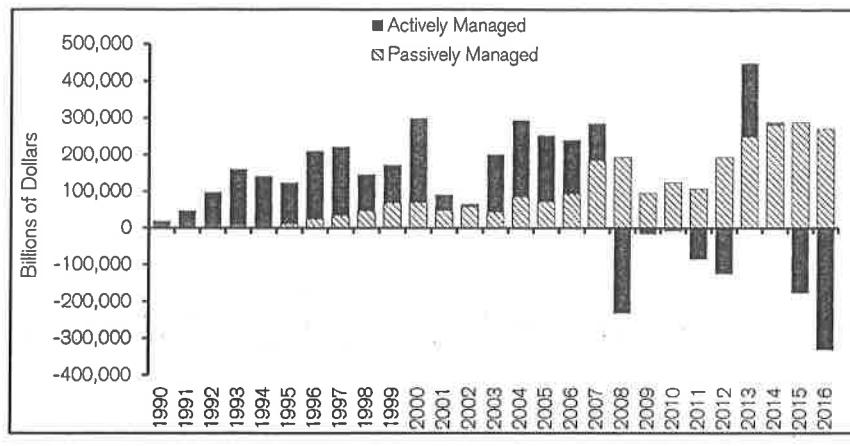


Looking for Easy Games

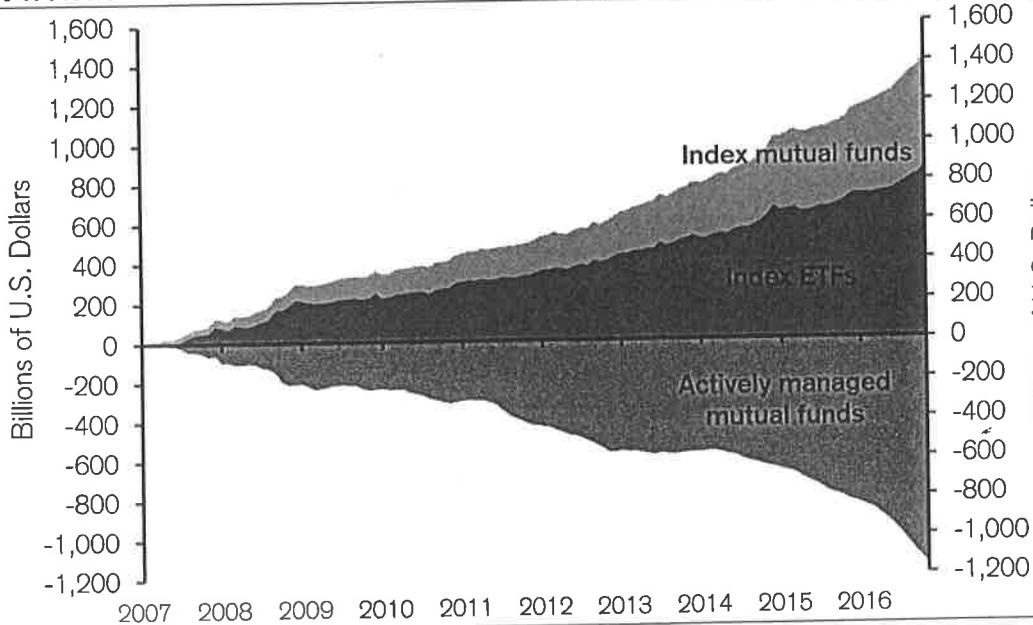
How Passive Investing Shapes Active Management

January 4, 2017



Source: Simfund.

Exhibit 1: Flows from Active to Passive Funds in U.S. Equities



Source: Investment Company Institute; Simfund; Credit Suisse.

Note: U.S. domestic equity funds; 2016 figure as of 11/30/16.

A Different Market

Market power among passive managers is far more concentrated and favors companies with strong direct distribution. There is \$19,032 trillion in active funds, and \$6,564 trillion in passive.

ACTIVE	ESTIMATED 5-YR NET FLOWS (in billions)	ESTIMATED 10-YR NET FLOWS (in billions)	TOTAL FUND ASSETS (in billions)
STOCK, BOND, MULTIASSET			
American Funds	-\$71.47	-\$246.91	\$1,290.54
Fidelity Investments	-123.70	-175.41	982.63
Vanguard	38.07	87.22	858.41
T. Rowe Price	27.95	66.29	482.88
Franklin Templeton Investments	-58.791	-25.85	381.09
Pimco	-221.91	-24.37	298.29
JPMorgan	72.31	137.90	269.97
BlackRock/iShares	14.57	55.44	203.75
MFS	48.62	56.67	191.99
Dodge & Cox	9.48	-10.38	189.89

PASSIVE	ESTIMATED 5-YR NET FLOWS (in billions)	ESTIMATED 10-YR NET FLOWS (in billions)	TOTAL FUND ASSETS (in billions)
STOCK, BOND, MULTIASSET			
Vanguard	\$985.10	\$1,323.24	\$2,650.94
BlackRock/iShares	413.71	572.88	1,035.97
SPDR State Street Global Advisors	108.50	213.44	506.96
Dimensional Fund Advisors	105.57	145.02	317.98
Fidelity Investments	87.62	104.25	265.68
Schwab Funds	57.68	62.95	117.03
PowerShares	21.05	37.02	108.18
TIAA-CREF Asset Management	21.17	28.98	46.09
WisdomTree	29.34	36.99	39.65
Van Eck	18.43	38.52	33.67

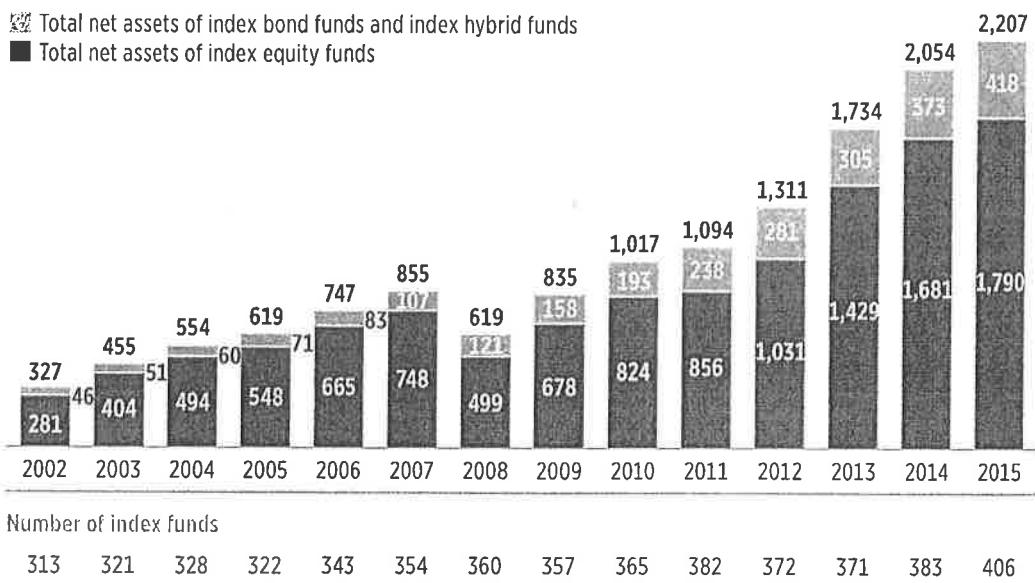
Note: Includes mutual funds and exchange traded funds, and not money-market funds. As of Jan. 31, 2017.

Source: Morningstar

FIGURE 5.5

Total Net Assets and Number of Index Mutual Funds Have Increased in Recent Years

Billions of dollars, 2002–2015



Note: Data exclude mutual funds that invest primarily in other mutual funds. Components may not add to the total because of rounding.

Source: 2016 ICI Factbook

CREDIT SUISSE

January 4, 2017

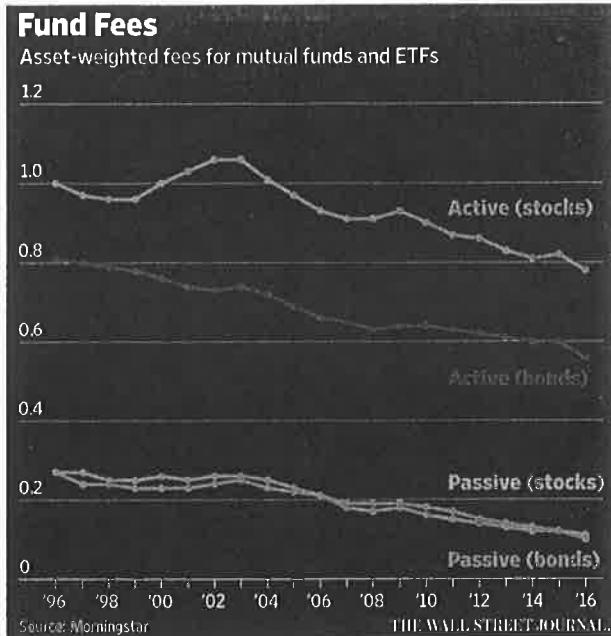
Exhibit 16: Largest Index Fund Equity Managers

Asset Manager	Total AUM	Index Funds AUM	Index Funds Fraction of AUM
BlackRock	2,644	2,166	81.3%
Vanguard	2,270	1,839	81.1%
State Street	1,377	1,275	96.9%
Fidelity	1,004	170	16.9%
Invesco	377	85	22.5%
T. Rowe Price	337	30	8.9%
BNY Mellon	247	14	6.9%
Capital Group	838	0	0.0%
Wellington Mgmt	476	0	0.0%
JPMorgan Chase	342	0	0.0%
Affiliated Managers	336	0	0.0%
Franklin Templeton	297	0	0.0%
Goldman Sachs	254	0	0.0%
Dimensional Fund Advisors	245	0	0.0%
Legg Mason	204	0	0.0%

Source: Jan Fichtner, Eelke M. Heemskerk, and Javier Garcia-Bernardo, "Hidden Power of the Big Three? Passive Index Funds, Re-Concentration of Corporate Ownership, and New Financial Risk," Working Paper, October 28, 2016.

Note: Billions of U.S. dollars; Assets under management for equities only.

Tuesday, January 3, 2017



Skeptical Investors Leave Active Funds Despite Fee Cuts

BY SARAH KROUSE

Those stock and bond pickers that cut mutual-fund fees most aggressively in 2016 are the ones that continue to lose clients to lower-cost rivals.

The average asset-weighted fee for actively managed stock mutual funds fell by 4.8% in 2016, the most severe decline since at least the 1990s, according to Morningstar Inc. Meanwhile the average asset-weighted fee for actively managed bond funds fell more than 6%.

The growing popularity of passive funds and an increased investor focus on fees has put unprecedented pressure on stock and bond pickers, prompting some fund boards to approve fee reductions to make their products more attractive.

Still, the average fee investors pay to track the performance of broad indexes re-

mains a fraction of what investors pay active managers to place bets, a major factor in the shift of money into index trackers such as exchange-traded funds.

Investors pulled a net \$358.8 billion out of U.S.-based actively managed mu-

Increased investor focus on fees has put pressure on stock and bond pickers.

tual funds in the 12 months to the end of November while pouring \$479.8 billion into passive funds, according to Morningstar. The net outflows have come primarily from active stock funds, while active bond funds have continued to pull in new investor cash.

Asset managers set for more big tie-ups

Fidelity expects wave of mergers as shift to passive vehicles squeezes margins

ROBIN WIGGLESWORTH
US MARKETS EDITOR

Life and Aberdeen Asset Management, while Amundi has swooped for Pioneer Investment. Lower-margin players in more exposed areas such as mainstream equities are likely to be vulnerable to takeover attempts.

"The trend is pretty clear. Margins will continue to come under pressure," Mr Morrison said. "The industry is going to look very different in five years. There will be fewer and larger managers."

Fidelity's only major recent acquisition was its purchase of eMoney adviser, a financial planning software company, for \$250m in 2015. But the family-owned investment group was "open to anything", said Mr Morrison. "Merging cultures is a wild card, but if there are some real opportunities we'd look at it."

Charles Morrison, head of the group's \$2.1tn asset management division, said industry margins would continue to be eroded by the shift into passive vehicles such as exchange traded funds that track investment benchmarks.

This accelerating investment trend

gushing into cheaper passive funds, forcing both actively managed mutual funds and hedge funds to slash their fees.

Over the past 12 months, investors have shovelled \$44.2bn into passive equity funds globally, while traditional "active" stock market funds have suffered outflows of \$53.4bn, according to consultancy EPFR Global.

The average expense ratio of US equity funds has fallen from 99 cents for every \$100 invested in 2000 to 68 cents by the end of 2015, according to the Investment Company Institute. The average US bond fund expense has slipped from 76 cents to 54 cents over the same period.

That shrunk the asset management industry's revenues by 5 per cent last year, according to a study by Morgan Stanley and Oliver Wyman, which predicted that revenues would contract by

another 3 per cent by 2019 despite the expectation of overall inflows.

Consolidation is tricky in an industry where companies often have distinct cultures but lack big fixed back-office costs that could be trimmed in a merger, with most deals historically consisting of big players snapping up star managers or swallowing small teams.

There has been a series of ETF providers acquired by bigger players in recent years, and the mergers of Janus-Henderson and Standard Life-Aberdeen have fostered expectations that the splintered industry will see more big deals, despite still largely healthy profit margins.

The investor pivot towards cheaper, benchmark-mimicking vehicles such as index-tracking and ETFs has accelerated this year, despite a tentative improvement in the performance of traditional mutual fund managers in 2017.

\$4.42bn
Sum invested in passive equity funds over a year

\$53.4bn
Outflows from active stock market funds

Indexes Beat Stock Pickers Even Over 15 Years

By DAISY MAXEY
AND CHRIS DIETERICH

Most actively managed U.S. stock funds were beaten by their market benchmarks over the past decade and a half, a record of underperformance that helps explain why stock pickers are losing billions of dollars in assets each month to low-cost passive investments that track indexes.

Over the 15 years ended in December 2016, 82% of all U.S. funds trailed their respective benchmarks, according to the latest S&P Indices Versus Active funds scorecard. This was the first year that the analysis included 15 years of data, helping smooth out periods of volatility that can affect the performance of active managers. The results coincide with Please see STOCKS page A8

STOCKS

Continued from Page One
the rise of passive investing and a growing view among investors and financial advisers that active managers can't pick stocks well enough to justify the fees they charge over extended periods and that even those managers who do outperform their passive counterparts can't sustain it year after year.

"We often hear from active managers, 'You need to measure us over a longer-term cycle,'" said Aye Soe, managing director of research and design at S&P Dow Jones Indices. "Even over a full market cycle, which includes peaks and troughs, we still see the majority of active managers performing unfavorably against their benchmarks."

