DFA Funds: A Better Way to Invest

The unconventional approach that delivers superior long-term results.

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About Vista

Vista Capital Partners is a fee-only investment advisor based in Portland, Oregon. We specialize in managing globally diversified portfolios which minimize costs and taxes for individual clients with more than $2 million to invest.

Since 2005, we have worked closely with Dimensional Fund Advisors (DFA), whose mutual funds feature prominently in our portfolios. Paired with our disciplined approach, DFA funds have played a key role in helping us protect and grow our clients' wealth.

We also want the benefits of our work to extend beyond the success of a portfolio—to the health, happiness and well-being of those we serve. Our mission is simple: to help our clients live happier and more prosperous lives.

Contributors

We are a passionate team of financial advisors. Learn more about the contributors and our team at: vistacp.com/our-team.

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A Better Way to Invest

Research shows more than 80% of active fund managers underperform their benchmarks.[1] Index funds virtually eliminate this risk of underperformance. Dimensional Fund Advisors, however, has engineered an even better mutual fund. This paper aims to explain key tenets of DFA's approach, and why they have resulted in a sizeable return advantage over both active and index mutual funds.

Unconventional Success

For nearly forty years, Dimensional Fund Advisors (DFA) has consistently bucked the investment industry's conventional wisdom. The firm maintains no Wall Street office, dedicates zero resources to economic forecasting, and doesn't allow individual investors direct access to its funds. This unconventional approach has been critical to fueling the firm's success—DFA is the fifth-fastest growing investment firm in the US[2] and now manages over $600 billion in assets.

Why the success? Performance. Returns in DFA's mutual funds have trumped not only a majority of "active" fund managers, but comparable index benchmarks, as well.[3] The firm's flagship U.S. Small Cap Value Fund has returned 11.1% annualized per year back to its early 1993 inception. That beats the comparable Russell 2000 Value Index of small cap stocks by over 1.2% per year.[4] Many of DFA's other funds show similar results.

Remarkably, this performance comes not from DFA's superior skill at forecasting the economic future or picking better stocks. In fact, the folks at DFA spend zero time or energy on these typical Wall Street strategies. Stock picking and market timing, DFA says, are a waste of time and money.

So, if they're not feverishly trying to outguess markets, what is DFA's secret? The firm embraces a so-called "passive" approach based on decades of academic research (University of Chicago's Eugene Fama and Yale's Roger Ibbotson are board members; Dartmouth's Ken French is the firm's Head of Investment Policy). The idea is that markets are correct more often than they are wrong. The sheer existence of so many diverse investors ensures prices reflect most, if not all, available information. As a result, market prices should be fair, and when prices are fair, stock picking and market timing become exercises in futility.

Eugene Fama

2013 Recipient of Nobel Prize in Economic Sciences[5]

If this line of reasoning sounds familiar, it should. The largest fund company on the planet, Vanguard, has popularized passive investing, or "indexing." Index funds are those diversified and low-cost baskets of stocks which mirror indexes such as the S&P 500. But don't confuse DFA's funds with traditional index funds.

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Not Your Typical Index Fund

For starters, anyone can buy index funds. DFA offers its funds exclusively through investment advisors. The firm figures a professional advisor will help protect clients from cutting and running during bad times or plowing into funds after a good run of performance. Such hyper-active moves increase trading and tax costs, dragging down returns for all fund shareholders.

Not just any advisor can offer DFA funds; only "authorized" advisors who've met the firm's strict criteria can gain access to the funds. To become approved, an advisor must attend two days of lectures from PhD's and other academics at company headquarters (advisors pay their own way). Whereas many fund companies might bring in motivational sales gurus to speak at meetings, DFA turns to its brain trust of rocket scientists and Nobel laureates—Co-CEO and Chief Investment Officer Gerard O'Reilly holds a PhD in Aeronautics; 1997 Nobel laureate Robert Merton is the firm's Resident Scientist—to dive into the finer points of multiple regression analysis, risk factor exposure and book-to-market ratios.

DFA funds differ from index funds in a few other important ways, and these differences often lead to significant long-term performance advantages.

