

Seeking Alpha α

Indexing: Mutual Funds vs. ETFs and Beating The Benchmark

by: Investing The Middle Way

May 24, 2007 | about: [IJR](#) / [IWM](#)

This is the next to last installment in [my series](#) on passive investing/indexing. I have already written about asset allocation plans, various indexes and rebalancing. I take it settled that we look to purchase index funds, but that still leaves the all important question of which one actually to buy. As with the rest of the series, I'll eschew the more prosaic facts. Instead, I want to take a look at a couple of interesting articles loosely tied around this topic.

Mutual funds vs. ETFs

This match-up has become the financial equivalent of boxers vs. briefs. Personally, I'm partial to silk boxers, but that's beside the point. The explosive growth of ETFs is evidence of their popularity with investors. Quite often they are compared with the average mutual fund and their cost advantages are quite apparent. However, that's somewhat of a straw man argument, as any investor would and should gravitate towards the best option available. That means index ETFs must be compared with the best of breed no-load, low-cost mutual funds which more often than not, are from the two industry giants: Vanguard and Fidelity. [WSJ](#) recent ran just such a comparison for funds for the S&P, broad US and international indexes.

Their findings are summarized in the table below. In almost all categories, mutual funds were winners (numbers in bold). One caveat is that the winners were all institutional class funds that carry lesser expenses. The retail classes were more closely matched with the ETFs. If anything, it shows the importance of low expense ratios.

Winners, Before Uncle Sam Takes a Bite

Comparison of total returns, including reinvested dividends, of index mutual funds and exchange-traded funds. Winners in each of the three broad investment areas are in bold.

Standard & Poor's 500

Mutual Funds	Ticker	Expense Ratio	Total Returns (%)					
			1q 2007	2006	2005	2004	2003	2002
Vanguard 500 Index	VFINX	0.18	0.60	15.64	4.77	10.74	28.50	-22.15
Vanguard 500 Index Adm	VFIAX	0.09	0.63	15.75	4.87	10.82	28.59	-22.10
Fidelity Spartan 500 Index Inv.	FSMKX	0.10	0.62	15.71	4.86	10.73	28.49	-22.17
Fidelity Spartan 500 Index Adv.	FSMAX	0.07	0.63	15.75	n.a.	n.a.	n.a.	n.a.
Mutual-fund category average		0.59	0.49	15.19	4.35	10.25	27.87	-22.53

ETFs

SPDRs	SPY	0.09	0.63	15.69	4.79	10.75	28.40	-22.12
iShares S&P 500 Index	IVV	0.09	0.62	15.70	4.83	10.77	28.53	-22.15

Benchmark Index

S & P 500-stock index			0.64	15.79	4.91	10.88	28.69	-22.10
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Total U.S. Stock Market¹

Mutual Funds

Vanguard Total Stock Mkt Idx	VTSMX	0.19	1.35	15.51	5.98	12.52	31.35	-20.96
Vanguard Total Stock Mkt Idx Adm	VTSAX	0.09	1.36	15.63	6.09	12.61	31.42	-20.95
Fidelity Spartan Total Mkt Idx Inv	FSTMX	0.10	1.39	15.73	6.42	12.11	31.24	-20.99
Fidelity Spartan Total Mkt Idx Adv	FSTVX	0.07	1.39	15.77	n.a.	n.a.	n.a.	n.a.
Mutual-fund category average		0.31	1.34	15.09	5.70	11.73	30.78	-21.58

ETFs

Vanguard Total Stock Market ETF	VTI	0.07	1.36	15.66	6.10	12.56	31.44	-20.94
iShares Russell 3000 Index	IWV	0.20	1.24	15.52	5.97	11.76	30.78	-21.63

Benchmark Indexes

MSCI US Broad Market index			1.38	15.72	6.37	n.a.	n.a.	n.a.
DJ Wilshire 5000 index			1.48	15.88	6.32	12.62	31.64	-20.86
Russell 3000 index			1.28	15.72	6.12	11.95	31.06	-21.54

International Stock Markets

Mutual Funds

Vanguard Developed Mkts Index	VDMIX	0.27	4.21	26.18	13.34	20.25	38.61	-15.70
Fidelity Spartan Int'l Index Inv	FSIIX	0.10	4.15	26.15	13.74	19.86	38.34	-15.99
Fidelity Spartan Int'l Index Adv	FSIVX	0.07	4.15	26.19	n.a.	n.a.	n.a.	n.a.
Mutual-fund category average		0.97	3.96	25.95	14.11	19.80	38.04	-16.59