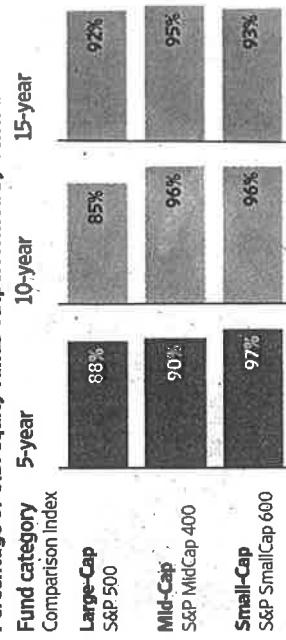
The debate over whether passive management is as good or better than active management is a long-running and contentious one, but it has heated up in recent years. Active managers' struggles to beat the market over recent years amid a long-term bull market in stocks have resulted in fee pressure, fund closings, business overhauls and mergers.

Investors have spoken with their wallets, turning to index-tracking funds in droves. Some \$1.2 trillion has been withdrawn from actively managed U.S. stock funds since the start of 2007 through March, according to Morningstar Inc. Nearly the same amount, \$1.1 trillion, has

Lagging Behind

Few actively managed funds have kept pace with market indexes in recent years, new data show.

Percentage of U.S. equity funds outperformed by benchmark



Note: Data as of Dec. 31, 2016

Source: S&P Dow Jones Indices

THE WALL STREET JOURNAL

ally by S&P Global using a methodology that includes funds that have been liquidated or merged out of existence. S&P Dow Jones Indices is a joint venture of S&P Global and CME Group Inc. It is a major participant in the indexing business with more than \$2.1 billion indexed to the S&P 500 index as of 2015.

A committee composed of three representatives of S&P Dow Jones Indices and two representatives of The Wall Street Journal determine the composition of the Dow Jones Industrial Average. Dow Jones & Co., a unit of News Corp, sold a majority stake in its index business in 2010 and sold the remaining stake in 2013.

S&P Dow Jones Indices pulls performance data on active funds from a database maintained by the Center for Research in Security Prices, a research and learning center at the University of Chicago Booth School of Business.

The debate over passive vs. active management is a contentious one.

spokeswoman said.

Among more than a dozen categories tracked, 95.4% of U.S. mid-cap funds, 93.2% of U.S. small-cap funds and 92.2% of U.S. large-cap funds trailed their respective benchmarks, according to the data. The performance analysis, known as Spiva, is published semiannually.

The latest Spiva survey period ended during a year of geopolitical tumult of the sort that sometimes is thought to benefit active managers, with market-churning events including Britain's vote to exit from the European Union and Donald Trump's surprise election to the U.S. presidency. Not even the volatility that came with those events was enough to give many more active fund managers the edge over indexes.

Even stock funds that manage to top the market for many years can stumble badly. One high-profile example is Sequoia Fund, operated by Ruane, Cunniff & Goldfarb, a firm co-founded by William Ruane, a value investor and friend and mentor to famed investor Warren Buffett.

Until the end of 2015, Sequoia Fund was the top performing large-cap growth mutual fund tracked by Morningstar over the previous 15 years, nearly doubling the annual performance of the S&P 500. But the fund was badly burned by a heavy position in Valeant Pharmaceuticals International Inc. Valeant's stock price has plunged 96% from its peak in August 2015 amid questions about its accounting practices.

Steep losses in Valeant have left the fund near the bottom of all large-cap growth funds over the past one, three and five years. "We're working very hard to restore the track record that our investors have come to expect from us," said David Poppe, co-manager of the fund.

WSJ, April 13, 2017

The Active Challenge

Thanks to costs they incur for stock pickers' salaries, trading and other expenses, along with their need to keep cash on hand, active funds generally start with a higher hurdle than passive funds to make money.

Turnover	Expenses	Idle cash for withdrawals	Value captured after 10 years
Active funds Funds pay to trade in and out of stocks	Salaries, marketing, research and other costs lift active funds' expenses	Cash kept to meet redemption requests isn't put to work in the market	80.57% Lost value The average active large capitalization core fund captured 80.57% of the value of the S&P 500
Passive Generally, Index funds buy and hold, reducing trading costs	Generally much lower	Index funds stay fully invested, to earn more over time	95.96% The Vanguard S&P 500 Index Fund made 98.96% of the market's ending value

Sources: WSJ calculation based on data from S&P Dow Jones Indices for core funds and Vanguard Group

THE WALL STREET JOURNAL.

"You have thousands of

people trying to get in through a revolving door at the same time," says Robert Arnott, who runs investment strategy firm Research Affiliates. "The reason you don't notice it is the index starts to measure it after everyone's through the door."

Mr. Arnott's analysis suggests the drag on returns could be half a percentage point or more a year. The problem with the argument, though, is that the drag is relative to "the market," which no investment firm offers as a product.

Another conundrum: Stocks in the index become overvalued relative to those outside it. Jeffrey Wurgler, a finance professor at New York University's Stern School of Business, has seen signs of this by comparing similar stocks that are or aren't included in a basket. A related criticism is that index investors have to ride the rise and fall of overvalued sectors within the index such as technology in the 1990s. They own more of what just went up and less of what just went down by default.

Mr. Arnott's firm has developed "fundamental indexes" designed to avoid this problem.

After a slow start four decades ago when Vanguard Group's John Bogle launched a passively managed S&P 500 index mutual fund, the genre now comprises almost 30% of mutual and exchange-traded funds, according to the Investment Company Institute, more than double their share a decade ago and eight times the share 20 years ago.

Resounding success has a way of drowning out critics. Here are some of the arguments against passive investing—and their shortcomings:

Indexes are a low-cost approach to investing, yet they can incur some costs and conundrums that active managers can avoid. One concern is how and when the passive funds buy stocks.

"The index" isn't the same as "the market." When it is announced that a stock will be added to the S&P 500, its price jumps before index investors have to buy it, and the price of the stock it replaces sinks before they sell it. These moves create a drag on returns that is invisible to passive investors since they confide index performance with a passive market performance.

The Case For the Triumph Of Passive Oct 19, 2016

THE WALL STREET JOURNAL.

The question of whether investors can continue to get more for less isn't merely a case of grousing from beaten money managers.

There are legitimate arguments against passive investing's virtues and sustainability. Past performance, as they say, is no guarantee of

Please see PASSIVE page C2



THE PASSIVISTS
SPENCER JAKAB

There are legitimate arguments against passive investing's virtues and sustainability. Past performance, as they say, is no guarantee of

spreading the notion of efficient markets and the virtues of passive investing to the masses with his bestseller "A Random Walk Down Wall Street."

Yet Charles Ellis, an intellectual godfather of the indexing phenomenon, points out that passive funds' market share remains far from that theoretical level where there won't be enough price discoverers. "I'm very confident that 60% isn't enough or that 80% isn't enough. 90% may be enough," he says.

Mr. Arnott reckons that the threshold is even higher and that it won't ever be breached anyway. Money management is so profitable, he says, that, if active investing re-emerges as a winner's game because so few are competing at price discovery, it will attract enough new managers to compete themselves back into mediocrity.

The one seemingly convincing revert to passive investing consists of two words: Warren Buffett. A dollar invested with the Oracle of Omaha's Berkshire Hathaway Inc. between 1965 and 2015 grew an eye-watering 136 times as much as one in the S&P 500, making him living proof of investment skill.

But then he isn't a mutual-fund manager, and many studies have shown that actual investing skill, while it probably exists in some small percentage of managers in excess of their fees, only can be identified with hindsight.

The odds of individual savers finding or being guided to such funds are low even before one accounts for the hefty drag of fund costs.

Research has shown, for example, that simply choosing top-ranked funds from services such as Morningstar actually worsens the odds of picking a winner.

The greatest living investor's instructions to the executors of his estate are perhaps the most convincing argument in favor of a passive approach. Mr. Buffett urged them to put 10% in short-term bonds "and 90% in a very low-cost S&P 500 index fund. (I suggest Vanguard's.) I believe the trust's long-term results from this policy will be superior to those attained by most investors—whether pension funds, institutions or individuals—who employ high-fee managers."

Oops! Frenzy Revives Defunct 'TWTRQ'

The hoopla surrounding the coming initial public offering for **Twitter** Inc. swept up an unlikely candidate: shares in bankrupt electronics retailer **Tweeter Home Entertainment Group Inc.**

The end result was a trading frenzy Friday that prompted regulators to step in and halt trading in Tweeter's shares—a penny stock that surged as much as 2200% during the session.

Tweeter was a midsize electronics chain selling stereos, televisions and other gadgets and eventually grew to more than 100 stores across the country.

It filed for Chapter 11 bankruptcy protection twice—in 2007 and 2008—and eventually closed its doors.

But it still has shares trading under the symbol TWTRQ, similar to the TVTR that Twitter disclosed late Thursday would be its ticker of choice when it sells shares to the public.

"There are real investors who have probably made a mistake here and probably lost money because of it," said Adam Mattessich, senior managing director

and head of equity trading at Cantor Fitzgerald LP.

Tweeter's shares aren't listed on an exchange and instead change hands in the "over the counter" marketplace. The shares rarely trade, and when they do have traded for less than a penny per share.

When Twitter announced in mid-September that it had filed for an IPO there was small flurry of trading in Tweeter stock. But after the filing became public Thursday night, buyers flocked to Tweeter stock.

The source of the confusion stems from the rules governing ticker symbols. When companies file for bankruptcy, the Financial Industry Regulatory Authority, Wall Street's self-regulatory body, typically appends a letter Q to the existing ticker. That frees up the symbol for potential use by another company.

"Investors mistakenly saw Tweeter as possibly being [Twitter] trading already and the orders flooded into it," said Cantor's Mr. Mattessich. "Then it becomes sort of a snowball effect."

As Tweeter's stock price rose and volume jumped, professional short-term traders jumped in to take advantage of the move, he said.

By the time the trading in Tweeter shares was halted by Finra early Friday afternoon, 14.4 million shares had changed hands, a daily record for the stock. At that point in the day, more Tweeter shares had traded than in all but six stocks in the S&P 500-stock index.

During the trading frenzy, Tweeter's share price surged from 0.07 cent to as high as 15 cents, according to FactSet. But by the time trading was halted, the stock had fallen all the way back to 5 cents.

In a statement announcing the halt of trading, Finra said the activity "demonstrated a widespread misunderstanding related to the possible initial public offering of an unrelated security, which ... has caused a major disruption in the marketplace." Finra's actions didn't invalidate trades.

—Matt Jarzemsky

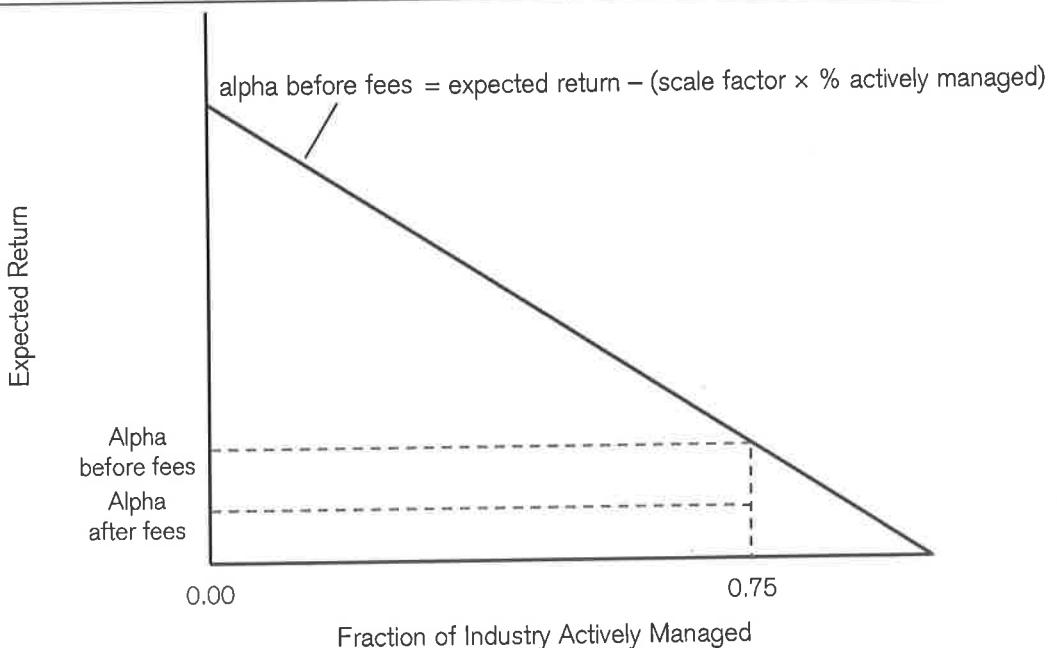
We start with a model developed by the finance professors, Luboš Pástor and Robert Stambaugh.⁶³ The core assumption of their model, consistent with Grossman-Stiglitz and Berk and Green, is decreasing returns to scale for the asset management industry. The higher the fraction of the industry that is active, the lower the expected return. They use the following equation to model decreasing returns to scale:

$$\alpha = a - b(S/W)$$

Where α is the industry's expected return in excess of passive benchmarks, a is the expected return on the fraction of wealth invested in active, net of costs, b captures decreasing returns to scale, and S/W is the percentage of the industry that is active.

Exhibit 19 shows this tradeoff. In this simple model, we assumed a is 10 percent, b is 0.10 and S/W is 0.75, which means that 75 percent of the U.S. equity industry is managed actively. These are all close to what has been observed empirically. The central insight is that investors have to adopt a point of view on what values the parameters will take to come up with the proper allocation between active and passive.

Exhibit 19: A Model of Decreasing Returns to Industry Scale



Source: Luboš Pástor and Robert F. Stambaugh, "On the Size of the Active Management Industry," Journal of Political Economy, Vol. 120, No. 4, August 2012, 749.

This model is very simple, so it is reasonable to ask whether the basic relationship between active and passive management explains returns. One way to address this question is to look at active management and indexing in markets around the world. Recent research concludes "that active funds perform better in markets in which low-cost explicitly indexed funds are more available."⁶⁴ The fact that competition drives down fees and compels active managers to position their portfolios with higher active shares explains this result.

A problem remains, though, which goes right back to our poker game metaphor. Passive investors always earn the benchmark returns minus their small fees. For some active managers to win in the form of excess returns, others must lose. This is implicit in the Pástor and Stambaugh model.⁶⁵ Further, investors have to be able to find the skillful managers, and may incur costs doing so.

Research finds a reason for active fund managers



John Authers
THE LONG VIEW

Why do we pay fund managers to take our money and attempt to beat the market?

Both theory and experience say that paying for "active" investment management – which "actively" seeks to beat the market – is a self-defeating waste of money. We should instead put our money into "passive" index funds.