Asset Class vs. Index

Rather than follow a commercial index like the S&P 500, DFA managers target entire "asset classes," or groups of stocks. And they have a particular expertise in targeting certain types of stocks—namely small company and low-priced "value" stocks—often thought to be riskier than the market as a whole. As risk and return are inherently linked, these riskier stocks have been more rewarding over the long haul. DFA deliberately targets these risks across many parts of the market, some of which index funds miss, including tiny microcap stocks, international small cap stocks and emerging market small cap stocks. DFA's goal, it says, is not to mimic a retail index but to harness the returns of the asset class.

Smaller and Lower-Priced Stocks

Relative to most mutual funds—both active and index—DFA funds favor smaller and lower-priced stocks. As an example, the average stock held in the DFA US Small Cap Value Fund has a market capitalization (company size) of $666 million. The average stock held in the Russell 2000 Value Index has a market cap of nearly $729 million.

Similarly, the average stock held in the DFA US Small Cap Value Fund has a price-to-book ratio of 1.12. (A stock's price-to-book ratio reflects how much investors are willing to pay for a share of the company's net assets.) Stocks in the Russell 2000 Value Index, for comparison, have an average price-to-book ratio of 1.55. By this measure, then, the small cap value index is nearly 40% more "expensive" than DFA's comparable fund.

DFA's ability to identify and efficiently buy these smaller and lower-priced securities, while selling larger and higher-priced stocks, has provided a significant benefit for fund shareholders.

Including Stocks Others Don't

Dimensional funds are broadly diversified, holding most, if not all, securities within their respective asset class. By contrast, most index funds select only a representative "sample" of stocks in the index, rather than own every single stock. Using such a sampling technique helps index funds keep an important lid on trading costs. Research shows, however, that a small handful of stocks typically deliver the bulk of an asset class' return each period. For example, of the roughly 10,000 stocks composing the global stock market, the top-performing 10% accounted for more than one-half of the market's total return. Investors who failed to hold these stocks earned just 2.9% per year, while fully-diversified investors earned 7.2% per year.[6] By diversifying thoroughly—DFA's International Small Cap Fund, for example, owns nearly twice as many stocks as the comparable index—DFA ensures its funds fully capture an asset class' return. Over time, this has made an enormous difference.

Style Consistency

Dimensional funds also maintain more consistent exposure over time to small cap and value stocks. As an index fund's goal is to mimic the benchmark index, it is rebalanced only when the index is redefined. (Consider when Google was added to the S&P 500 Index, replacing Burlington Resources. Every S&P 500 Index Fund, in order to mirror the index itself, was forced to buy Google and sell Burlington at roughly the same time).

The DFA Advantage

Feature Comparison

Compare	Index Funds	Asset Class Funds (DFA)
Target Return	Performance of commercial index benchmarks	Performance of entire asset class, including smallest stocks
Diversification	Broad: "sampling" may result in fewer securities in retail index	Broad: often hold more securities than included in retail index
Rebalancing	Infrequent: fund characteristics may shift over time	Intentional: fund characteristics remain consistent over time
Trading	Mandatory tracking increases turnover and trading costs	Patient approach minimizes transaction costs
Securities Lending	Returns most of net revenue to investors	Returns 100% of net lending revenue to investors

Such index changes are infrequent, meaning most index funds adjust their holdings just once a year, regardless of what happens to the stocks in the index throughout the year.

Infrequent rebalancing is less than ideal. Over time, securities within an index migrate from one asset class to another (such as from small cap to large cap). This migration can alter an index's characteristics significantly, so that an index fund may look quite different 11 months after the last batch of stocks were added/subtracted from the index. DFA frequently monitors the holdings of its funds, rebalancing as necessary, to ensure exposure to the underlying asset class.

Taken together, these portfolio design efforts—smaller small caps, thoughtful diversification, and more consistent exposure to small and value stocks—results in asset class mutual funds that have a higher expected return than a traditional index fund. And that's just the beginning.