ETFs

iShares MSCI EAFE Index	EFA	0.35	4.06	26.00	13.39	19.75	38.45	-15.61
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Benchmark Index

MSCI EAFE index			4.08	26.34	13.54	20.25	38.59	-15.94
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N.A.: Fund is too young for longer track record, or index not tracked these years

¹Vanguard funds track MSCI US Broad Market index since April 2005, DJ Wilshire 5000 before; Fidelity funds track DJ Wilshire 5000; iShares tracks Russell 3000

Sources: Morningstar; Lipper (S&P-500 category averages); Dow Jones Newswires (broad-market category averages)

[The WSJ article also highlighted some important difference between ETFs and mutual funds, such as tax advantage, cash levels, ETFs being continuously offered, etc.]

So anyway, the fierce competition for your dollars has reduced the difference between the best mutual funds and ETFs to a handful of basis points per year, in the most hotly contested domestic large stock funds. To put things in perspective, 10 basis points (0.1%) corresponds to \$100 on \$10k per year. One take away was that commission costs and convenience factors may be more important. Given the rise of zero commission and dividend reinvesting among deep discount online brokers, ETFs are giving the best mutual fund companies for a run for their money.

Buy an index fund to beat the indexes?

No, this is not a joke. This is the actual punch line (sans the question mark) of an article written by William Bernstein, titled "[How to Beat the Benchmark -- Indexing's Ultimate Irony.](#)" Bernstein is, of course, the author of such modern classics in asset

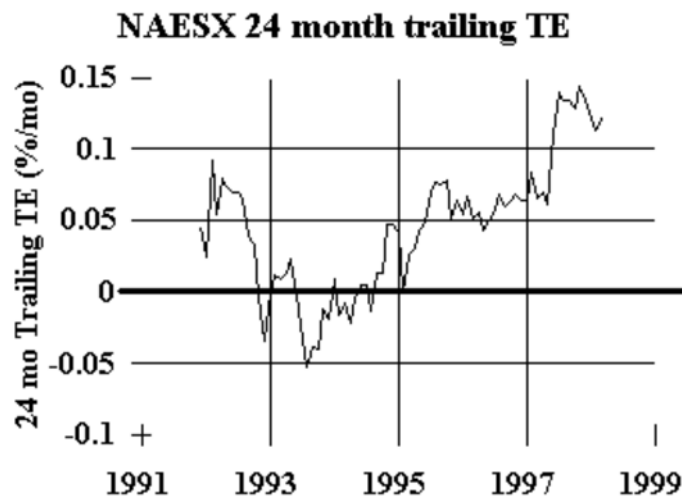
allocation as [The Intelligent Asset Allocator](#) and [The Four Pillars of Investing](#). The article was written in 1998, but I have not seen the same concept mentioned elsewhere, so I'd like to share it with my readers.

Bernstein first defines the term "tracking error" [TE] as a measure of the efficiency of index funds.

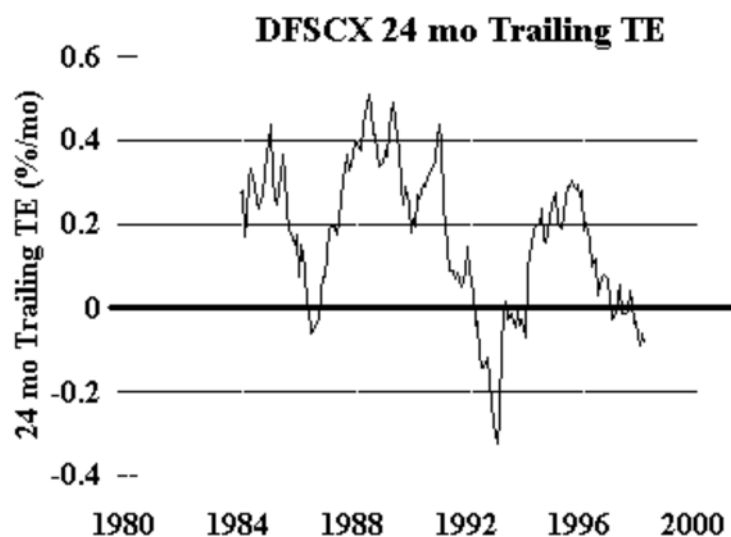
The ultimate measure of the efficiency of an index fund is its "tracking error" [TE]. This is the difference between the return of the fund and its benchmark. If an index fund is doing its job perfectly, then its TE will be a small negative number, equal to the opposite of its expense ratio. (A positive TE means the fund is beating its benchmark -- ML.)