This has been well established for some two decades now. So, the existence of a vast industry devoted to trying to beat the market on our behalf seems baffling. Now fascinating research suggests that we are acting rationally when we give money to an active manager – though we may be gripped by a dreadful collective action problem.

I will short-circuit the theory for now. Let the common-sense argument for indexing suffice: in aggregate, stock markets are so totally dominated by institutions that the collective performance of active managers is equal to the overall performance of the market. Leaving aside front-end sales charges, they generally charge more than 1 per cent each year to pay for the research and salaries that go into beating the market. Index funds also get the overall performance of the market but generally only charge a fraction of 1 per cent. Let that gap in fees compound for a few years and index

funds inevitably come out on top – which is indeed what all the performance data show.

Academics have shown this. Passive investment companies' marketers have got the message out. The industry has produced new indexed products, such as exchange-traded funds or enhanced indexes, which are based on factors such as earnings or dividends or market value.

Yet old-guard actively managed funds cling on. By the end of 2008, only about 18 per cent of equity mutual funds in the US were passive, according to the Investment Company Institute. Outside the US, intermediaries do not even seem to have caught up with evidence in favour of indexing, and continue to balk at the idea because it means their clients cannot beat the market.

My own explanation for active management's persistence has centred on inertia, ignorance (which

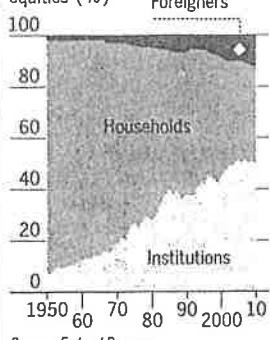
It is rational to devote money to active managers to go out and find stocks that are selling too cheap

suggests that we in the press are doing a bad job) and the incentives on intermediaries, who are generally paid more to sell an actively managed fund. In other words, I have tended to believe that active management is a racket built on exploiting investors' ignorance.

Now academics have proved me at least partially wrong. It may be rational to hire an active

Investment managers take over

Ownership of US corporate equities (%) Foreigners



Source: Federal Reserve

you give up first, someone else will benefit.

This is a collective action problem. The same logic often applies to gamblers. Mr Stambaugh, writing for Knowledge@Wharton, put it this way: "Most of us think that if we could just get the other guy to take his money off the table then there would be a better opportunity for me to outperform... We realise that if we pull out a lot, all we are doing is leaving money on the table for the guys who don't pull out."

So, rationally, what should happen is what has happened. Investment management is a young discipline – as recently as the 1950s individuals held more than 90 per cent of the stocks traded on the New York Stock Exchange. As the industry grew, active managers dominated. Then they grew too big and pushed against diminishing returns, so passive indexing grew. Collective action problems mean that active management's share of the pie continues to be greater than it should.

What does this mean for savers? The arguments for index funds remain overwhelming. Yes, as index funds grow, they will create more opportunities for active managers. Active management will never go away. But when you entrust money to an active manager, make sure it is one with a specific plan to exploit a market inefficiency – not one just hanging on in hope that others will give up first.

'On the Size of the Active Management Industry', by Lubos Pastor and Robert F. Stambaugh. Free from: <http://ssrn.com/abstract=1532268>

Active Funds Have Time on Their Side: Lubos Pastor

March 7, 2012

It has been another disappointing year for investors in actively managed funds.

In 2011, about 79 percent of large-cap mutual fund managers trailed the Standard & Poor's 500 Index (S&P 500), according to Morningstar Inc. The average equity mutual fund lost almost 3 percent last year, compared with a 2 percent gain for the S&P 500, says Lipper U.S. Fund Flows. Hedge funds fared even worse, with an average loss of 5 percent, according to Hedge Fund Research Inc.

These weren't aberrations. Numerous studies show that most active funds have underperformed passive benchmarks over time, primarily due to costs and fees. Not surprisingly, most academics and many market professionals are recommending passive investing. Even superstar active managers such as Peter Lynch and Warren Buffett have advised most investors to hold index funds.

Investors have been listening. Exchange-traded funds are gaining popularity. Also, the share of assets invested in equity index funds relative to all equity mutual funds grew to 14.5 percent in 2010, from 5.2 percent in 1996, according to the Investment Company Institute.

Yet these figures indicate that most money remains invested actively. Why is the active management industry so large when its performance has been so poor?

Stupid Investors

Most explanations for this continued dominance suggest that investors aren't very smart. For example, they may be fooled by slick salespeople or are unable to correctly interpret performance data. Or they may believe they can all pick above-average fund managers. There is some truth to all these interpretations.

But investors don't have to be stupid. In a recent paper I wrote with Robert Stambaugh of the Wharton School of the University of Pennsylvania, we argue that the large size of the active management industry is understandable even if investors are smart. Our conclusion is based on the realization that this industry faces decreasing returns to scale. Any fund manager's ability to outperform a passive benchmark decreases as the industry grows.

The idea is simple. As the active industry grows, more money chases opportunities to outperform passive benchmarks, and such opportunities become harder for managers to find. Conversely, if the industry shrinks, less competition among the remaining active managers makes it easier for them to find mispriced securities and outperform.

At the extreme, if investors moved all of their money to index funds, markets would probably be rife with mispricing. With no active managers searching for mispriced assets, the first dollar invested actively would earn a high return by picking low-hanging fruit, tempting investors back into active funds.

For an analogy, think of active managers as police officers and of mispricing as a crime. If there were no officers patrolling the streets, there would probably be some crime. But as the number of officers increases, the amount of crime is likely to decline.

Decreasing returns to scale imply that the industry's alpha, which is the expected benchmark-adjusted return from investing in active funds, isn't constant. Instead, alpha decreases as the industry grows, and it increases as the industry shrinks, where industry size is measured in relative terms as the share of actively managed assets in total assets under management.

Alpha Revision

This inverse relationship between industry size and alpha offers an explanation for the continued popularity of active management. Investors require a small, but positive, alpha to invest in active funds to compensate for the associated risks. They don't know the exact value of alpha, but they learn about it by observing the funds' returns. If these returns turn out to be disappointing, investors revise their beliefs about alpha downward and reduce their investment in active funds.

Importantly, the reduction in active investment in response to underperformance is cushioned by the inverse relationship between industry size and alpha. In such instances, investors know that alpha is too low at the current industry size, but they also know that alpha will go up after they reduce their investment in active funds. As a result, the industry shrinks only modestly after a period of underperformance.

When returns are decreasing with scale, past underperformance doesn't imply future underperformance; it implies only that investors should shift some money from active funds to index funds. Following a period of underperformance, the active industry should shrink in relative terms, but it can remain large.

Stambaugh and I developed a model of active management under decreasing returns to scale and applied it to equity mutual funds. We showed that despite the industry's poor track record since 1962, its current size can be rationalized with decreasing returns to scale. By contrast, under the more traditional assumption of constant returns to scale, the industry would have disappeared years ago.

We also simulated the industry's future performance under decreasing returns to scale. We found that the industry is likely to remain large for decades even if it continues to underperform passive benchmarks. Importantly, the future performance of active managers is likely to be better than their past performance. Because of the rapid growth of indexing, the active industry today accounts for a smaller share of assets under management than ever before. A smaller industry should perform better in the future.

In addition, the growth of indexing itself creates opportunities for active investors. Index funds tracking popular indexes such as the S&P 500 and Russell 2000 tend to rebalance at index reconstitution dates so as to minimize tracking error. This rebalancing creates price pressure, which leads indexers to buy high and sell low. Active managers can profit at the expense of indexers by trading ahead of reconstitutions.

Sooner or later, the effects of smaller scale and index reconstitutions should improve the active managers' performance to attractive levels. But whether that will happen this year or 20 years from now is anybody's guess. Meanwhile, if you want to be on the safe side, stick to index funds.

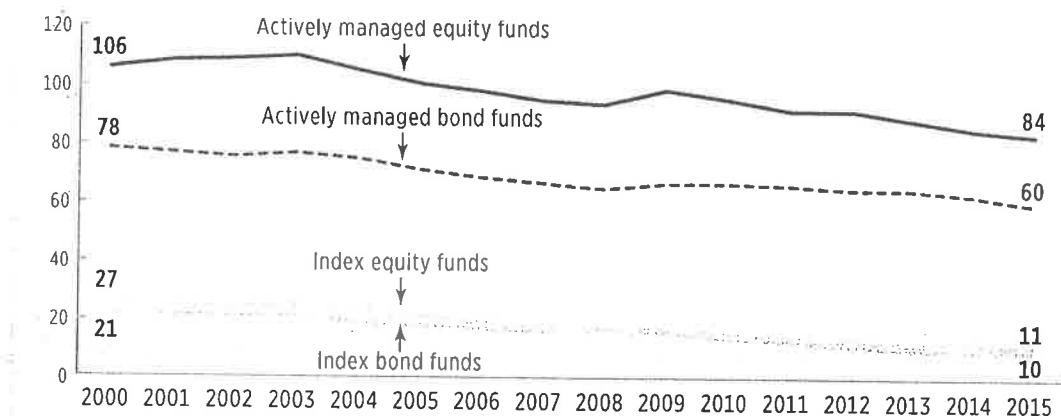
(Lubos Pastor is professor of finance at the University of Chicago Booth School of Business and a contributor to Business Class. The opinions expressed are his own.)

Source : 2016 Investment Company Institute Factbook

FIGURE 5.6

Expense Ratios of Actively Managed and Index Funds

Basis points, 2000-2015



Note: Expense ratios are measured as asset-weighted averages. Data exclude mutual funds available as investment choices in variable annuities and mutual funds that invest primarily in other mutual funds.

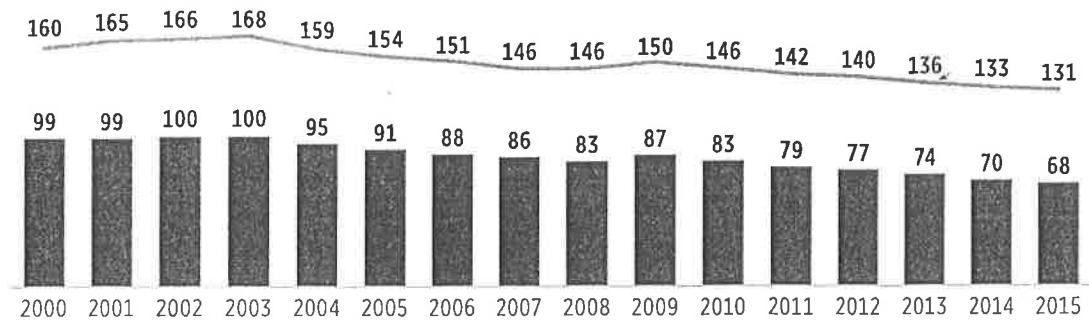
Sources: Investment Company Institute and Lipper

FIGURE 5.3

Fund Shareholders Paid Below-Average Expense Ratios for Equity Funds

Basis points, 2000-2015

— Simple average expense ratio
█ Asset-weighted average expense ratio



Note: Data exclude mutual funds available as investment choices in variable annuities and mutual funds that invest primarily in other mutual funds.

Sources: Investment Company Institute and Lipper

Index Funds Won't Always Save You Money

By DAISY MAXEY

Frugal investors often assume that index funds will save them money. But that isn't always the case. On average, index-tracking funds are indeed a lot cheaper than funds whose managers select individual securities.

Among diversified U.S. stock funds, for instance, actively managed mutual funds have annual expenses that average 1.22% of assets, while index mutual funds are at 0.67%, according to investment researcher Morningstar Inc. Indexed exchange-traded funds are even lower in cost, at an average 0.36%.

But "there are cases where you have index funds that are expensive for the type of exposure they're offering, and there are certainly active

funds that are very cheap," says Alex Bryan, a Morningstar analyst.

Here are some of the most expensive index U.S. stock funds and some of the lowest-cost actively managed ones:

The largest share class of the \$270.4 million **Rydex S&P 500 Fund** charges 1.58% in annual expenses. The fund gained 9.9% a year on average over the three years through April 14, lagging behind the S&P 500's 11.8% gain, Morningstar says.

A spokesman for Guggenheim Investments, which offers the Rydex funds, says the mutual fund is more expensive than some index funds because it is "priced twice daily and designed for tactical fund traders."

The \$163.6 million **Green Century Equity Fund**, with

expenses of 1.25%, invests in an MSCI Inc. index of stocks screened for environmental, social and governance criteria. The fund's custom index, with its "extensive screening process," is one of the factors that makes it more expensive

Some index funds are expensive for the type of exposure they offer.

than other index funds, says Leslie Samuelrich, president of Green Century Capital Management, the fund's manager. (For the fiscal year through July, the fund accrued fees to MSCI equal to 0.06% of its July 31 assets.) The fund's fees

also help a shareholder-advo-

cacy program to promote corporate environmental responsibility, she says. Green Century Equity Fund gained 11.3% a year on average over the past three years, according to Morningstar.

The \$171.7 million **Victory CEMP U.S. 500 Enhanced Index Volatility Weighted Index Fund** has expenses that are capped at 0.99% by Victory Capital Management Inc. at least through Oct. 31, 2017, according to the prospectus. Excluding that subsidy, the expenses would be 1.22%, the prospectus shows. The fund tracks a benchmark, created by a company Victory Capital acquired, that adjusts its stock-market exposure in an effort to limit losses in down markets.

The \$6.6 billion **Primecap Odyssey Growth** has expenses of 0.64%, while sibling **Primecap Odyssey Stock**, with \$5.6 billion in assets, charges 0.65%. Both gained nearly 12% a year on average over the last three years. Primecap Management Co. also manages funds for Vanguard that are currently closed to new investors.

Also among the inexpensive actively managed U.S. stock

funds from Vanguard are the "alternative indexing" funds, says Mannik Dhillon, head of investment solutions, product and strategy for Victory Capital. The fund gained 9.7% a year on average over the past three years.

Vanguard Group, which pioneered index investing, also offers some inexpensive actively managed funds. The \$20.2 billion **Victory Income Fund**, which typically invests in U.S. companies that consistently pay dividends, has expenses of just 0.26% on its basic investor shares. The charge drops to 0.17% on the Admiral shares, which are open only to investors who hold at least \$50,000 in the fund. The fund gained 10.6% a year on average over the past three years.

The \$53.8 billion **Dodge & Cox Stock Fund**, which invests mostly in large stocks that appear to be temporarily undervalued, has expenses of 0.52%. The fund gained an average of 9.9% a year over the last three years.

How Passive Funds Trim Your Tax Bill

Less frequent trading and other key factors help lower taxes on hands-off investments

By LAURA SAUNDERS

Here is a plus for passive investing over active: lower taxes.

