With a host of noted academics minding the store, Dimensional Fund Advisors has attracted a loyal following among fee-only advisers

BY LYNN O'SHAUGHNESSY

ugene Fama Sr., who may someday receive one of those early–morning transatlantic calls from the Nobel Prize committee, didn't become famous in academic circles for his tact.

ILLUSTRATIONS BY SCOTT MENCHIN

## After cramming several weeks

of lectures from a Ph.D. program into a one-hour presentation in Santa Monica, Calif., this past April, Fama paused for questions from his audience of investment advisers. They were trying to digest the University of Chicago professor's onslaught of projector transparencies, densely packed with figures illustrating the conclusions of a study he and Kenneth French of Dartmouth College had undertaken, which demonstrated that small-cap and value stocks deliver an investment premium over time.

The diminutive finance professor answered questions from the audience with the finesse of a hedge clipper. What was his opinion of portfolio optimizers? "They're junk. You're wasting your time with an optimizer, but if you have a lot of time to waste, go ahead." And hedge funds? "If you want to invest in something where they steal your money and don't tell you what they're doing, be my guest." Then Fama took a swipe at Jeremy Siegel of the Wharton School of the University of Pennsylvania, who has questioned the small-cap premium by saying the advantage evaporates if you remove a few key years. "The reality is," Fama sniffed, "if you throw out the best five years of anything, it doesn't do well."

Fama's supreme confidence is also evident inside the oceanfront headquarters of Dimensional Fund Advisors (DFA) in Santa Monica, where Fama-along with several other academics, including Roger Ibbotson of Yale University and Myron Scholes of Stanford University-serves as a board member of the institutional money-management firm. In a time when the market's truculent behavior has prompted soul-searching among some money managers, DFA's faith in how it invests the \$34.4 billion under its management remains absolutely unshakable. The source of DFA's smugness becomes clear at its frequent educational seminars for fee-only advisers: no one at the firm agonizes about outsmarting the market, because they consider it as likely as discovering how to transform baser metals into gold. As efficient-market disciples, they dismiss any sustained successes of active fund managers as sheer luck. "Talk about beating markets is irrelevant and extremely boring," says Rex Sinquefield, who in 1981 cofounded DFA with fellow University of Chicago Graduate School of Business alumnus David Booth. "There is no evidence managers can beat markets; if there was, then somebody would find it."

Initially the money-management firm concentrated exclusively on investing for institutional clients. But in 1990 DFA opened its doors to fee-only financial advisers, who could for the first time invest in its funds on behalf of individuals. The reverence DFA enjoys among many of the 300plus advisers who use its funds is legendary. Listen to true believers talk, and it wouldn't require a leap of faith to imagine that if God were an investor, Heaven would use DFA funds exclusively. Cash from advisers is pouring in at record amounts. By August 31 the net flow for the year had reached \$2.1 billion. That figure smashes the old record set in 2001, when advisers invested \$1.6 billion for the entire year.

What sometimes gets lost in the fervor, however, is that DFA funds won't necessarily be the answer to every client's prayer. Tax efficiency is a nightmare for many DFA offerings. The firm's investment strategies also trigger periodic tracking error, which may disturb your clients but doesn't worry DFA. Meanwhile, if you buy into DFA's value and small-cap bias, your clients may howl when their portfolios don't behave like their neighbors'. And finally, the firm's institutional "my way or the highway" attitude can be intimidating for advisers. "I think there's a little bit of fear out there, though maybe that's overstating it," says client Mark Nickell, president of J. Mark Nickell & Co. in Brentwood, Tenn., who describes DFA's adviser presentations as old-fashioned tent revivals that are run by "efficient-market fundamentalists."

At its heart DFA's structured-management investment strategy defies pigeonholing. The approach isn't an active one, but it isn't purely passive either. In general the firm's investment goal is to produce annualized returns for its funds that exceed conventional benchmarks by 100 to 200 basis points without producing excessive tracking error. DFA would be the first to admit that this sort of outperformance won't happen with all its 30 funds—only those its portfolio managers can squeeze potentially higher returns from, particularly in the small-cap and value arenas. Some of its funds—such as DFA U.S. Large Company, a plain-vanilla fund that tracks the Standard & Poor's 500 stock index—defy tweaking.

To accomplish its goal, the firm relies on indexes derived

from the vast database maintained by the Center for Research in Security Prices (CRSP) at the University of Chicago. The academics at DFA believe these indexes are far superior to conventional benchmarks such as the S&P 500, Wilshire 5000, and Russell 2000 because of the way the database is constructed. It includes prices for all domestic stocks traded on the New York and American exchanges and the Nasdaq. The CRSP database ranks all companies by market capitalization and divides them into 10 equally populated deciles.

Decile 1 includes the biggest corporate titans such as General Electric Co. and Exxon Mobil Corp., whereas deciles 9 and 10 are stuffed with microcaps. DFA believes that slicing the market more finely than the popular indexes do and making adjustments more frequently makes for purer asset classes. "We provide a more reliable exposure to a specific asset class," says Henry Gray, a DFA portfolio manager. "We're constantly readjusting, so we've got the freshest small caps."