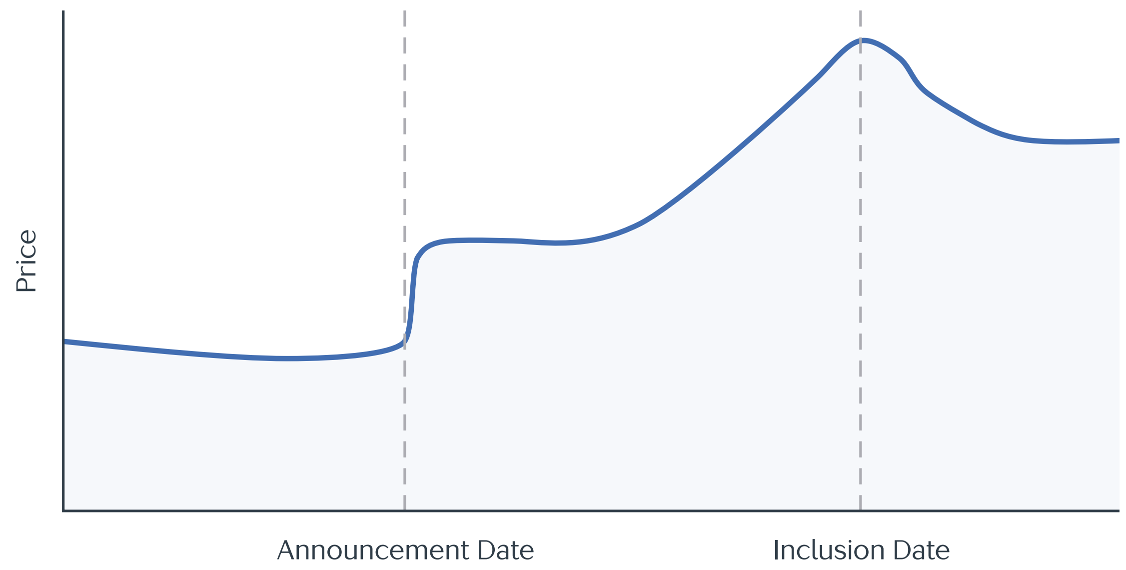
Trading: Patience Matters

In the asset classes in which DFA invests most heavily—small cap and value stocks—trading costs are huge as more limited share volume results in wide spreads between what stock sellers will accept and buyers will offer. In some instances, buying or selling an illiquid small company stock can move its price by 10% or more. Minimizing these costs is critical.

Consider an index fund, the goal of which is to track its benchmark as closely as possible. In order to minimize tracking error, index funds buy on the exact date the stock is added to the index. When index changes occur (think: Google replacing Burlington Resources), the index fund must buy and sell the affected stocks regardless of price. The cost of buying the new stocks and selling the old stocks, at the same time as every other index fund, can increase significantly. Higher trading costs can eat dramatically into performance. The graphic below helps explain this phenomenon.

Cost Of Tracking An Index

Stocks Rise On Announcement; Fall After Inclusion



Since DFA never buys stock to track a commercial index, its traders can drive harder bargains on purchases and sales of securities. This freedom allows DFA to be patient, to avoid buying/selling at unfavorable prices, and enhance investor returns. In an investment world in which every penny counts, even one percent—compounded over time—can lead to a dramatic difference in ending wealth.

Earning Back Their Fees

For a fee, mutual funds will temporarily lend securities in their portfolios to other investors seeking to borrow them. This practice of "securities lending" has become more common with the growth of hedge funds and other investors who bet on prices to fall.

As a dollar of lending revenue has the same positive impact on performance as a dollar of capital appreciation, lending securities can be quite profitable for a mutual fund. Here's how it works:

A large fund manager like DFA might agree to transfer stock to a hedge fund interested in borrowing it. By borrowing the stock instead of purchasing it, the hedge fund can cover a temporary short position—a bet the value of the stock will fall—without impacting its price on the market. As compensation for borrowing the fund's stock, the hedge fund transfers more than the stock's current value in cash as collateral. The fund manager—DFA in this example—has access to the cash for overnight investment and is able to eke out a very small return. Multiplied over time, and across thousands of stocks, these small incremental returns can make a meaningful impact, as shown in the table on the following page.

DFA appears to have a leg up on index funds in the securities lending arena, having engaged in the practice for over a decade. The firm is one of the largest fund managers of the smallest, most illiquid stocks on the market. As these illiquid stocks are more difficult to borrow, they command higher lending fees. As a result, securities lending is a particularly appealing enhancement to DFA's funds.

While many fund companies take a portion of securities lending revenue for themselves (as opposed to crediting it into the fund), 100% of DFA's securities net lending revenue goes back into the fund to benefit investors.