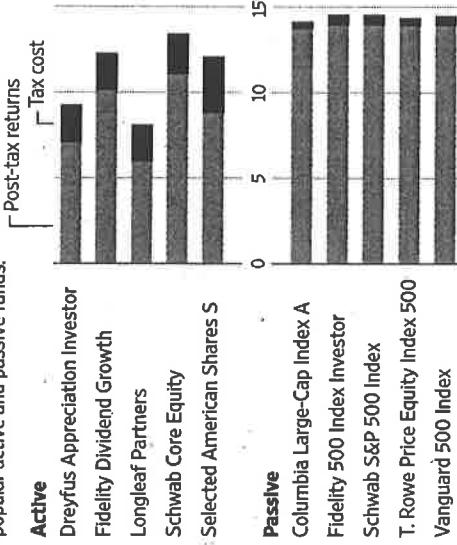
Taxes knocked an average of 0.96 percentage point a year off the returns of about 2,000 actively managed U.S. stock mutual funds over the 15 years ended in September 2014, if they were held in taxable accounts rather than tax-sheltered retirement plans, according to research by Vanguard Group.

By contrast, taxes reduced the returns of 130 broad-based U.S. stock index funds by an average of 0.69 percentage point a year over the same period—about one-third less. The S&P 500's annualized return was 2.91% during this period.

The tax efficiency of passive funds is due partly to the fact that they trade less than actively managed funds. By law, funds must pay most of their realized gains to investors

Tax Take

Passively managed funds are often more tax efficient than actively managed ones. Here are the five-year annualized returns for five popular active and passive funds.



Note: Returns as of 8/31/16 estimated using SEC methodology, which assumes a high-bracket taxpayer. After-tax returns do not include taxes due after the liquidation of a position.

Sources: Morningstar; Columbia Threadneedle Investments; T. Rowe Price Group; Southeastern Asset Management; BNY Mellon

THE WALL STREET JOURNAL.

Exchange Commission, estimate the annual tax cost to an upper-bracket taxpayer of holding an investment and aren't intended to reflect returns if an investor sells the holding. Investors can check this statistic for many funds on Morningstar's website.

Besides less frequent trading, other factors help lower taxes on passive investments. In index mutual funds, managers frequently buy and sell small amounts of securities to track the benchmark, so if they need to meet shareholder redemptions, they can sell lots that were bought at higher costs. This, in turn, reduces taxable gains paid out to investors.

Managers of exchange-traded funds have a different tax-saving technique that involves lower-cost shares. To keep the ETF tracking its index, designated middlemen can buy ETF shares in the open market and trade them to the fund in exchange for underlying stocks in the portfolio held by the fund.

These transfers to middlemen are tax-free because of a benefit known as in-kind redemption. As a result, ETFs can shed their lower-cost shares with no tax cost. This practice resets upward the cost of the ETF's portfolio,

reducing taxable gains paid to investors.

Vanguard Group seeks to join the benefits of these two techniques in most of its offerings by making its ETFs a share class of an index fund with the same portfolio. So while the Vanguard 500 index fund is minimizing taxes by selling high-cost shares, the Vanguard 500 ETF is avoiding them by shedding low-cost shares.

This portfolio hasn't distributed capital gains to investors in many years. Do passive strategies come with pitfalls? Some people fear that if markets drop sharply and investors flee, passive funds could be forced to sell positions with large embedded gains to meet redemptions. Thus investors selling at a loss could also wind up with taxable gains.

Mark Wilson, a portfolio manager with the Tarbox Group in Newport Beach, Calif., says none of the broad-based index funds used by his firm paid out capital gains during the down markets ending in 2001 and 2009.

"We tell clients, 'It's not what you make, but what you keep.' Active funds have to do very well just to achieve the same after-tax returns as passive ones," he said.

BLOOMBERG NEWS

At some actively managed funds, the tax hit has been higher than average in recent years. According to Morningstar, taxes cost investors holding the popular Schwab Core Equity Fund 2.4 percentage points a year for the same period.

Morningstar's calculations, which use methodology prescribed by the Securities and

Growth Fund, the annual tax cost was 2.2 percentage points of the 12.34% return for the same period. The tax cost for each firm's S&P 500 index fund was about 0.6 percentage point a year for the same period.

"Taxes affect investment returns at least as much as fees, and sometimes more," said Joel Dickson, an expert Aug. 31 at Fidelity's Dividend

At some actively managed funds, the tax hit has been higher than average in recent years. According to Morningstar, taxes cost investors holding the popular Schwab Core Equity Fund 2.4 percentage points a year for the same period.

Morningstar's calculations, which use methodology prescribed by the Securities and

Thursday, December 12, 2013 | C3

In corporate news, Facebook shares gained more than 4% in early after-hours trading after S&P Dow Jones Indices said the social-media-company's stock would be added to the S&P 100 and S&P 500 indexes.

FRIDAY, MARCH 24, 2006 C1

Google Will Join S&P 500 Index; Dow Pulls Back

By E.S. BROWNING

STOCKS CONTINUED to yo-yo, giving back some of Wednesday's gains as investors turned their focus away from profit strength and back to fears of higher interest rates and higher oil prices.

But some of the day's biggest news came after the close of trading, when it was announced that Internet darling Google Inc. will be added to the Standard & Poor's 500-stock index.

While the inclusion had been anticipated, the news sent Google shares soaring 9% in after-hours trading because index funds that track the S&P 500 now must buy the shares.

The Google addition will be effective after the end of trading on March 31, said S&P, a unit of McGraw-Hill Cos. (Google will replace oil and gas producer Burlington Resources, which is being acquired by ConocoPhillips.)

Berkshire Hathaway Added to S&P 500

By SCOTT PATTERSON

Berkshire Hathaway will join the Standard & Poor's 500-stock index, becoming one of the biggest additions to the benchmark index in years.

The iconic company, run by Warren Buffett for 45 years, had been excluded from the index because its high share price meant its shares didn't trade enough to meet the index's standards.

That changed when shareholders approved a 50-1 stock split of its Class B shares last week as part of Berkshire's deal to buy railroad Burlington Northern Santa Fe Corp. last year. Berkshire will replace Burlington Northern in the index, as well as in the S&P 100 index.

After the split, "liquidity is no longer an issue," said David Blitzer, chairman of S&P's index committee, in an interview. Mr. Blitzer said the committee had decided to add Berkshire to the index several weeks ago.

Since Berkshire shareholders approved the stock split on Feb. 20, its B shares gained 2% through the close of regular trading Tuesday, compared with a 3% decline by the S&P 500. Some of that increase was due to investors trying to get ahead of buying by index funds. In after-hours trading on Tuesday, Berkshire class B shares were up \$5.89, or 8.66%, to \$73.89.

Berkshire, the biggest U.S. company not in the index, will account for about 1.1% of the S&P 500's overall market cap, and it will be the 21st largest company in the index, according to S&P senior index analyst Howard Silverblatt.

Berkshire's addition to the index means fund managers who track it will need to rush to buy shares. Many index funds controlled by money managers, such

as Vanguard Group, are benchmarked to holdings in the S&P 500, a broad gauge of corporate America. S&P estimates that more than \$3.5 trillion in assets are held in investment funds, including index funds, tied to components of the S&P 500.

Berkshire's market value of \$160 billion makes it one of the biggest additions to the index in years. At 11% of the index, investors would need to buy roughly \$38 billion worth of Berkshire shares.

The index's additions and deletions usually come among its smallest constituents. A more typical addition occurred last week when S&P added NRG Energy Inc., which has a market value of \$6.4 billion, to the index replacing Sun Microsystems Inc., which is being bought by Oracle Corp.

Berkshire investors applauded the move. S&P's decision could "have a bigger impact than the market is giving it credit for," said Jonathan Carmel, founder of New York money manager Carmel Asset Management, which owns Berkshire's A shares.

Because most Berkshire investors tend to be buy-and-hold investors, there may not be enough stock to go around when index fund managers rush to buy, he says. In order to get enough investors to agree to sell, prices may need to rise sharply.

"This is not a shareholder base who gives up their shares easily," said Mr. Carmel.

The move before the Burlington deal closes will likely mean Burlington shareholders will get fewer Berkshire shares when the deal closes, since Berkshire stock was up sharply after the announcement.

Berkshire's Class A shares were up about 7% in late electronic trading.

May 3, 2013, 5:42 p.m. ET

Macerich to Replace Coventry in S&P 500

By Nathalie Tadéna

Real-estate investment trust Macerich Co. (MAC) will join the S&P 500 index, replacing managed-care company Coventry Health Care Inc. (CVH) following its acquisition by Aetna Inc. (AET), S&P Dow Jones Indices said.

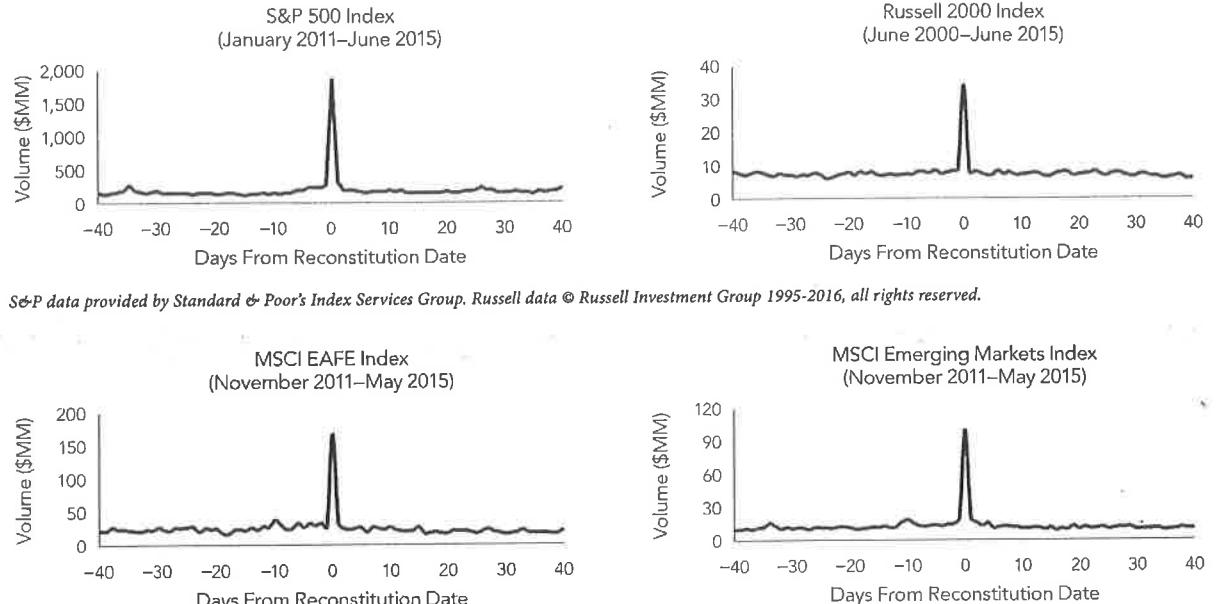
Macerich's shares were up 2.1% to \$71.89 after hours. The shares of companies joining the S&P 500 often rise because many portfolio managers try to track the index. To do that, they must buy shares of the companies that become part of the index.

Aetna, which is already a part of the S&P 500, agreed in August to buy Coventry in a \$5.7 billion cash and stock deal that will bolster Aetna's presence in government-financed health care.

Three-dimensional-printer maker 3D Systems Corp. (DDD) will replace Macerich in the S&P MidCap 400. In turn, REIT CoreSite Realty Corp. (COR) will take 3D Systems' place in the S&P SmallCap 600.

The changes are scheduled to take effect after the close of trading May 8. Aetna's acquisition of Coventry is expected to complete on or around that date.

-Write to Nathalie Tadéna at nathalie.tadéna@dowjones.com

Exhibit 1: Equal-Weighted Average Trade Volume for Index Additions and Deletions

S&P data provided by Standard & Poor's Index Services Group. Russell data © Russell Investment Group 1995-2016, all rights reserved.

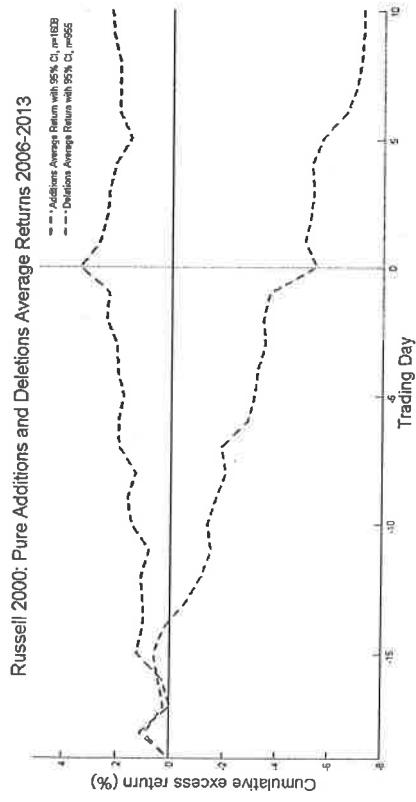
MSCI data © MSCI 2016, all rights reserved.

Exhibit 2: Effect of Delaying Reconstitution Month

	Rebalanced in June			Rebalanced in September			Difference Between Delayed and Actual		
	Russell 1000 Value Index	Russell 2000 Index	Russell 2000 Value Index	Delayed R1V	Delayed R2	Delayed R2V	R1V: Delayed – Actual	R2: Delayed – Actual	R2V: Delayed – Actual
Average Monthly Returns, January 1990–July 2015									
All Months	1.02%	0.99%	1.16%	1.06%	1.15%	1.35%	0.04%	0.15%	0.18%
October–June	1.43%	1.55%	1.70%	1.43%	1.55%	1.70%	0.00%	0.00%	0.00%
July–September	-0.17%	-0.65%	-0.42%	-0.02%	-0.05%	0.31%	0.15%	0.60%	0.73%

Russell data © Russell Investment Group 1995–2016, all rights reserved. Past performance is not a guarantee of future results. Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio.

