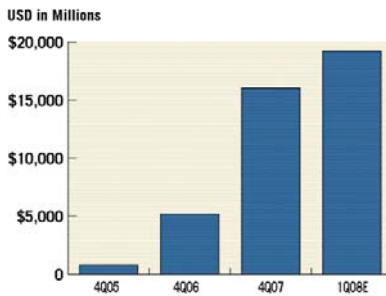


rafi® Fundamentals

RAFI® Managed Assets*



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

A MIDDLE GROUND IN THE ACTIVE/PASSIVE DEBATE

Are markets efficient? The answer depends on who you ask and views tend to be held with near religious conviction in both the yes and no camps. More importantly, one's views on market efficiency strongly color one's approach to investing—typically choosing between active management and indexing. For many of us, however, these alternatives provide little choice for those frustrated with the hollow promise of active management and the propensity of traditional index funds to ignore mispricing and load up on the most overpriced areas of the market. In this issue, we show that the Fundamental Index® approach offers a new choice for investors.

Investors approach to investing is built on their views of market efficiency. Proponents of traditional indexes believe that market prices reflect all current information on a company and thus are a fair representation of its value. Accordingly, the pursuit of undervalued or overvalued stocks is a waste of time as these intensive research efforts will fail to unearth significant opportunities to beat the market.

Naturally, active managers disagree. They parade a seemingly endless list of bubbles and crashes where prices couldn't have possibly reflected value. The natural question, then, is whether active stockpickers can exploit these mispricings (if they exist) for above-market returns. The fund management industry shouts, "Of course! Look at Peter Lynch, Warren Buffett, and Bill Miller." The proponents of indexing claim these stars are the outliers on a wide distribution of results—the lucky few roulette winners at the end of a long night.

Thus, the beliefs of the indexing community can be summed up as (1) prices closely reflect intrinsic value, and (2) active managers cannot reliably beat the market (as proxied by cap-weighted indexes). Meanwhile, the tenets of active management are naturally the opposite: (1) prices deviate, often significantly, from intrinsic value, and (2) active managers can exploit

these inefficiencies to beat the market. **Figure 1** summarizes these contrasting viewpoints:

Figure 1. Core Beliefs of Active and Passive Managers

Active Manager	Indexer
Prices deviate from intrinsic value.	Prices closely reflect intrinsic value.
Active managers can beat the market.	Active managers cannot beat the market.

Source: Arnott, Robert D., Jason C. Hsu, and John M. West. 2008. *The Fundamental Index: A Better Way to Invest*. New York: John Wiley & Sons.

Those of us in the Fundamental Index camp have our own opinions. We assert the first and more theoretical definition of market efficiency—that prices align or closely approximate the intrinsic value of the enterprise—to be a bit of a stretch. The peak of the technology bubble produced scores of stocks that now appear today to have been selling dramatically above their eventual worth. Cisco, Nortel, Lucent, and others suffered mind numbing declines as the euphoria of the Internet (and hundreds of billions of dollars of wealth) evaporated in three short years. Even everyday industries see prices wildly detach from value—witness Krispy Kreme briefly selling for over 150 times earnings (for donuts—a 150-year old product!) in 2001. It is part of human nature to give in to the fad of the day whether it be Dutch Tulips in the 17th Century or the Nifty Fifty of the early 1970s. Even in more "normal" times, prices are unlikely to match value—as the eventual true fair value of an equity security is dependent upon potentially decades of future cash flows, market participants would have to have incredible clairvoyance to perfectly match price and value.¹ Thus, we in the

¹Most efficient market proponents claim the price reflects the current value that incorporates all available information at that moment. Bill Sharpe has labeled the perfect foresight of future cash flows the "clairvoyant value." Nobody clings to the assumption that prices equal this clairvoyant value.



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Fundamental Index camp reject this notion of price efficiency as history is littered with massively mispriced securities.

Turning to the practical side of the market efficiency issue, we ask whether active managers outperform the market indexes after fees. The answer is no. The data do not present a pretty picture. Time and time again, indexes such as the S&P 500 trump the majority of institutional managers and mutual funds, adjusted for survivorship bias, over the long term. Furthermore, collectively, all active managers own the market and thus will earn market returns, less costs. Thus, we agree with those on the passive side of the fence that active managers cannot reliably beat the market, as represented by index funds.

In light of this discussion, let us revisit the comparison of active managers and their indexing counterparts in **Figure 2**. By breaking the definition of market efficiency into two components and gauging the validity of each, we arrive at a paradox—we agree with both the indexers and active managers! We believe pricing errors exist but assert that active managers collectively have not and cannot exploit them reliably for above benchmark returns.

Investors in both the active and passive camps ought to be thoroughly distressed by this contradiction. Some know there are mispriced stocks and so they search for top performing funds to identify underpriced companies. Their hopes are, of course, dashed when these portfolios fail to perform despite an environment that provides numerous opportunities. Seeing these failures, investors shun the

Figure 2. Core Beliefs of the Fundamental Index Believer

Active Manager	Indexer
Prices deviate from intrinsic value.	Prices closely reflect intrinsic value.
Active managers can beat the market.	Active managers cannot beat the market. ^a

^aNot collectively!

Source: Arnott, Robert D., Jason C. Hsu, and John M. West. 2008. *The Fundamental Index: A Better Way to Invest*. New York: John Wiley & Sons.

manager selection game and invest in the seemingly safe index alternative. Unfortunately, these investors see the indexers structurally load up on shares of companies that are later proven to be dramatically overpriced.²

No readily available solution existed to address this inconsistency prior to the development of Fundamental Index approach. By breaking the link between price and portfolio weight, the Fundamental Index methodology bypasses the return drag caused by capitalization weighting. Meanwhile, it retains the chief advantages—low fees, massive diversification, and low turnover—that result in the traditional index fund's long-term performance advantage over active managers.

²For more on the two interpretations of market efficiency, see *The Fundamental Index: A Better Way to Invest* (2008) by Robert D. Arnott, Jason C. Hsu, and John M. West, New York: John Wiley & Sons.

Performance Update*

TOTAL RETURN AS OF 4/30/08	BLOOMBERG TICKER	YTD	12 MONTH	ANNUALIZED 3 YEAR	ANNUALIZED 5 YEAR	ANNUALIZED 10 YEAR	ANNUALIZED 10 YEAR VOLATILITY
FTSE RAFI® 1000 Index ^a	FR10XTR	-5.35%	-7.85%	8.68%	12.87%	7.53%	14.02%
S&P 500 ^b	SPTR	-5.03%	-4.68%	8.23%	10.62%	3.89%	14.75%
Russell 1000 ^c	RU10INTR	-4.89%	-4.62%	8.63%	11.23%	4.24%	14.92%
FTSE RAFI® US 1500 Index ^d	FR15USTR	-5.29%	-10.67%	10.20%	17.31%	10.25%	18.16%
Russell 2000 ^e	RU20INTR	-6.12%	-10.96%	8.62%	13.76%	5.33%	19.90%
FTSE RAFI® Developed ex US 1000 Index ^f	FRX1XTR	-3.97%	0.20%	18.68%	23.33%	11.22%	14.77%
MSCI EAFE ^g	GDDUEAFE	-3.76%	-1.31%	16.74%	20.92%	7.05%	14.78%
FTSE All World Series Developed ex US ^h	FTS5DXUS	-3.40%	1.07%	18.01%	21.79%	7.95%	14.92%

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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