the 20 observations).

Negative (or zero) EPS numbers are included in the standard deviation or standard error calculation, however, a negative or zero median EPS value will not be used to calculate earnings variability. Rather, when the median EPS is negative or zero, earnings variability is excluded from the analysis and set to zero/dynamic. Assigning this value is equivalent to characterizing the company as having very high earnings variability.

### **Volatility score (comprises 50% of the overall stability probability)**

Total return volatility (standard deviation) is measured over two horizons, over the previous year and over the previous five years. Each indicator represents one half of the Volatility score.

**52-week price volatility (1 year):** The one-year volatility is the standard deviation based on the 52 weekly returns that end on the last Friday on or before May 31. A stock must have 52 weeks of data points in order to populate, otherwise, the indicator will be set to NULL (see "Missing values" below).

**60-month price volatility (5 year):** Trailing five-year volatility is the standard deviation based on monthly returns. Thus, for a score based on May 31, 2010 data, the five-year volatility is based on the 60 monthly returns for the period that starts on May 31, 2005 and ends on May 31, 2010. A stock must have 60 months of data points in order to populate, otherwise, the indicator will be set to NULL (see "Missing values" below).

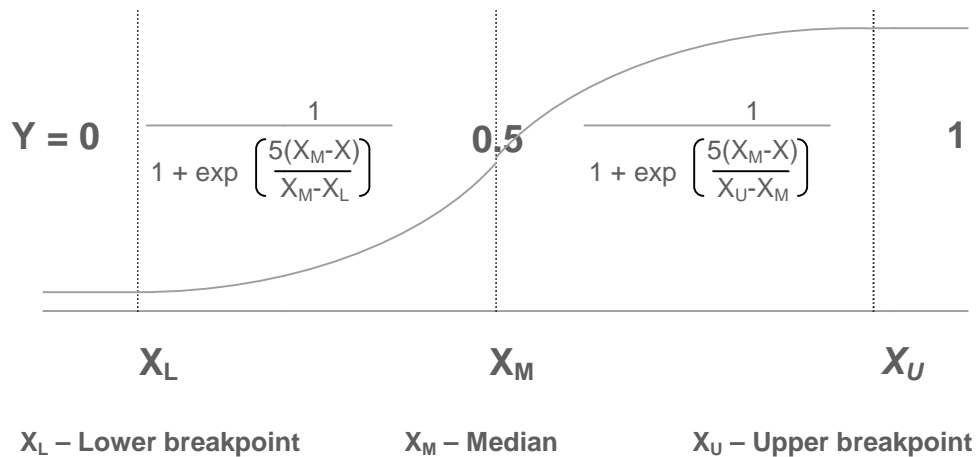
### Application in Russell non-linear style algorithm

In the first stage of the Russell non-linear style algorithm, since zero indicates dynamic and one indicates defensive, the five quality and volatility measures are calculated to yield higher scores for characteristics indicating greater stability/lower sensitivity to economic cycles, credit cycles and market volatility and lower scores for characteristics indicating lower stability/greater sensitivity. Because low leverage (debt/equity), low earnings variability, low volatility and high ROA indicate greater stability/lower sensitivity, they are assigned higher scores. Because high leverage, high earnings variability, high volatility and low ROA indicate lower stability/higher sensitivity, they are assigned lower scores.

In the next stage, the three quality indicators (leverage, earnings variability and ROA) are combined to form a Quality score, and the two volatility indicators (52-week and 60-month volatility) are combined to form a Volatility score. Again, higher scores indicate more stable/less sensitive, while lower scores indicate less stable/more sensitive.

The final stage of the Russell non-linear style algorithm calculates the stability probability with the average of the Quality and Volatility scores as its input. Companies in the 35% of equity universe capitalization with the highest combined score are assigned a stability probability of one (defensive), while companies in the 35% of equity capitalization with the lowest combined score are assigned a stability probability of zero (dynamic). The remainder of companies will be both defensive and dynamic (stability probability greater than zero and less than one).

### Russell non-linear probability algorithm



### Missing values

If the quality or volatility indicator is not available, the company receives a stability score for that indicator of 0.25. Since zero is the worst possible score and one is the best, this conservative assumption mandates that missing data will result in a lower than average stability probability.

### **Index maintenance / corporate action-driven changes**

The members of the Russell Stability Indexes are proactively maintained and reflect daily changes in the global equity market. Russell Stability Indexes follow all of Russell's standard rules for corporate actions with the following exceptions:

**IPOs:** IPOs entering the Russell Stability Indexes will be defaulted to 100% Dynamic.

**Reverse mergers:** Takes on existing member's characteristic.

**Spin-offs:** The spun-off company takes on the parent company's characteristic (rank and dynamic/defensive stability probability). Exception, spin-offs entering the Russell Stability Indexes during the first two weeks of reconstitution, i.e. from the time the new membership is announced, will be ranked appropriately and defaulted to 100% Dynamic.

**Mergers with stocks outside of the Russell Global Indexes:** Russell Microcap<sup>®</sup> Index and Russell Frontier<sup>™</sup> Index members are not currently assigned a Stability score, therefore, the shares will be updated according to the terms of the merger but the stability probability will not change.

A complete description of Russell's standard rules for corporate actions can be found in the Russell Global Indexes Construction and Methodology document available at [www.russell.com/indexes](http://www.russell.com/indexes).

**For more information about Russell Indexes call us or visit [www.russell.com/indexes](http://www.russell.com/indexes).**

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