Source : William Collins-Dean, Chicago Booth
Index Rebalance Effects, 2014

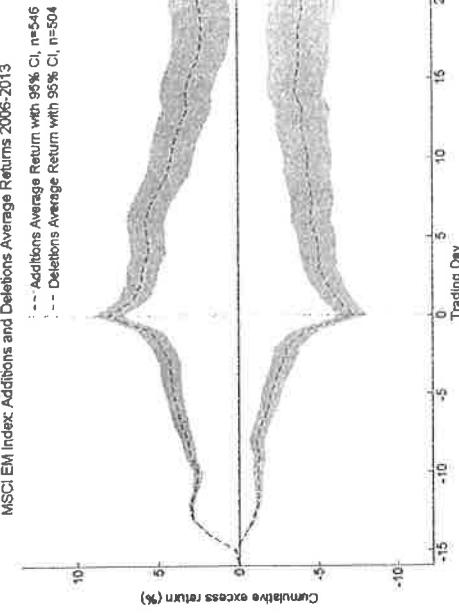


Additions N CER

Deletions N CER

Additions + Deletions CER

Year	N	CER
1990	243	3.5%
1991	382	2.2%
1992	424	-1.6%
1993	376	1.0%
1994	424	-0.4%
1995	333	7.0%
1996	384	-3.5%
1997	410	8.0%
1998	393	-0.1%
1999	348	9.6%
2000	471	31.0%
2001	450	5.6%
2002	358	8.5%
2003	275	1.1%
2004	278	-2.0%
2005	183	6.0%
2006	196	1.4%
2007	179	1.0%
2008	241	0.7%
2009	252	13.3%
2010	212	2.0%
2011	163	1.2%
2012	188	4.3%
2013	177	3.2%
2014	380	5.2%
2001-2005	317	3.8%
2006-2013	301	3.0%
1990-2013	307	4.7%



Additions N CER

Deletions N CER

Additions + Deletions CER

Year	N	CER
2006	803	1.5%
2007	380	-6.0%
2008	381	-7.6%
2009	309	-3.4%
2010	402	-3.0%
2011	238	-3.7%
2012	304	-10.1%
2013	223	-5.3%
2014	227	-7.9%
2001-2005	318	-3.1%
2006-2013	257	-5.6%
1990-2013	217	-10.0%
2006	169	5.6%
2007	204	-1.6%
2008	207	1.4%
2009	156	4.0%
2010	154	2.8%
2011	134	0.7%
2012	120	-11.5%
2013	169	-5.3%
2014	106	0.0%
2006	103	5.2%
2007	13	-14.8%
2008	290	-5.7%
2009	213	-2.0%
2010	346%	34%
2011	119	-5.5%
2012	62%	62%
2013	27	-4.7%
2014	50%	50%
2001-2005	(1.63)	(-0.13)
2006-2013	(1.63)	(-0.13)
1990-2013	(1.63)	(-0.13)

$$\text{Regression: } R^e - R^d = \alpha + b(R^m - r_f) + S(SMB) + H(HML) + M(MOM) + L(Liq) + e$$

	RWMF	Liq	a	b	s	h	m	l
(1)			9.47 (5.14)	0.58 (1.14)				-1.36 (-1.97)
(2)	RWMF							
(3)	RWMF + SMB + HML + MOM		6.13 (2.02)	0.07 (0.17)	0.9 (1.61)	-0.78 (-1.23)	0.492 (1.22)	
(4)	RWMF + SMB + HML + MOM + Liq		6.11 (3.88)	-0.02 (-0.06)	6.11 (1.50)	-0.78 (-1.37)	0.56 (1.55)	-0.97 (-1.93)

Table 1: CERs for Russell 2000 "pure" additions and deletions. The table shows the equal-weighted, buy-and-hold excess return for all qualifying stocks from the announcement date (May 31, when the new index is determined) to the rebalance date. The excess return on a stock is the difference between the stock return and the return on the Russell 2000 index. T-statistics are in parenthesis.

Table 3: Long-short portfolio of Russell 2000 additions (R^a) and deletions (R^d) regressed on Fama-French 3 factors + momentum + Pastor and Stambaugh's (2003) Liquidity factor. Sample period is 1990 through 2013. T-statistics are in parenthesis

Pakistan Stocks Get MSCI Boost

By QASIM NAIDMAN

reason."

ISLAMABAD, Pakistan—Despite its stock market being one-hundredth the size of mainland China's, Pakistan has managed to qualify for the popular MSCI Emerging Markets Index while its larger Asian neighbor has been left out in the cold.

The Pakistan Stock Exchange's benchmark KSE 100 index gained 2.8% Wednesday and rose further Thursday to be up a total of 1,234 points, or 3.3%, to a record close of 38,751.60 after MSCI's announcement late Tuesday.

MSCI's decision to snub China's A-stocks while upgrading Pakistan from a frontier market to an emerging market came down to capital mobility, said Saad Hashemy, chief economist at Topline Securities, a Karachi-based brokerage.

"The Pakistani market has no limitations on foreign ownership, no controls. People can bring in money and take it out," Mr. Hashemy said. "Over the years, liquidity in the Pakistani market has improved tremendously. That's the key

upgrade the country to the emerging-markets group will lead to significant foreign-investment inflows, considering the size of the index. Funds with assets valued at \$1.5 trillion track the MSCI Emerging Markets Index. Brokers said the upgrade is likely to attract other investors, too, considering Pakistan's stable macroeconomic indicators and steady growth at the stock exchange. Pakistan was removed from the emerging-market index in 2008 because of a deteriorating investment climate amid political instability.

In 2013. On Wednesday, Mr.

Sharif said the MSCI decision

"is a reflection of our prudent economic policies and strong financial discipline."

Pakistan's benchmark 100-stock index has gained more than 90% since the 2013 elections that brought Mr. Sharif's party into power. Gross-domestic-product growth for the 2015-16 financial year was 4.7%, below the targeted 5.5% but the highest pace in eight years.

Finance Minister Ishaq Dar



Pakistan Prime Minister Nawaz Sharif cites 'strong financial discipline' for getting MSCI's nod.

said earlier this month that after achieving stabilization targets, the government will aim to boost growth now. Mr. Dar said Pakistan won't seek assistance from the International Monetary Fund beyond the current program, which helped avert a balance-of-payments crisis and ends in September. As a result of the MSCI upgrade, brokers and analysts

estimated investment inflows at between \$300 million and \$500 million. Mr. Hashemy of Topline said his firm's "rough estimate" of inflows is \$600 million over the next year. "Total foreign holding [in Pakistani stocks] is \$6 billion to \$7 billion, so 10% is a big number," Mr. Hashemy said. Finance Minister Ishaq Dar

year. Reclassification of Pakistan to the emerging-markets index will occur in May 2017. Insight Securities, a Karachi-based brokerage firm, estimated investment inflows at

between \$300 million and

\$500 million.

Mr. Hashemy of

Topline said his firm's "rough estimate" of inflows is \$600 million over the next year.

"Total foreign holding [in Pakistani stocks] is \$6 billion to

\$7 billion, so 10% is a big

number," Mr. Hashemy said.

Finance Minister Ishaq Dar

Wednesday, June 15, 2016

THE WALL STREET JOURNAL

MSCI Deals Setback To China

Index provider isn't
ready to add local-
currency shares

By CAROLYN CUI

MSCI Inc., a widely followed global index provider, said Tuesday it wasn't adding China's local-currency shares to its benchmark emerging-markets index, a setback for China's efforts to join international markets.

STOCK INDEXES The inclusion of China's local-currency shares, known as A shares, had been widely anticipated by global investors and Wall Street. It was expected to bring tens of billions of dollars into China's stock market at a time when its economy is cooling and capital is fleeing. The MSCI Emerging Markets Index is tracked by money managers with some \$1.5 trillion of assets.

But MSCI said investor concern over the openness and transparency of Chinese markets, despite years of reform, convinced the index provider that China's A shares weren't ready for the index.

"International institutional investors clearly indicated that they would like to see further improvements in the accessibility of the China A shares market before its inclusion in the MSCI Emerging Markets Index," said Remy Briand, global head of research at MSCI.

MSCI's decision is a blow to Chinese authorities who

have been eager to attract more foreign capital to their stock market.

To win over MSCI, Chinese regulators recently stepped up their efforts, creating new rules that limit how long companies could suspend trading in their shares and allowing foreign money-management funds to take bigger stakes in the market.

The index provider welcomed those moves but said investors "stressed the need for a period of observation to assess the effectiveness" of these changes.

Some investors raised concern that Beijing could impose new controls during the next market selloff.

"We need to see how the regulators behave in turmoil again," said Jorge Mariscal, chief investment officer of emerging markets at UBS Wealth Management.

MSCI said its decision to hold off also reflected continuing issues for foreign investors, such as provisions that prevented them from taking out more than 20% of their investment each month.

The firm has already been reviewing the Chinese market for three years.

After MSCI declined to include the A shares in its index last year, Chinese stocks fell 40%, and about \$600 billion of market value was wiped out over the course of a few weeks.

But investors say the market is less likely to suffer a sharp selloff this time because share prices are at much lower levels.

Early Wednesday, the Shanghai Composite Index was up 0.2%, while the Shenzhen Composite was up 0.7%.

MSCI said it could still add A shares over the course of next year if China makes significant positive developments before the next review.

Without MSCI's inclusion of A shares in its benchmark emerging-markets index, most global investors will continue to exclude China's \$7 trillion yuan-denominated market, the second-largest stock market in the world behind the U.S.

—Julie Wernau
contributed to this article.

More Fund Managers Give a Nod to China

BY GREGOR STUART HUNTER

Big fund managers are saying for the first time that they are comfortable with including domestic Chinese shares in some global indexes, a sign that the mainland's huge stock markets may finally be coming of age.

BlackRock Inc., the world's largest money manager by assets, said Thursday that it supports including mainland shares in the benchmarks of **MSCI Inc.**, whose indexes are used by global money managers to guide trillions of dollars in investments. Deutsche Asset Management, one of the world's biggest managers of exchange-traded funds, also said that from the ETF perspective there are no more technical problems with including China's domestic stocks, known as A-shares, in MSCI indexes.

Other fund managers such as **UBS Asset Management**, **Fidelity International** and **Matthews Asia** said they think inclusion is becoming more likely.

MSCI, which typically tweaks its indexes each year around June, declined to comment.

Inclusion of A-shares in MSCI indexes could be a watershed for China's \$7.82 trillion in domestic stocks, the world's second-biggest pool after the U.S. China's markets have slowly opened to foreign investors, and in previous years

MSCI has said the markets weren't accessible or transparent enough to warrant inclusion of mainland stocks in its benchmarks. Only Chinese companies listed offshore in places such as Hong Kong and New York are included in MSCI indexes.

The inclusion of A-shares would mean that the many global fund managers, including pension funds and insurers, that invest based on MSCI indexes would have to add mainland stocks to their portfolios.

Funds that compare their performance to that of an MSCI index that included Chinese stocks would likely buy those shares as well.

MSCI's Emerging Markets Index is the most widely tracked benchmark of performance of stocks in the developing world and is followed by money managers with \$1.6 trillion in assets. Société Générale SA estimates that inclusion of A-shares in MSCI indexes could immediately lead global funds to buy about \$13 billion in Chinese shares, and that amount would rise as more Chinese stocks are included.

Chinese authorities have been lobbying for MSCI inclusion for years, taking steps to fix problems such as unclear ownership laws and curbs on the amount of money foreigners can invest in mainland shares.

THE WALL STREET JOURNAL.

Slow Start

MSCI wants to include a tiny sliver of the Chinese market in its indexes.



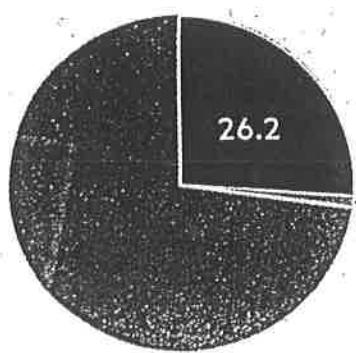
Sources: MSCI; HKEX (Data on Stock Connect trading link); World Federation of Exchanges (total listings)

THE WALL STREET JOURNAL.

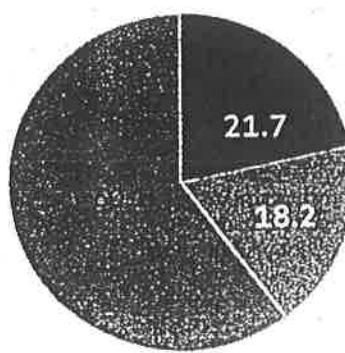
If MSCI includes A-shares in its Emerging Markets index

Per cent

If MSCI adds a 5% weighting for A-shares...

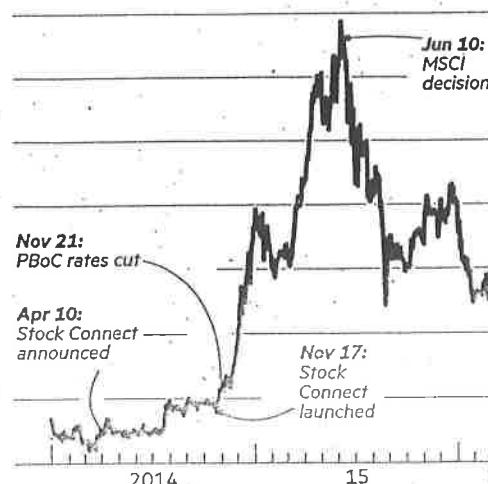


If all A-shares were fully included...



CSI 300 value index

Shanghai/Shenzhen equities ('000)



* Includes South Korea, Taiwan, India, South Africa, Brazil, Mexico, Russia

Sources: MSCI; Bloomberg; SG Cross Asset Research/Equity Strategy

Thursday 9 June 2016

FINANCIAL TIMES

Indexing Pioneer Advises Rivals: Do Nothing

By SARAH KROUSE

Indexing pioneer Jack Bogle has some near-term advice for many money managers that are losing customers to the firm he founded: Do nothing.

That strategy "is far more likely to preserve the profits of managers than slashing fees, or more aggressive marketing, or jumping (likely fruitlessly) on the bandwagon of low-cost traditional indexing," the founder of Vanguard Group said at a Morningstar Inc. conference Thursday.

In the long run, mutual-fund firms focused on active management—handpicking stocks and bonds—will likely be forced to fundamentally change their business structures to win investors' cash, he said.

"These are profit-making machines. They're going to have to gradually be weaned away from that," Mr. Bogle said in a separate interview Thursday with The Wall Street Journal.

Vanguard is the second-largest money manager in the world, with more than \$4 trillion in assets. It sells actively managed funds and index-tracking funds, though the ma-

jority of the firm's assets under management are in passive products. Investors have flooded the firm with cash in recent years as they lose faith in firms that rely on stock and bond pickers to beat markets. Vanguard has been able to keep its costs low and undercut rivals on price because it is owned by its fund shareholders, a structure Mr. Bogle put in place. It started the first index mutual fund for retail investors four decades ago.

Mr. Bogle, who is no longer involved in the day-to-day

management of Vanguard, predicted in his speech that more firms will adopt this "mutual" structure in the years ahead to win investors' cash.

