

The FTSE RAFI<sup>®</sup> Index Series is another member of FTSE's range of nonmarket capitalisation weighted indexes. Using the Fundamental Index<sup>®</sup> methodology developed by Research Affiliates LLC of Newport Beach, California, the index breaks with the traditional price-based market cap weighted design, and instead derives its constituent weights from fundamental measures of company size.

The methodology uses the reported monetary values of cash flow, book value, total sales and gross dividend to derive each constituent index weight. Prices, which can be prone to speculation, are not a component of the weights. By anchoring the index to economic measures, the Fundamental Index approach contra-trades against the market's constantly changing views, expectations, fads, bubbles, and crashes.

### **Fundamental Factors**

Sales = company sales averaged over the prior five years.

**Cash Flow =** company cash flow averaged over the prior five years, defined as Operating Income plus Depreciation and Amortization.

Book Value = company book value at the review date.

**Dividend =** total dividend distributions averaged over the last five years, including both special and regular dividends paid in cash.

## Index construction overview

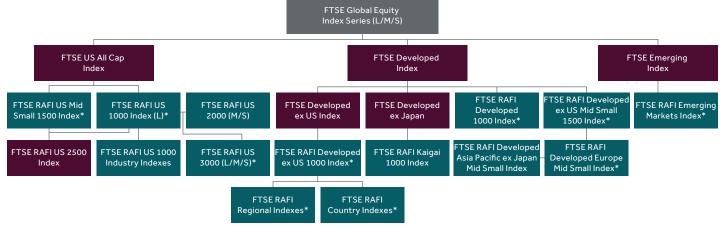
The headline FTSE RAFI U.S. 1000 Index and FTSE RAFI Developed ex U.S. 1000 Index are comprised of the 1000 companies with the largest fundamental value (defined overleaf) from the FTSE U.S. All Cap Index and the FTSE Global All Cap Index ex U.S. respectively. Country and regional indexes come out of the RAFI Developed ex U.S. Index.

The FTSE RAFI Index Series is reviewed annually based on data as at the close of business on the last trading day of February, taking into account any additions and deletions planned in the underlying indexes. Changes arising from the annual review are implemented after the close of the index calculation on the third Friday of March each year.

### Features

- FTSE RAFI Index-linked products offer the advantages of an active management strategy with the highlights of passive investment: lower turnover costs, broad economic representation and transparent, rules based process, whilst retaining high investment capacity
- By using fundamental factors rather than prices to select and weight stocks, rebalancings of the FTSE RAFI Index Series take advantage of price movements by reducing each index's holdings in constituents whose prices have risen relative to other constituents, and increasing holdings in companies whose prices have fallen behind their economic value
- Fundamentals weighting does not increase exposure to high P/E stocks during episodes of unsustainable P/E expansion. It therefore avoids overexposure to the more overvalued stocks
- Similar liquidity and capacity to market cap-weighted indexes
- Superior mean-variance portfolio construction
- The universe of eligible constituents is the FTSE Global Equity Index Series (GEIS)

# **Index family tree**



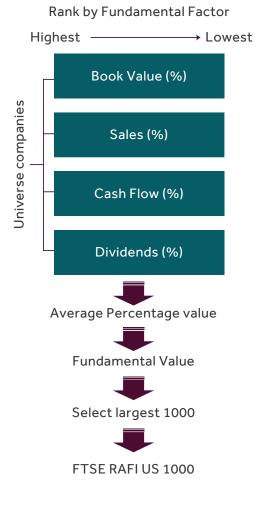
#### Benchmark Indexes Tradable Indexes

\* QSR Index also available

### **Index design**

- 1. The process starts with the selection of the company universes. For the FTSE RAFI U.S. 1000 Index, the constituents of the FTSE U.S. All Cap Index are used, and for the FTSE RAFI Developed ex U.S. 1000 Index the constituents of the FTSE Developed ex U.S. Index are used. The only difference between the two universes is that the FTSE U.S. All Cap Index includes large, medium and small cap companies whereas the FTSE Developed ex U.S. Index consists of only large and mid cap companies. Country indexes fall out of the FTSE RAFI Developed ex U.S. 1000 Index.
- 2. The universe companies are each ranked by each of the following four fundamental measures of company size: book value, cash flow, sales, and dividends. The percentage weight that each company represents of the total value of each fundamental measure is calculated. Except in the case of book value, trailing five year averaged data is used to minimise the substantial volatility in the index factors that would result from using year-to-year data. The five-year averaging also reduces index rebalancing turnover.
- **3.** A composite fundamental value is given to each company by taking the average weighting of each fundamental measure. If a company has a zero dividend percentage the average of the other three metrics are taken. The company's fundamental value is defined in relation to the composite weight.
- 4. The companies are then ranked in descending order of their RAFI fundamental values. The top 1000 companies derived from the FTSE U.S. All Cap Index then form the constituents of the FTSE RAFI U.S. 1000 Index. Similarly, the top 1000 companies derived from the FTSE Developed ex U.S. Index then form the constituents of the FTSE RAFI Developed ex U.S. Index.
- 5. The weights in the indexes are then set proportional to their fundamental values. The weighting factor used in the index calculation is derived by dividing the investable RAFI fundamental value of each company by its free-float adjusted market capitalisation. If there are fewer than five years of data available, the average of the years of data that are available are taken. It can be shown that although the results are not materially different from those of their trailing five-year counterparts, portfolio turnover is higher.
- 6. When converting from company level to stock level factors, the fundamental value is calculated at a company rather than a stock level. If a company has two or more lines of stocks in the relevant index, the company's fundamental value is allocated between these lines of stock in proportion to the free-float adjusted market capitalisations at the date of the rebalancing.

## Example: The FTSE RAFI U.S. 1000 index construction



#### For more information about our indexes, please visit ftserussell.com.

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