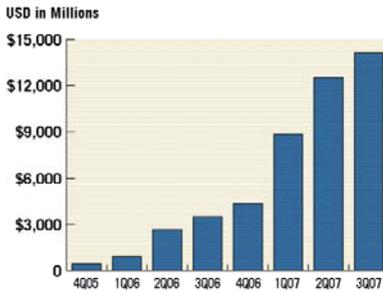


# rafi® Fundamentals

## RAFI® Managed Assets\*



\*Includes RAFI assets managed or sub-advised by Research Affiliates® or RAFI licensees.

## DIVERSIFY YOUR PASSIVE EXPOSURE

Regardless of whether it is labeled an index, an active strategy, or somewhere in the middle, the Fundamental Index® portfolio is designed to excel in markets where prices deviate from fair value. As long as there is some probability that the market might be inefficient, complementing your capitalization-weighted portfolio with a Fundamental Index portfolio is a good hedging strategy.

Infrequent bubbles are a recurring theme in the history of investments. With certainty, it is not a question of if but when. Of course, we will never know the moment the next episode is upon us. It seems sensible to provide some protection in our index fund exposure for this eventuality by diversifying a portion of funds into a price indifferent approach. Even if the four most dangerous words in investing—it's different this time—miraculously prove true, the portfolio would still be covered by the cap-weighted index fund allocation, which would steadily increase its weight in the hot market segment.

Active managers may not be a good hedge against the downside of bubbles. While firmly believing they should bypass the latest craze, some will succumb to the intense pressure to please their clients and keep their jobs

by giving in to the conventional bubble wisdom. Agency conflicts contribute to this type of behavior. For example, investment firms owned by parent organizations, particularly those that are publicly traded, are expected to keep revenues growing to meet shareholder demands.

The benefits of diversifying a portfolio's indexed equity exposure can be seen clearly when one looks at the composition of the Fundamental Index portfolio, as measured by RAFI® US Large Company, relative to the S&P 500 market portfolio during bubble periods. As **Figure 1** shows, the Fundamental Index portfolio's tracking error dramatically rises as it naturally rebalances the hot stocks back to their fundamental size while the cap-weighted index is magnifying its bet on the upside of the bubble. In each case, the RAFI portfolio went on to produce sizeable relative gains as the new paradigm theme failed to materialize, and the bubble burst.

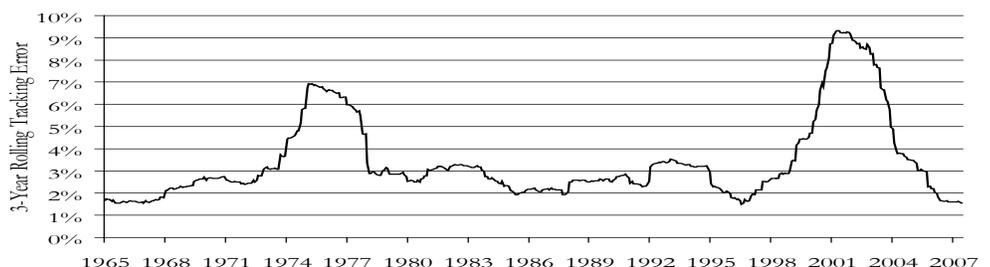
Meanwhile, the Fundamental Index portfolio behaves very much like a diversified core equity holding absent these bubble episodes with a tracking error consistently in the 2–4% range all the while adding incremental value over and above the S&P 500 in the majority of more “normal” markets. Thus, this diversified



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Figure 1. RAFI US Large Company and S&P 500



index approach isn't a huge departure from a traditional passive core portfolio.

Another way to frame the benefits of complementing a cap-weighted index with a RAFI orientation is to examine the bull and bear market performance (Figure 2). Both domestically and internationally, the Fundamental Index portfolio keeps pace in bull markets, adding marginal excess returns while outperforming significantly in bear markets. Perhaps more interesting is that in both cases the tracking error of the Fundamental Index approach is relatively low in the up markets but widens significantly when stock prices fall—exactly the time you don't want the cap-weighted index performance.

Figure 2.