DFA Securities Lending Profits[7]

Fiscal Year Ending October 31, 2018

Fund	Securities Lending Net Revenue	Percentage of Fund Net Assets
DFA Emerging Markets Small Cap (DEMSX)	$55,191,000	0.74%
DFA International Small Company (DFISX)	$41,042,000	0.29%
DFA Emerging Markets Core Equity (DFCEX)	$73,321,000	0.26%
DFA International Small Cap Value (DISVX)	$29,094,000	0.18%
DFA International Core Equity (DFIEX)	$39,593,000	0.14%
DFA Micro Cap (DFSCX)	$6,800,000	0.10%
DFA Targeted Value (DFFVX)	$9,237,000	0.08%
DFA Small Cap Value (DFSVX)	$10,449,000	0.07%
DFA International Real Estate Securities (DFITX)	$4,234,000	0.07%
DFA U.S. Vector Equity (DFVEX)	$3,143,000	0.06%

Impressive Long-Term Results

Conceptually, the unconventional strategies DFA employs to build better mutual funds should deliver superior results relative to both traditional index and actively managed funds. But what about actual performance?

Does all the time and energy required to develop and implement these more sophisticated “passive” strategies really result in better returns for investors?

The answer, quite simply, is yes.

Whether compared to index benchmarks or actively managed funds, DFA has delivered.

By departing from the rules and rigidity of traditional indexing while avoiding the costly distractions of stock picking and market timing, DFA is able to focus on what really matters. It identifies the sources of return which truly reward investors and seeks to delivers them as intelligently and effectively as possible.

Table 1, on page 12, shows twenty years of performance for select DFA mutual funds versus their comparable retail index benchmarks. In each instance, DFA has delivered an impressive longterm performance advantage over the index.

Table 2, on page 13, compares twenty years of performance for selected DFA funds versus the universe of actively managed funds. In each case, DFA's performance has delivered a sizeable advantage over traditional active management.

Whether compared to index benchmarks or actively managed funds, DFA has delivered. The bright minds at DFA have clearly engineered a better way to invest. And an ever-growing number of investors—working with authorized, fee-only advisors—are reaping the rewards.

Table 1: DFA Fund Performance vs. Retail Indices[8]

20 Years Of Performance, Period Ending December 31, 2019

Asset Class	Fund/Index	20 Year Annualized Return	DFA Performance Advantage
U.S. Market Value	**DFA U.S. Vector Equity (DFVEX)***	**11.82%**	+0.11%
	Russell 3000 Value Index	11.71%	
U.S. Small Cap	**DFA Micro Cap (DFSCX)**	**9.31%**	+1.72%
	Russell 2000 Index	7.59%	
U.S. Small Cap Value	**DFA Small Cap Value (DFSVX)**	**9.90%**	+0.49%
	Russell 2000 Value Index	9.41%	
International	**DFA International Core Equity (DFIEX)***	**6.07%**	+0.75%
	MSCI World ex USA Index	5.32%	
International Small Cap	**DFA International Small Company (DFISX)**	**8.38%**	+0.79%
	DFA International Small Cap Value (DISVX)	**9.20%**	+1.61%
	MSCI EAFE Small Cap Index	7.59%	
Emerging Markets	**DFA Emerging Markets Core Equity (DFCEX)***	**3.89%**	+0.21%
	MSCI Emerging Markets Index	3.68%	
Emerging Markets Small Cap	**DFA Emerging Markets Small Cap (DEMSX)**	**8.67%**	+1.91%
	MSCI Emerging Small Cap Index	6.76%	

**DFA U.S. Vector Equity, DFA International Core Equity and DFA Emerging Markets Core Equity do not have twenty years of performance history, having launched in December 2005, October 2005 and May 2005, respectively. Accordingly, return data shown is for the 10 year period from January 1, 2010 through December 31, 2019. Returns for DFA funds are shown net of fees.*

Table 2: DFA Fund Performance vs. Actively Managed Funds[9]