He then noticed this curious fact:

The tracking error of the Vanguard Small Cap Index Fund [NAESX] has been persistently positive, and by no small amount either - about 1.38% annually since 1994. And that's after expenses.



The granddaddy of small cap indexing actually resides in Santa Monica, in the form of the DFA (Dimensional Fund Advisors) 9-10 Small Cap Index Fund DFA U.S. Micro Cap [DFSCX]. Founded in 1982 by Rex Sinquefeld and David Booth, the fund's benchmark is the CRSP (Center for Research in Security Prices) 9-10 Decile Index, which comprise stocks in the smallest quintile of the NYSE/AMEX, and NASDAQ stocks with the same capitalization included as well. Again, I've plotted the 24 month TE of the fund since inception:



Bernstein attributed this index-beating feat this way:

A small cap index fund cannot possibly own all of the thousands of stocks in its benchmark; instead it owns a "representative sample." Further, these stocks are usually thinly traded, with wide bid/ask spreads. In essence what the folks at DFA learned was that they could tell the market makers in these stocks, "Look old chaps, we

don't have to own your stock, and unless you let us inside your spread, we'll pitch our tents elsewhere. Further, we're prepared to wait until a motivated seller wishes to unload a large block." In a sense, this gives the fund the luxury of picking and choosing stocks at prices more favorable than generally available. Hence, higher long term returns.

I want to make a couple of quick comments here:

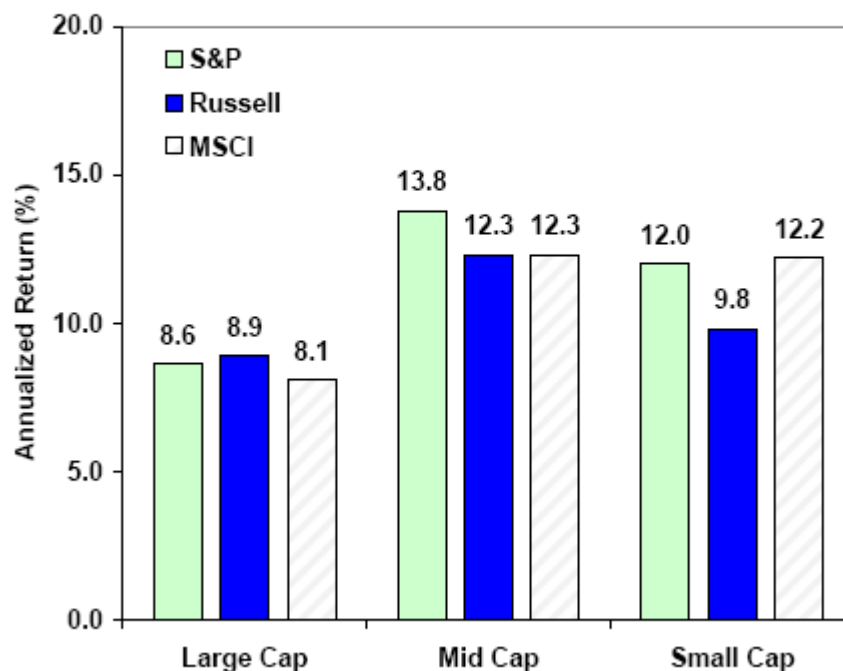
- This article actually restored in me a little respect for investment managers since what their decisions made a positive impact.
- It's not clear to me why ETFs per se cannot replicate this strategy. Of course, they would have to be clear that what they deviate from is the target index. So I don't expect IWM to be able to do this. However, from what I understand of Vanguard Vipers (i.e., VB), they can. Perhaps that is also why many index funds aren't specific about the index they follow. It could both be a licensing issue as well as giving themselves leeway to get the best pricing.
- Before you go run out and buy DFSCX, note that DFA funds are only sold through advisors. But note it has underperformed NAESX lately.