"It's idealistic, of course it is. But sooner or later, competition is going to drive people in that direction," Mr. Bogle

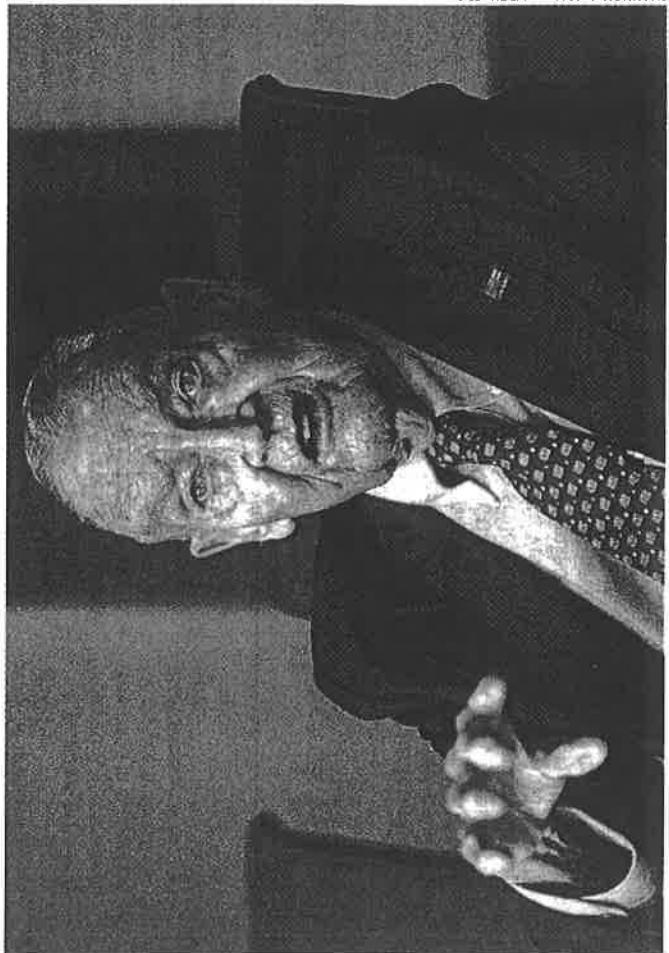
said in the interview.

The Vanguard founder in his speech separated today's mutual-fund industry into groups: Firms that are all or mostly owned by their founders and insiders and businesses owned by larger financial firms.

For mutual-fund firms owned by broader financial-services organizations, many will "be sold at bargain prices or merged with other similarly-situated fund managers," he said in his speech. He argued that managers shouldn't invest further resources in them.

The industry has benefited from a multidecade stretch of strong market returns that is unlikely to be repeated and favorable tax treatment for many of its retirement-savings products that may not last, Mr. Bogle said in his speech. He argued that the burden of changing the industry falls in part on mutual-fund boards, the overseers charged with approving management contracts.

"We have to get back to building products and services that are good for investors and good for the community. That is your long-term survival," he said in the interview.



SHANNON STAPLETON/REUTERS

Jack Bogle put in place Vanguard's structure in which it is owned by its fund shareholders.

management of Vanguard, predicted in his speech that more firms will adopt this "mutual" structure in the years ahead to win investors' cash.

"It's idealistic, of course it is. But sooner or later, competition is going to drive people in that direction," Mr. Bogle

Asset management

Index we trust

by being boring and cheap

WHEN John Bogle set up Vanguard Group 40 years ago, there was no shortage of scepticism. The firm was launching the first retail investment fund that aimed simply to mimic the performance of a stock index (the S&P 500, in this case), rather than to identify individual companies that seemed likely to outperform. Posters on Wall Street warned that index-tracking was "un-American"; the chairman of Fidelity, a rival, said investors would never be satisfied with "just average returns"; and the Securities and Exchange Commission (SEC), Wall Street's main regulator, opposed the firm's unusual ownership structure. The fund attracted just \$1m of the \$150m Vanguard had been hoping for, and suffered net outflows for its first 83 months. "We were conceived in hell and born in strife," Mr Bogle recalls.

Vanguard now manages over \$3.5 trillion on behalf of some 20m investors. Every working day its coffers swell by another billion dollars or so. One dollar in every five invested in mutual or exchange-traded funds (ETFs) in America now goes to Vanguard, as does one in every two invested in passive, index-tracking funds, according to Morningstar, a data provider. Vanguard's investors own around 5% of every public company in America and about 1% in nearly every public company abroad. Although BlackRock, a rival, manages even more money, Vanguard had net retail inflows of \$252 billion in 2015, more than any

other asset manager.

Impressive as they are, however, these statistics still understate Vanguard's influence. By inventing index-tracking, and providing it at very low cost, the firm has forced change on an industry known for its high margins and overcomplicated products. Delighted investors and disgruntled money managers speak of "the Vanguard effect", the pressure that the giant's meagre fees put on others to cut costs. Some rivals now sell passive products priced specifically to match or undercut it.

Ask any employee for the secret of Vanguard's success, and they will point to its ownership structure. The firm is entirely owned by the investors in its funds. It has no shareholders to please (and remuner-

ate), unlike the listed BlackRock or Fidelity, a privately owned rival. Instead of paying dividends, it cuts fees. Mr Bogle's rationale for this set-up is simple: "No man can serve two masters." The incentives of the firm and its customers are completely aligned, he says. Competitors implicitly agree. "How are we supposed to compete when there's a non-profit disrupting the game?" complains one.

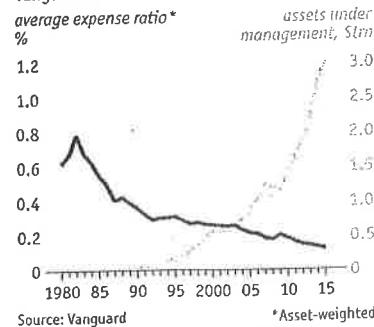
Bill McNabb, Vanguard's current CEO, says the ownership structure permits a virtuous cycle, whereby its low fees improve the net performance of its funds, which in turn attracts more investors to them, which increases economies of scale, allowing further cuts in fees. Even as the assets Vanguard manages grew from \$2 trillion to \$3 trillion, its staff of 14,000 or so barely increased. Meanwhile, fees as a percentage of assets under management have dropped from 0.68% in 1983 to 0.12% today (see chart). This compares with an industry average of 0.61% (or 0.77%, when excluding Vanguard itself). Fees on its passive products, at 0.08% a year, are less than half the average for the industry of 0.18%. Its actively managed products are even more keenly priced, at 0.17% compared with an average of 0.78%.

The index-trackers account for over 70% of Vanguard's assets and over 90% of last year's growth. Investors are gradually absorbing the idea that, in the long run, beating the market consistently is impossible, Mr McNabb says. That makes being cheap more important than being astute. Last year investors in America withdrew \$145 billion from active funds of different kinds and put \$398 billion into passive ones.

"In an industry with serious trust issues, Vanguard has proven an exception to the rule," says Ben Johnson of Morningstar. Its investors stay with it roughly twice as long as the industry average. The firm ac-

Crowd-pleaser

Vanguard's:



tively shuns short-term "hot money" because it brings extra trading costs. Mr McNabb tells the tale of the CEO of a foundation who wanted to park \$40m with a Vanguard fund for a few months. When the fund turned him away, he "went ballistic", complaining to the SEC, but Vanguard did not budge.

Vanguard also insists on keeping things simple. It offers only 70 different ETFs, compared with 383 at BlackRock. It steers clear of voguish products, such as funds of distressed energy firms. It refused, presciently, to set up an internet fund in the late 1990s.

But Vanguard's conservatism can also

The Economist June 11th 2016

be a weakness. It has been slow to expand abroad: its customer base is 95% American. It was slow to get into ETFs as well, allowing BlackRock to become the biggest provider, although Vanguard is catching up. BlackRock is also a one-stop shop for all manner of investments, including alternatives such as private equity and hedge funds, whereas Vanguard caters only to the mainstream. This may be one of the reasons why it does less well with the biggest institutional investors, which want lots of investment options and the kind of bespoke service that Vanguard does not offer.

There is always a chance that a clever

fintech startup, or a tech giant like Apple, might create a cheaper or simpler way for individuals to invest, luring away some of Vanguard's customers. As it is, it is getting harder for Vanguard to keep cutting fees: to shave its average fee by a hundredth of a percentage point, it needs to attract an extra \$560 billion in assets under management. And heavier regulation is always a risk. Last year the industry's giants won an important battle when they convinced regulators that, unlike banks, fund managers should not be subject to more onerous rules simply because they are big. But talk of rules intended to stem panic in collaps-

ing markets has not gone away.

Nonetheless, there is plenty of room for Vanguard to keep growing. Only a third of American equities are held by index-tracking funds, and a smaller share elsewhere. Regulators in America and beyond are discouraging or barring financial advisers from receiving commissions from firms whose products they recommend—a move that should push even more money to Vanguard as advisers lose the incentive to offer expensive products (Vanguard refuses to pay commissions).

As the move from defined-benefit to defined-contribution pensions continues, and as Asia sets up its retirement systems, there will be growing demand for the sort of "DIY" investing that has underpinned Vanguard's success. With interest rates and investment returns expected to be low for years to come, keeping fees down will be more important than ever. As Tim Buckley, the firm's chief investment officer, puts it: "The biggest advantage Vanguard has, aside from its structure, is the greed of our competitors."

THE NEW BASICS

The War Between the Indexes

By JOE LIGHT

Exchange-traded fund companies have battled each other for years by cutting expense ratios to rock-bottom levels.

Now, some are trying to save money by switching the indexes they track. But the far bigger impact for investors will come from differences in the indexes themselves, experts say.

On Oct. 26, FTSE Group, best known for its FTSE 100 Index of companies on the London Stock Exchange, announced it had set up an exchange-traded-products division to compete for the business of ETFs that passively track indexes.

That came on the heels of a big win for the company earlier in October, when fund giant Vanguard Group announced it would use FTSE indexes for six of its international funds beginning in January 2013, replacing ones provided by MSCI.

Vanguard said another 16 of its U.S. stock and balanced funds would use indexes created by the University of Chicago's Center for Research in Security Prices, or CRSP, replacing the MSCI indexes it previously used.

Vanguard officials say FTSE and CRSP will charge less money to license their indexes, which means it can reduce expense ratios for investors.

The index-licensing fees make up only a portion of expense ratios, and the fractions of a percentage point saved in fees will pale in comparison with the ramifications of using the new indexes, says Dave Nadig, director of research at ETF analytics firm IndexUniverse. Much more important for returns "will be the change in holdings and how the funds are run," he says.

Take the Vanguard MSCI Emerging Markets ETF, which has an expense ratio of 0.2% and tracks the MSCI Emerging Markets Index. In January, Vanguard will begin moving the ETF to the FTSE Emerging Index.

The change could cause Vanguard's licensing costs to dip below 0.02% per fund, says Vijay Sumon, director of quantitative research at HSBC—meaning that segment alone would cost an investor about \$2 for every \$10,000.

Yet the FTSE and MSCI indexes have a huge difference: While MSCI's index allocates almost 15% to Korean stocks, FTSE classifies South Korea as a developed country, and its emerging-markets index owns no Korean stocks. Conversely, FTSE includes the United Arab Emirates, Pakistan and Bermuda, while MSCI doesn't.

That difference will ultimately be more important than the ex-

pense-ratio savings, Mr. Sumon says. It also will cause the performance of the Vanguard emerging-markets ETF to deviate significantly from other emerging-markets ETFs that still track the MSCI index, such as the iShares MSCI Emerging Markets Index Fund, says Rick Ferri, founder of Portfolio Solutions, which manages \$12 billion.

The differences aren't limited to international funds. The U.S. stock CRSP index that the Vanguard Total Stock Market ETF will start tracking next year holds more small-company stocks than the one it currently tracks, Mr. Ferri says.

Over the long term, that could help improve the ETF's performance, he says, though the fund will probably be slightly more volatile.

ETF firms hope to shave costs by trading indexes. But not all indexes are alike.

There also will likely be a few changes in holdings of specific companies. Warren Buffett's Berkshire Hathaway, for example, has A and B share classes, which represent different-size slices of the company. MSCI's U.S. Broad Market Index includes only the B shares, while CRSP's index includes both.

That means Vanguard's total-market index fund will pick up about \$1 billion extra in Berkshire stock when it makes the switch, says Allan Roth of Wealth Logic, a fee-only financial adviser in Colorado Springs, Colo.

For investors, the changes mean they must pay close attention to the holdings of the ETFs

that make up their portfolios, even if the names of the ETFs are similar, Mr. Ferri says.

Mixing and matching ETFs from different fund companies could cause unintentional overlap, says Mr. Nadig from IndexUniverse. If an investor holds a developed international ETF that follows FTSE indexes and an emerging-markets ETF from MSCI, for example, he will end up with a huge helping of Korean stocks.

Investors also should shy away from ETFs that track indexes that are overly predictable and can be gamed by hedge funds and other managers, says William Bernstein, an investment manager at Efficient Frontier Advisors in Eastford, Conn. Managers sometimes buy stocks about to enter an index with the expectation that purchases by index funds will soon drive share prices higher. That hurts index funds' performance.

The most vulnerable indexes are those that are highly followed and rebalanced frequently and predictably, Mr. Bernstein says. A prime example: the Russell 2000 index, which tracks small-company stocks and has a high turnover that investors can easily foresee, he says.

Investors in ETFs that change indexes might also see their performance lowered by temporary transition costs, as the fund undertakes the buying and selling needed to rebalance into the new index, Mr. Roth says.

Such costs, which could include potential taxes from capital gains and brokerage commissions, can eat into fund performance.

Vanguard ETF strategist Joel Dickson says he doesn't expect the funds to have capital gains as a result of the switch and that Vanguard will keep other transition costs to a minimum.



Vanguard will buy more shares of Warren Buffett's Berkshire Hathaway.

Vanguard Drops MSCI Benchmarks For 22 Funds

By MIA LAMAR

Shares in index provider MSCI Inc. plunged Tuesday after mutual-fund giant Vanguard Group said it would use a different yardstick for 22 of its index funds.

MSCI shares closed down \$9.61, or 27%, at \$26.21, their lowest level in three years.

Vanguard said cost was the main factor behind the decision. As part of the switch away from MSCI indexes, 16 U.S. funds with \$367 billion in assets under management will move to benchmarks developed by the University of Chicago. Six Vanguard international stock funds with \$170 billion in assets under management will be realigned to follow indexes maintained by London-based FTSE Group.

The change will become effective in January, Vanguard said.

Competition is heating up in the lucrative index industry as exchange-traded funds, which often track a collection of shares or other financial instruments, continue to proliferate. Companies such as MSCI decide the components and the weight of those components in various indexes. Mutual-fund companies and ETF providers in turn pay index companies a fee, usually a small percentage of assets under management.

Vanguard's move raised fears that other major mutual-fund firms could also seek cheaper benchmarks, a concern MSCI Chief Executive Henry Fernandez sought to contain in a conference call with analysts.