20 Years Of Performance, Period Ending December 31, 2019

Asset Class	Fund/Index	20 Year Annualized Return	DFA Performance Advantage
U.S. Market Value	**DFA U.S. Vector Equity (DFVEX)***	**11.82%**	
	MORN Large Cap Value Universe, Active	10.40%	+1.43%
	MORN Small Cap Value Universe, Active	9.84%	+1.98%
U.S. Small Cap	**DFA Micro Cap (DFSCX)**	**9.31%**	+1.36%
	MORN Small Cap Universe, Active	7.94%	
U.S. Small Cap Value	**DFA Small Cap Value (DFSVX)**	**9.90%**	+1.07%
	MORN Small Cap Value Universe, Active	8.83%	
International	**DFA International Core Equity (DFIEX)***	**6.07%**	+1.06%
	MORN Int'l Large Cap Universe, Active	5.01%	
International Small Cap	**DFA International Small Company (DFISX)**	**8.38%**	+3.00%
	DFA International Small Cap Value (DISVX)	**9.20%**	+3.82%
	MORN Int'l Mid/Small Value Universe, Active	5.38%	
Emerging Markets	**DFA Emerging Markets Core Equity (DFCEX)***	**3.89%**	+0.69%
	MORN Emerging Markets Universe, Active	3.20%	
Emerging Markets Small Cap	**DFA Emerging Markets Small Cap (DEMSX)**	**8.68%**	+2.85%
	MORN Emerging Markets Universe, Active	5.82%	

**DFA U.S. Vector Equity, DFA International Core Equity and DFA Emerging Markets Core Equity do not have twenty years of performance history, having launched in December 2005, October 2005 and May 2005, respectively. Accordingly, return data shown is for the 10 year period from January 1, 2010 through December 31, 2019. Returns for DFA funds are shown net of fees.*

Endnotes

1 SPIVA® U.S. Scorecard 2018. Over the 15-year period ending Dec. 2018, 92% of large-cap, 92% of mid-cap, and 96% of small-cap managers underperformed their respective benchmarks.

See Tables 1 and 2 on pages 12 and 13, respectively, of this paper.

2 The World's 500 Largest Asset Managers. Willis Tower Watson, 2019.

3 See Tables 1 and 2 on pages 12 and 13, respectively, of this paper.

4 Dimensional Fund Advisors. Annualized returns of the DFA US Small Cap Value Fund from April 1, 1993 through December 31, 2019. Past performance is not a guarantee of future results.

5 Eugene F. Fama Nobelpristagare i ekonomi December 2013 © Bengt Nyman (https://www.flickr.com/photos/bnsd/11253390925/in/album-72157632193865514/).

6 Dimensional Fund Advisors. Historical annualized return of all eligible stocks in Developed and Emerging markets, as per Bloomberg London Share Price Database and Centre for Research in Finance from 1994 through 2018. Eliminating the top 10% (in terms of performance) of global stocks each year reduced the historical annualized return from 7.2% to 2.9%.

7 DFA Investment Dimensions Group Inc. Prospectus, dated February 28, 2017. Securities Lending Revenue for fiscal year ended October 31, 2018. Figures are net revenues.

8 Dimensional Fund Advisors. For illustrative purposes only. Past performance is not a guarantee of future results.

9 Morningstar (MORN) and Dimensional Fund Advisors. For illustrative purposes only. Past performance is not a guarantee of future results.

Important Disclosure Information

Past performance may not be indicative of future results. Different types of investments involve varying degrees of risk. Therefore, it should not be assumed that future performance of any specific investment or investment strategy (including the investments and/or investment strategies recommended and/or undertaken by Vista Capital Partners ("Vista"), or any non-investment related services, will be profitable, equal any historical performance level(s), be suitable for your portfolio or individual situation, or prove successful. Vista is neither a law firm nor accounting firm, and no portion of its services should be construed as legal or accounting advice. Moreover, you should not assume that any discussion or information contained in this document serves as the receipt of, or as a substitute for, personalized investment advice from Vista. Please remember that it remains your responsibility to advise Vista, in writing, if there are any changes in your personal/financial situation or investment objectives for the purpose of reviewing/evaluating/revising our previous recommendations and/or services, or if you would like to impose, add, or to modify any reasonable restrictions to our investment advisory services. A copy of our current written disclosure Brochure discussing our advisory services and fees is available upon request. **The scope of the services to be provided depends upon the needs of the client and the terms of the engagement.**

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