The reason this slicing and dicing is so important is be-

cause DFA believes that hidden within the markets is a size premium. And that brings us back to Fama and French, who provide much of DFA's economic underpinnings. Whereas mutual fund launches are often instigated by marketing departments, DFA portfolios are created and tweaked in reaction to academic research. DFA, which got its start by originally rolling out passive small-cap funds, was jolted into examining how it could construct even better investment products by research that Fama and French undertook in 1990. The academics sought to unmask the sources of risk that the market systematically bestows with greater returns.

And what they uncovered was a trio of economic traits—or a three-factor model—that the pair concluded could explain most of the variation of stock-portfolio average returns. The three are company size, book-to-market ratio, and the classic market beta. Fama and French challenged the earlier research of William Sharpe, the 1990 Nobel laureate at Stanford University and the creator of the capital-asset-pricing model, who essentially concluded that expected returns hinged on market beta alone.

Based on Fama and French's research, DFA structured many of its funds to capture the return premiums it believed were associated with high book-to-market stocks—that is, value stocks—and



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small market cap. DFA continues to use book to market even though skeptics quibble that the tool is an economic dinosaur. "There's nothing special about book to market," says Eugene Fama Jr., a DFA vice president. "It doesn't describe risk. However, sorting stocks by book to market also seems to sort them by their true underlying source of risk—the level of their distress." Ultimately, DFA believes that screening for high book-to-market stocks allows the firm's small- and large-cap value funds to maintain a more consistent and stronger exposure to value names than its peers. The strategy seems to be working. During the five-year period ending August 31, 2002, for instance, DFA U.S. Large Cap Value returned 4.37 percent annually, versus 1.1 percent for the Vanguard Value Index and 1.08 percent for the average large-cap value fund as tracked by Morningstar.

Of course, all the trading can lead to unwelcome taxes—something DFA didn't have to worry about when it was managing money exclusively for institutional clients such as California Public Employees' Retirement System, Stanford University, Boeing Co., and major California municipalities.

That indifference evaporated once the company began actively welcoming financial advisers and their affluent clients. Advisers looking to invest taxable client money must cherry-pick among the DFA funds. According to Morningstar, the five-year tax-efficiency record of DFA funds collectively ranks them in the 60th percentile (first is best and 100th is worst). Not exactly the sort of statistic that marketing brochures crow about. Nevertheless some of DFA's tax hogs are true success stories. The annualized five-year pretax return of DFA Intermediate Government Fixed-Income Fund,

## DFA VIEWS ITS JOB AS BRIDGING THE GULF BETWEEN ACADEMICS AND THE PROFESSIONALS IN THE TRENCHES. "FAMA DOESN'T READ BARRON'S AND BARRON'S READERS DON'T READ FAMA"

DFA is just as dogged about exploiting a small-cap premium by maintaining portfolios stuffed with tiny holdings. For example, the DFA U.S. Micro Cap fund has about a third of the median market cap that the average small-cap index fund has. And because DFA uses CRSP deciles 6–10 as a benchmark rather than the S&P SmallCap 600 or Russell 2000, its small-cap funds have less than four-fifths the median market cap that the average small-cap fund has. Although decile 10 stocks recently represented more than 10 percent of the total market cap of the CRSP 6–10 index, the Russell 2000 has only limited exposure to these tiny tots, which have been the market's historic best performers.

DFA portfolio managers further try to enhance small-cap fund returns by fixating on trading costs. Despite a notoriously illiquid market, block trading helps keep expenses incredibly low. The firm, which is a huge dealer of small-cap stock, evaluates hundreds of potential block trades a day and discount trades account for a substantial amount of its purchases. DFA's average block purchase price of small caps has historically been 3 percent lower than the following day's closing price. Traders can extract price concessions from desperate small-cap sellers because they enjoy greater flexibility in what stocks they acquire and dump. DFA doesn't consider moderate overweighting or underweighting in portfolios a sin. Price rather than time of execution is emphasized, as traders aim to buy at or below existing bids and sell at or above offer prices.

for instance, is 8.67 percent. True, its after-tax return slips to 6.23 percent, but the fund's after-tax performance still bested 99 percent of its category peers.

The tax hemorrhaging isn't an issue of course if offending funds are corralled in retirement accounts. "I think the DFA funds are great, but they have to be intelligently applied by a guy with a brain, who's essentially looking at the client's total situation," says Frank Armstrong, president of Investor Solutions in Miami, who has roughly \$110 million sunk into DFA funds.

Still, the task of finding the best fund grew easier for Armstrong and other advisers in 1999 after DFA rolled out the first of five tax-managed funds to attract more adviser cash. And a municipal-bond fund recently joined the lineup. The goal of these six funds is to provide higher after-tax returns-30 to 150 basis points higher—through such strategies as harvesting capital losses, avoiding short-term capital gains, and using lot accounting. The original three of these funds—DFA's Tax-Managed U.S. Small Cap Value, Tax-Managed U.S. Small Cap, and Tax-Managed U.S. Marketwide Value—now enjoy three-year track records, which has spawned more adviser interest. The after-tax performance of this trio, in comparison with the regular funds, has been noteworthy. In the turbulent three-year period ending August 31, DFA U.S. Small Cap generated an annual return of 3.61 percent, but its aftertax return shriveled to 1.08 percent. In contrast, DFA TaxManaged U.S. Small Cap enjoyed a 2.28 percent return and an after-tax performance of 2.16 percent.