Mr. Fernandez said he spoke Tuesday morning with Mark Wiedman, global head of BlackRock Inc.'s iShares ETF business. Wiedman "could not have been more complimentary" of MSCI, he said. Mr. Wiedman echoed those sentiments in a public statement, calling MSCI "the gold standard of global and international equity indexes."

While the loss of Vanguard may be a blow to MSCI's credibility, research from Standard & Poor's Ratings Services on Tuesday called it a "small part of the overall revenue base." S&P pegged Vanguard's contribution at under 3%. MSCI on Tuesday estimated the shortfall next year at roughly \$24 million.

MSCI was spun off from Morgan Stanley in 2007.

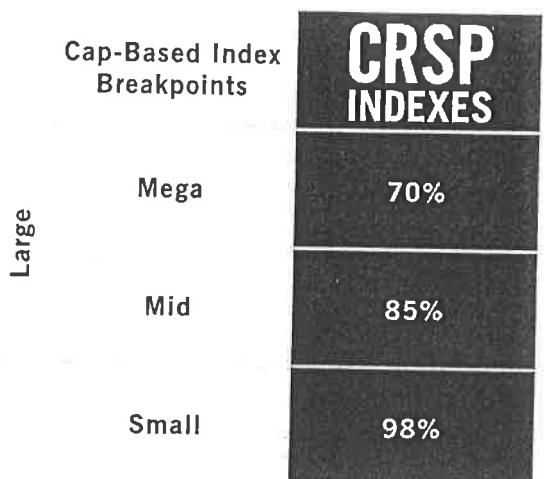
Tess Stynes and Amy Or contributed to this article.

Number of publicly traded U.S. stocks



Source: Center for Research in Security Prices.

Cap-Based Index Breakpoints



Large

Mega

Mid

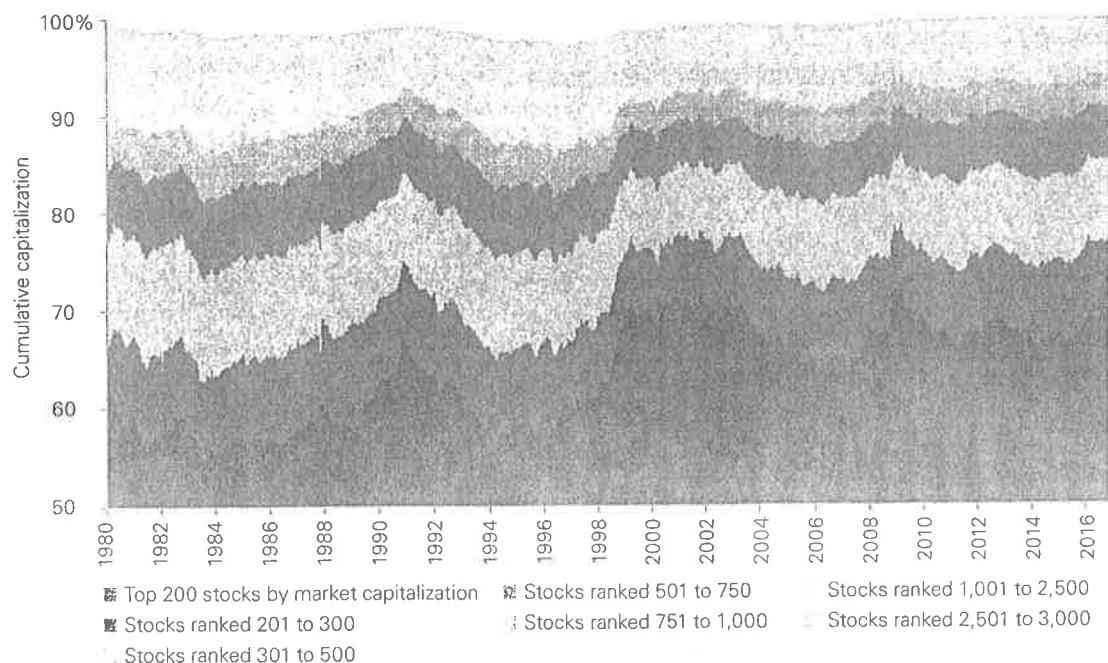
Small

**CRSP
INDEXES**

Source: Vanguard, *ETF Perspectives*, Spring 2017.

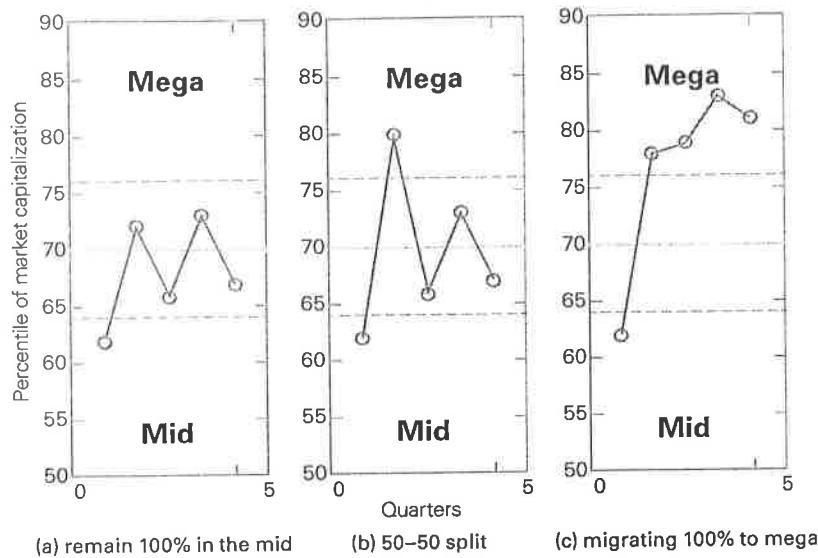
Market capitalization of the number of publicly traded stocks

The value of portions of the market can change relatively quickly. Note that a mega-cap index of the top 200 stocks jumped from around 57% of capitalization in the mid-1990s to almost 70% five years later.

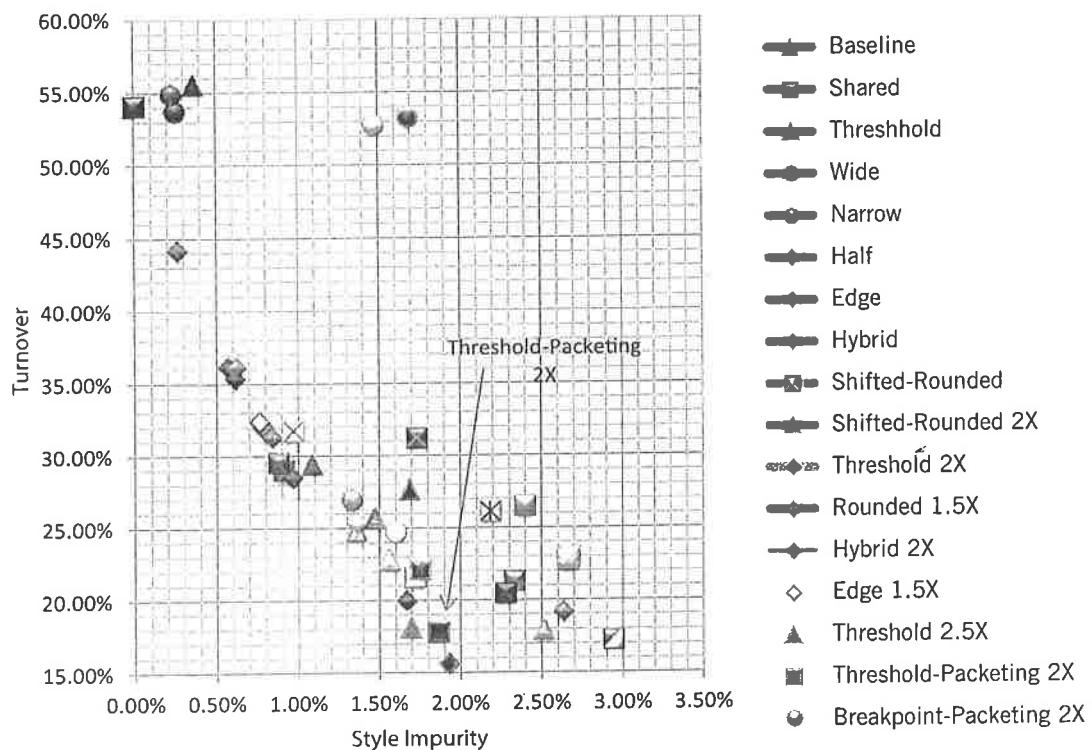


Source: Center for Research in Security Prices.

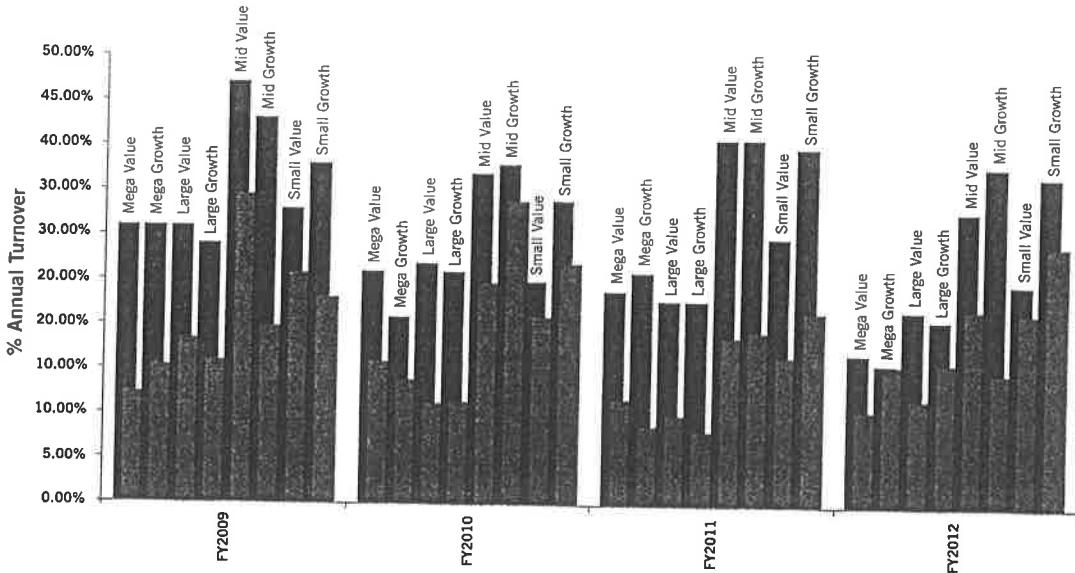
How CRSP performs banding and migration as securities move between size categories



Source: Center for Research in Security Prices.



Existing Vanguard ETF Product Turnover vs. Estimated Turnover Using CRSP Indexes



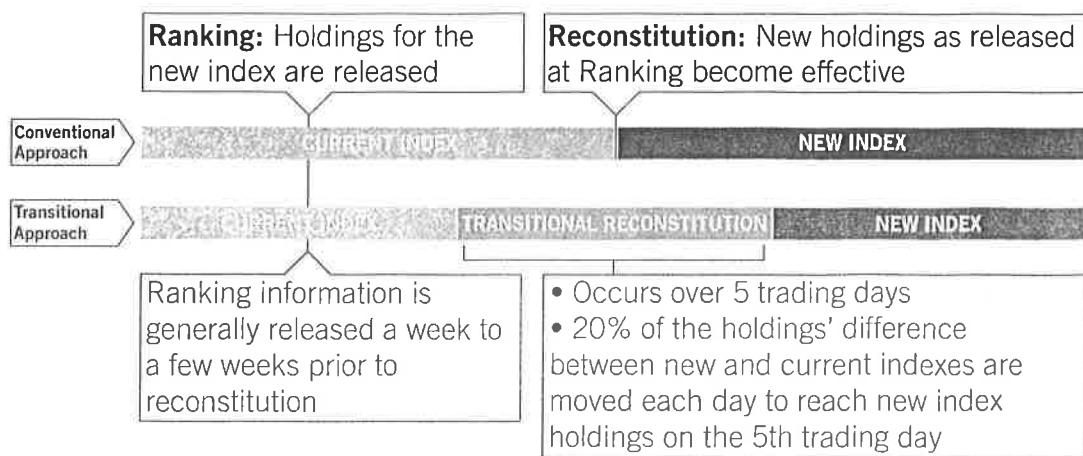
Vanguard Value/Growth ETF Product Turnover (in blue) vs. Estimated CRSP Value/Growth Index Turnover (in red); Source: CRSP, Vanguard reports available as of 03/08/13. Note: FY2009 ending 8/31/09 is first full period for Mega Cap ETFs; other ETFs have 12/31 FYE.

TRANSITIONAL RECONSTITUTION

CRSP recognizes that active managers usually don't change portfolio positions over a single day. Rather, it is common for active managers to gradually adjust their holdings to mediate market impact by lowering the daily trading volume. To better align index methodology with the investment community's best practices, CRSP introduced a five-day transitional reconstitution that moves 20% of the change in holdings each day from the current index to the new target index's holdings as computed on ranking day.

Transitional reconstitution will be implemented during the September reconstitution in 2017. Ranking day will be September 1, 2017. Transitional reconstitution will occur from September 13, 2017 through September 19, 2017.

The illustration below demonstrates the difference between the conventional and transitional reconstitution.



Market leaders face pressure from upstarts

Competition
Smaller indexers are challenging the biggest players on cost, says Chris Flood

earnings of \$428m, a rise of 8.8 per cent on 2015, according to Morgan Stanley.

Almost two-thirds of the ETF industry's assets track benchmarks provided by the four largest index providers. However, smaller rivals are intensifying their efforts to win a larger share of this highly profitable market.

Morningstar last month announced that it would offer more than 100 global equity indices to users for free. The initiative has tempted 25 investment managers including Eaton Vance, Dodge and Cox, and Guggenheim Investments.

Global ETF assets have risen more than fourfold since the end of 2008 to reach \$3.4tn, according to ETFGI, a London-based consultancy. This has generated unprecedented profits for index providers, particularly the four leading players: S&P Dow Jones Indices, MSCI, FTSE Russell and Bloomberg.

A handful of providers control the vast majority of the indexing market and they are using their power to dramatically increase fees, says Joe Mansueto, chief executive of data provider Morningstar.

Profit margins for MSCI's indexing business this year are forecast to reach 70 per cent, generating underlying

aggressive price competition, even though ETF managers such as BlackRock and Vanguard are fighting a cut-throat price war to attract investors.

Solactive, a Frankfurt-based company set up in 2007, is also attempting to disrupt the indexing market. It charges a flat fee for its indices, in contrast to the larger players that base their charges on assets under management tied to their benchmarks.