	Large Company		International	
	Excess Return	Tracking Error	Excess Return	Tracking Error
Bull Markets	0.8%	3.2%	2.6%	3.7%
Bear Markets	5.7%	5.6%	5.2%	5.1%

Splitting one's passive exposure between these two orientations also makes sense intuitively from a style standpoint. We know the cap-weighted portfolio has a structural growth tilt—it gives twice the

weight to each security with twice the market multiple and halves the weight to stocks selling at half the market multiple. Growth stocks will always be overweighted in this kind of construct. Meanwhile, the Fundamental Index portfolio will assign the same weight to two companies with identical fundamental values. If one grows at a faster rate, it will be under-represented. Conversely, the slow grower will be overweight vis-à-vis its immediate prospects, thus creating a structural value orientation. We also know that the cap-weighted portfolio's growth bias will rapidly expand in bubbles as it allows these projected stars of tomorrow to become larger and larger positions. Meanwhile, the Fundamental Index value bet increases lock step while this is occurring. Blending the cap-weighted strategy's growth bias with the value tilt of the Fundamental Index portfolio seemingly produces a more balanced growth/value orientation.

Investing passively in cap-weighted indexes has a host of advantages—low fees, broad representation, massive capacity, and low turnover. However, using price to determine security weights can lead to problems, particularly in bubble periods and a structural growth bias—both of which can be partially neutralized by adopting a complementary allocation to a Fundamental Index strategy. In doing so, those married to index investing don't have to approach the fundamental versus cap-weighted choice in an either/or manner.

## Performance Update\*

TOTAL RETURN AS OF 10/31/07	BLOOMBERG TICKER	YTD	12 MONTH	ANNUALIZED 3 YEAR	ANNUALIZED 5 YEAR	ANNUALIZED 10 YEAR	ANNUALIZED 10 YEAR VOLATILITY
FTSE RAFI® 1000 Index <sup>a</sup>	FR10XTR	9.31%	13.32%	14.79%	16.89%	10.93%	13.92%
S&P 500 <sup>b</sup>	SPTR	10.87%	14.56%	13.16%	13.88%	7.10%	14.70%
Russell 1000 <sup>c</sup>	RU10INTR	11.21%	15.03%	13.82%	14.54%	7.40%	14.84%
FTSE RAFI® US 1500 Index <sup>d</sup>	FR15USTR	7.36%	11.42%	15.60%	22.38%	13.30%	17.96%
Russell 2000 <sup>e</sup>	RU20INTR	6.12%	9.27%	13.69%	18.67%	8.01%	19.68%
FTSE RAFI® Developed ex US 1000 Index <sup>f</sup>	FRX1XTR	21.07%	28.99%	26.35%	26.75%	13.76%	14.52%
MSCI EAFE <sup>g</sup>	GDDUEAFE	18.05%	25.43%	23.96%	23.71%	9.64%	14.45%
FTSE All World Series Developed ex US <sup>h</sup>	FTS5DXUS	20.59%	27.79%	25.12%	24.82%	10.40%	14.56%

Definition of Indices: (A) The FTSE RAFI® 1000 comprises the 1000 largest companies selected and weighted using our Fundamental Index methodology; (B) The S&P 500 Index is an unmanaged market index that focuses on the large-cap segment of the U.S. equities market; (C) The Russell 1000 Index is a market-capitalization-weighted benchmark index made up of the 1,000 highest-ranking U.S. stocks in the Russell 3000; (D) The FTSE RAFI® 1500 comprises the 1001st to 1500th largest companies selected and weighted using our Fundamental Index methodology; (E) The Russell 2000 is a market-capitalization weighted benchmark index made up of the 2,000 smallest U.S. companies in the Russell 3000; (F) The FTSE RAFI® Developed ex US 1000 Index comprises the largest 1000 non US-listed companies by fundamental value, selected from the constituents of the FTSE Developed ex US Index; (G) MSCI EAFE (Morgan Stanley Capital International Europe, Australasia, Far East) is an unmanaged index of issuers in countries of Europe, Australia, and the Far East represented in U.S. dollars; and (H) The FTSE All World ex-US Index comprises Large and Mid-Cap stocks providing coverage of Developed and Emerging Markets excluding the United States. It is not possible to invest directly in any of the indexes above.

\*In November 2008 performance returns for all prior periods were restated to reflect a change in calculation methodology from using a 365 day period to annualize returns to a return calculation based on using monthly returns as of the last business day of each month to create a geometric return for each period.

Source: Based on price data from Bloomberg.



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