Not all indexes are created equal

I wish the WSJ article covered small cap stock index funds that were the focus of the Bernstein article. There seems to be far greater variability among them. First of all, not all indexes are created equal and differences are more prominent among small cap indexes. For example, I have seen the notable underperformance of Russell 2000 being attributed to its excessive rebalancing and bigger overall capitalization than its peers (see chart below from MS ETF quarterly, Nov'06).

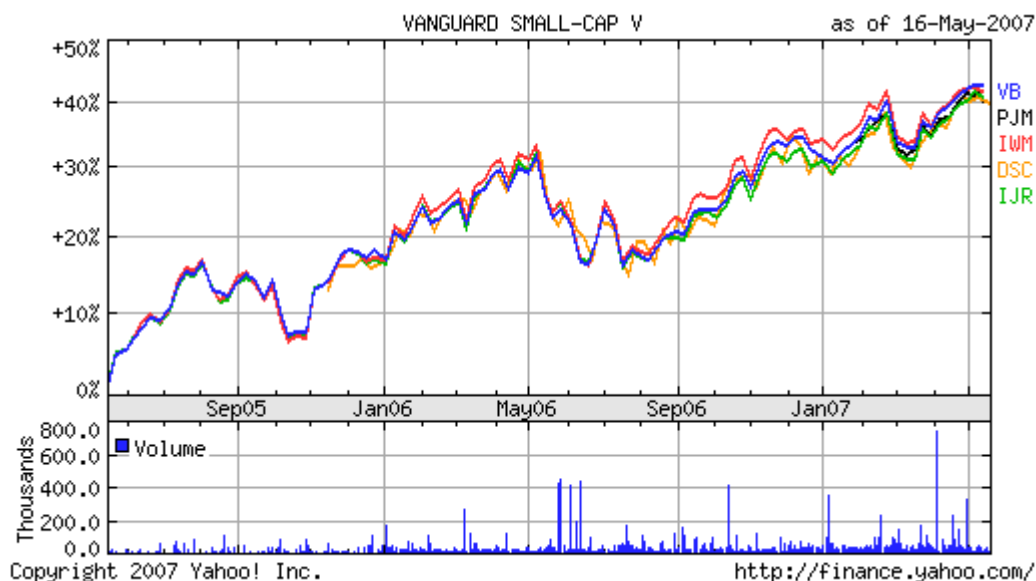
Exhibit 17

Ten-Year Annualized Index Performance



Looking at the two-year record of a number of small cap index ETFs, Vanguard's VB leads the pack; whereas IJR, the S&P 600 small cap ETF is the laggard. [If you have time, you can look up each of these ETFs which were based on different indexes.] However, as we just saw, the Russell 2000 ([IWM](#)) is supposed to underperform S&P 600 ([IJR](#)), albeit over a 10-yr time frame.

Here however, IWM outperforms IJR during the past two years. It's not clear whether this switch was due to index behavior or the disparity between price and NAV. Life is not that clear-cut after all. The second chart shows a number of mutual funds including NAESX and DFSCX that Bernstein wrote about.



If the recent short history is any guide, VB with the best performance and lowest fees (0.1%) would be my choice for the small cap blend component of the allocation plan. I'm fully aware that "past performance is not an indication for the future," but what else do we have to go by?

Fundamental indexing

Fundamental indexing refers to indexing based on value metric (price/earnings, price/sales, dividends, etc.) other than just market capitalization. (See the section titled "Problem with indexes" in [this article](#) for a more in-depth look. I find the idea attractive, although there are detractors such as, not surprisingly, [John Bogle](#).

[WisdomTree](#) with Jeremy Siegle as a senior advisor has taken the lead in dividend and earnings based indexing. Many of their international dividend indexed funds look interesting in that they beat the MSCI indexes handily in back-testing (check out their individual ETF pages). Of course, they need to be proven in real life before wide institutional adoption. One of their most popular funds is the small cap international fund, DLS, which happens to fill the space left by its bigger rivals. I personally think fundamental indexing is an idea with legs, and won't be surprised to see more institutional at least add them to the mix.

I made few concrete suggestions here, but I hope the articles I quoted were helpful. To close, let me refer again to this nice table from [Altruist Advisors](#) where you'll find their recommendations for each asset class. It's an eclectic mix of ETFs and mutual funds which fits well with my philosophy: I'll take the best of both worlds at the lowest cost.