So far, the performance of DFA's tax-managed funds, which have yet to make any capital-gains distributions, have exceeded the firm's goals. Weston Wellington, vice president in DFA's research group, characterizes the tax-management strategies as an "unqualified success." DFA hopes to further enhance after-tax returns through its dividend-management strategy, which was implemented by the five tax-managed funds in December 2001. Fama and French, along with Eduardo Repetto, a former senior Caltech scientist now with DFA, developed an approach to minimize dividends while maintaining a fund's value tilt. The emphasis on tax management has attracted a flood of new money from advisers. "I was using DFA funds before, but the addition of tax-managed funds has allowed me to use DFA in nonretirement accounts, which I hesitated to do before," says Bruce Berno, president of Berno Financial Management in Cincinnati.

These strategies don't behave seamlessly. The tracking error between an original fund and its tax-managed counterpart can be significant. Through August 31, for instance, the one-year tax-adjusted performance of DFA U.S. Large Cap Value was -12.74 percent, versus -24.96 percent for DFA Tax-Managed U.S. Marketwide Value. DFA, which expects tracking error because the underlying portfolios are different, believes straying from target benchmarks is acceptable if the funds produce superior tax efficiency. Besides, tracking error is also caused by such factors as the timing of cash inflows and redemptions, observation of wash-sale rules, and the tendency of the tax-managed portfolios to hold on to their winners. Is any amount of tracking error unacceptable? "There's probably some level, but at this point, I'm not in a position to say," Wellington says. "It will be something we can deal with as time goes on."

During the tax-managed funds' relatively short lifetimes, the tracking error has flip-flopped—sometimes favoring the tax-efficient funds and sometimes the regular ones. This potential for tracking error needs to be discussed with clients, says Jeffrey Troutner, president of Tam Asset Management in Tiburon, Calif. "If you don't explain this kind of stuff up front to clients," Troutner says, "when they go to The Wall Street Journal and see return differences, they'll ask, 'What the heck is the advantage of going to a tax-managed fund?' "

And that's precisely why DFA won't sell funds directly to the public. But the firm is also persnickety about the advisers it associates with. An initial call from advisers could begin a courtship that continues through numerous conversations with a DFA regional director. Before any relationship is sealed, advisers must attend a two-day DFA investment seminar, where they'll be handed a large envelope containing nearly five pounds of DFA educational material. Ultimately, they may end

up talking to Dan Wheeler, director of the firm's global financial-adviser services—a charismatic guy, whose ruddy complexion deepens to another shade of red when he confesses that he was once a stockbroker. Back in the mid-1980s, Wheeler was the first adviser to seek the institutional shop's permission to use its funds. Then Wheeler was searching for a passively managed small-cap fund. He eventually sold his own business and launched DFA's adviser sideline in 1990.

## LEARLY, DFA SEES ONE OF ITS MISSIONS AS

bringing the rigors of academic research to advisers, who aren't inclined to spend precious hours trudging through heavily footnoted academic papers, no matter how brilliant the conclusions. DFA views its job as bridging the gulf between the ivory-tower academics and

the professionals in the trenches. "Fama doesn't read Barron's and readers of Barron's don't read Fama," Wellington says. As part of its education process for advisers, DFA has archived client presentations, academic papers, fund statistics, regular commentaries, and frequently asked questions on its Website at www.dfafunds.com.

DFA believes repeated conversations with advisers are necessary to ensure they possess realistic expectations of its investment strategy. Just as critical is the ability of advisers to adroitly convey this message to their own clients, who may have their noses buried in a Money article on 2003's hottest funds. It's this obsession with setting appropriate expectations that probably saved the firm back in the 1980s when small-cap stocks were sinking in quicksand. DFA's clients didn't bolt during this period. And during the more recent tech mania, DFA spent an inordinate amount of time helping advisers convince their skeptical clients that diversification really wasn't a dumb idea.

A number of other firms have their own passively managed funds for financial advisers, says Wheeler. Plenty of planners use Vanguard funds, for example, but DFA doesn't consider the indexing giant a competitor. One of the differences, notes Larry Swedroe, a principal at Buckingham Asset Management in St. Louis and the author of What Wall Street Doesn't Want You to Know: How You Can Build Real Wealth Investing in Index Funds (St. Martin's), is that Vanguard doesn't offer tax-managed value funds or indexed small-cap or large-cap value international funds. "There's no question that DFA is a far superior fund family," Swedroe says.

Lynn O'Shaughnessy, is a financial journalist and former reporter for the Los Angeles Times. She is the author of the Retirement Bible and the Investing Bible (both John Wiley).