Steffen Scheible, Solactive's chief executive, says there is "a disconnect" in pricing between fund managers and mainstream index providers.

"There are perhaps only 20 global benchmarks where the brand name can add value. So we are starting to see more fund managers [changing] benchmarks," he says.

The most notable example to date is Vanguard's decision in 2012 to drop MSCI in favour of CRSP indices as the benchmark for some of its domestic index funds. But Toni Kaplan, a Morgan Stanley analyst, says Vanguard's switch was "an exception".

He adds that traditional benchmarks weighted by market capitalisation are not based on any proprietary methodology and can be easily and cheaply replicated.

However,

and so it can be viewed as a red flag by investors," she says.

Mit Arya says inertia among fund managers remains a problem but there is "perceptible change" under way. "We are moving to a new reality as to what index licensing costs should be," he says.

Manoj Mistry, head of passive asset management for Europe, the Middle East and Africa at Deutsche Asset Management, says that the importance of index branding varies between asset classes and different markets. Although well known equity market indices such as the S&P 500 and FTSE 100 are widely used, the choice in fixed income tends to be more of an open field.

Fund managers using fixed income indices tend to focus more on the quality of pricing data, as the majority of bond trading is done through over-the-counter private bilateral trades, says Mr Mistry.

"The timing of when bond prices are captured is vitally important as this matters for determining a fund's net asset value, its trading error and also for pricing in the creation and redemption of ETF units.

These pricing differences are less pronounced in equity markets where the majority of

trading is done on an exchange," he says.

Bloomberg, which last year agreed to buy Barclays' index business, plans to offer clients the ability to create and back-test their own custom-built indexing strategies.

Some asset managers, such as WisdomTree, already use proprietary built indices to construct ETFs. Nizam Hamid, head of ETF strategy at WisdomTree in Europe, says this is not done solely to save costs.

"Using our own indices allows us to create unique products and helps us to differentiate our strategies from other ETF providers," he says.

In two of the industry's best-selling ETFs last year, WisdomTree used in-house indices that provide exposure to dividend-paying European and Japanese exporting companies while also protecting against currency fluctuations.

Mr Scheible says he expects to see many more niche ETFs launched as the cost of building new products will continue to fall.

"But there are no established branded indices for these niche strategies. So we will see fund managers moving to index providers that offer a lower fee model," he says.

with the tight-knit networks of traders located in a few places, means there are still opportunities for cheating. "A voluntary code of conduct makes things look like they have changed. It is more about PR. The organisation, called the FICC Markets Standards Board, has begun issuing guidance to traders around appropriate conduct and what practices to avoid.

Mark Yallow chairs the organisation, which is funded by subscription from members. These range from HSBC to Royal Dutch Shell, the oil producer, and Vodafone, the telecoms group. Mr Yallow is optimistic about the board's impact on the industry.

"It is absolutely the goal to prevent a repeat of the forex rigging," he says. "We are trying to create a granular, commonly agreed standards of practice which firms will voluntarily adhere to. The intention is thus to prevent that kind of thing from happening again."

Other forex experts, however, are sceptical that industry-led initiatives alone will be effective in ensuring bad behaviour does not reoccur. There are concerns that new rules from regulators have not gone far enough.

Andre Spicer

professor of organisational behaviour at London's Cass Business School, says: "[The industry]

has dodged the more thorny issue of

market design.

Because there is no

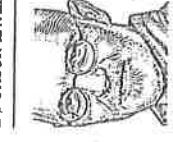
centralised venue for trading, only

traders themselves have a good understanding of order flow. This, coupled

THE INTELLIGENT INVESTOR

Are Index Funds on Track to Become Even Harder to Beat?

By JASON ZWEIG



Investors, like the Pilgrims at the first Thanksgiving, should remember that gratitude can feel sweetest when the skies are bleak and the table is mostly bare.

Financial markets are reeling in Europe, another insider-trading scandal is unfolding on Wall Street, and the Federal Reserve's efforts to drive down interest rates seem to be backfiring. Even so, the Dow Jones U.S. Total Stock Market Index is up 10.3% thus far this year.

More important for the future, index funds continue to make investing cheaper and easier than ever. For investors in these low-cost, autopilot portfolios that dispense with stock pickers and passively replicate the holdings of a broad basket of stocks or bonds, the best is yet to be.

That may not sound right at first. Since they aren't designed to beat the market, but only to match it, these portfolios don't look very appealing after a long period in which stocks have gone nowhere. In a market with low returns, low fees still can't leave you with much.

Over the past decade, Vanguard Total Stock Market Index Fund has gained an annual average of just 1.79%, or less than half the return you could have gotten keeping your money in cash. Then again, according to Morningstar, this autopilot fund outperformed two-thirds of all other stock funds, including those run by managers trying to beat the market. Until now, index funds have had an Achilles' heel. One factor that makes indexing "a horrendous idea," the renowned value investor Seth Klarman of Baupost Group argued earlier this year, is that hedge funds and others have long beaten the index funds to the punch on trades that the autopilot portfolios are forced to make.

New "inversible" indexes, forthcoming early next year from the Center for Research in Security Prices at the University of Chicago, or CRSP, could reduce compulsory trading for any index funds that adopt them as a benchmark. Funds that trade less should have lower brokerage costs, lower tax bills and higher net returns.

Better yet, it should be harder for outsiders to "front run" these improved indexes. CRSP, founded in 1960, was a pioneer in calculating long-term returns on assets; it gathers and analyzes massive amounts of data for investment firms and academic researchers.

Consider an index fund that specializes in small stocks. If

the shares of a little company in the fund take off, then the stock won't be small anymore—and the fund will have to sell it. Likewise, the firms that compile market benchmarks periodically add or delete stocks, forcing index funds to buy everything that is added and to sell everything that is deleted.

Each June, roughly 200 stocks are replaced in the Russell 2000 index of small companies. This June 25, the stocks that were added to the Russell 2000 outperformed those that were deleted by 2.3%, according to Investment Technology

Group. Over the long run, sharp traders getting out in front of these forced portfolio changes have poached at least 0.38 percentage point of annual return away from Russell 2000 index funds, estimates a new study in the *Journal of Empirical Finance*.

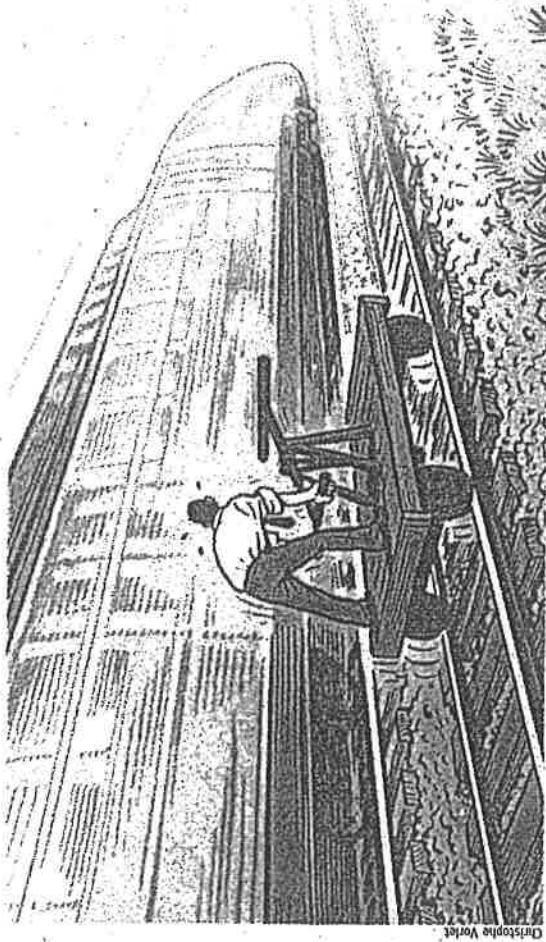
CRSP's new family of indexes will tackle the poaching problem in several ways, says Lubos Pastor, a University of Chicago finance professor who helped design them. The boundaries between small, medium and large stocks will be set as proportions of the value of the to-

argues Mr. Pastor. New screening methods could also enable CRSP to offer investors an index of stocks that rank high in both growth and value. "That's a very interesting idea that I've wanted to be able to index for a long time," says Gus Sauter, chief investment officer at Vanguard Group.

David Barclay, CRSP's chief operating officer, says "a couple of" index-fund providers have expressed interest in the new benchmarks. Mr. Sauter says that "it's something we'll have to consider." CRSP's approach, he adds, is "well thought-out" and "compelling."

There is other good news for index investors. Over the past year, Charles Schwab, Fidelity Investments, TD Ameritrade and Vanguard have eliminated brokerage commissions on selected ETFs. William Koehler, chief investment officer at ETF Portfolio Partners in Leawood, Kan., says he has opened a custodial Roth IRA for both his teenage sons at Schwab, where the minimum opening balance for such accounts is \$100. "They now lawns, and now I can buy ETFs for them with their lawn-mowing money without paying a commission," he says. "When they're in their 20s, they'll thank me."

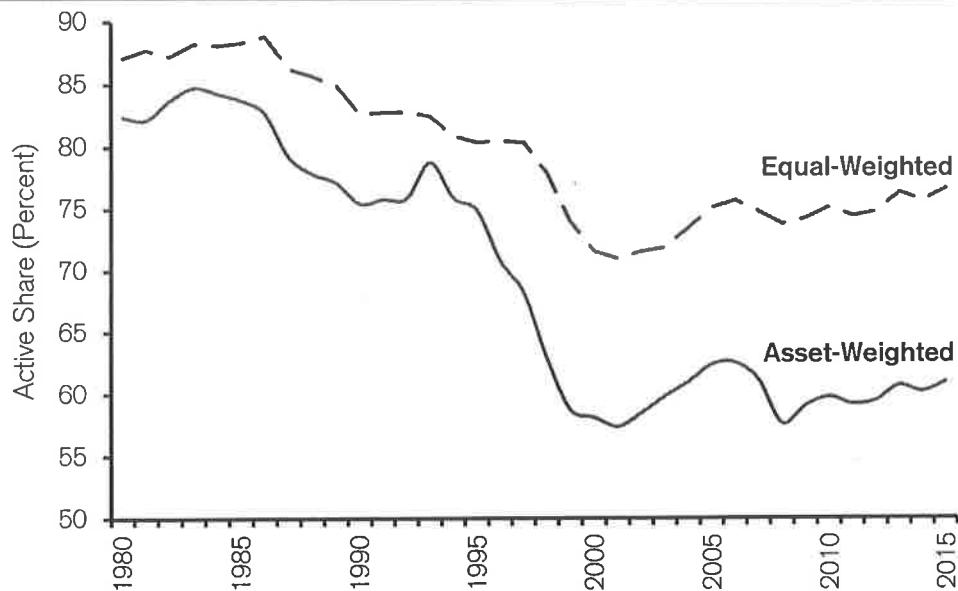
*intelligentinvestor@wsj.com;
twitter.com/jasonzweigwsj*



tal market, rather than as fixed dollar amounts or as an unchanging number of companies. Stocks will be "partially weighted," or shared, across different size indexes—so, as a company grows or shrinks, it doesn't have to be added or eliminated in one fell swoop. Any additions or deletions will be made in "packets," or gradual steps over time, and the days on which the substitutions take effect will be randomized.

These techniques should re-

duce turnover and poaching by outsiders while preserving the "style purity" of the indexes,

Exhibit 13: Active Share for U.S. Equity Mutual Funds, 1980-2015

Source: Antti Petajisto, see www.petajisto.net/data.html; Antti Petajisto, "Active Share and Mutual Fund Performance," *Financial Analysts Journal*, Vol. 69, No. 4, July/August 2013, 73-93; Martijn Cremers, see <http://activeshare.nd.edu/data/>; Credit Suisse.

Exhibit 15: Explicit Indexing, Closet Indexing, and Active Funds Around the World

	Number of Funds	Total Net Assets (\$Bn)	Market Share (Percent)			Total Shareholder Cost (Percent)		
			Explicit Indexing	Closet Indexing	Active Funds	Explicit Indexing	Closet Indexing	Active Funds
Austria	167	15.0	3	36	61	2.23	2.58	2.61
Belgium	150	17.9	21	43	36	1.16	2.01	1.98
Canada	895	326.4	8	37	55	0.42	2.11	2.80
Denmark	201	30.5	2	27	71	0.83	1.87	2.09
Finland	147	26.2	3	44	53	0.34	2.16	1.91
France	492	134.1	25	29	46	0.77	2.07	2.22
Germany	356	139.5	16	34	50	0.69	2.34	2.37
Ireland	484	222.5	31	25	44	0.56	1.89	2.17
Italy	125	31.4	0	36	64	2.44		2.59
Liechtenstein	101	6.0	0	18	82		1.70	1.98
Luxembourg	2,057	750.5	4	26	70	1.21	2.60	2.43
Netherlands	75	33.6	1	21	78	0.59	1.40	1.30
Norway	117	41.4	6	26	68	0.42	1.44	1.82
Poland	46	8.4	0	58	42		4.02	3.00
Portugal	53	2.0	0	39	61	1.03	2.01	2.08
Spain	267	13.1	9	42	49	1.51	2.12	1.97
Sweden	266	113.5	10	56	34	0.56	1.47	1.42
Switzerland	220	69.7	58	24	18	1.01	1.73	2.08
United Kingdom	975	504.1	9	32	59	0.62	2.33	2.38
United States	3,153	5,150.3	27	15	58	0.26	1.07	1.31
Asia Pacific	1,204	255.5	24	20	56	0.75	1.46	1.90
Other Regions	225	29.3	0	41	59	1.35	2.14	2.08
Total	11,776	7,921.1	22	20	58	0.35	1.64	1.66

Source: Martijn Cremers, Miguel A. Ferreira, Pedro Matos, and Laura Starks, "Indexing and Active Fund Management: International Evidence," *Journal of Financial Economics*, Vol. 120, No. 3, June 2016, 539-560.

Hedge funds exposed in smart beta's sights

ROBIN WIGGLESWORTH

After taking on the mutual fund complex, the financial engineers of the passive investment industry are training their sights on hedge funds. And they are winning.

Traditional active asset managers have been losing ground to their passive rivals, which include index funds and exchange traded funds, for more than a decade. But this was the year that hedge fund managers also began feeling the pinch, especially from next-generation "factor" ETFs, which seek to beat the market at a fraction of the cost.

Historically markets have been divided into asset classes such as equities, bonds and commodities. Over the years financial academics have sought to boil the many variables down the fundamental building blocks of returns, which they call factors.

For bonds this might be a combination of interest rates and creditworthiness, and for a stock it would reflect cheapness, size and volatility.

"A lot of these factors have been housed in hedge funds for years, and we're commoditising it," says Dan Draper, head of Invesco PowerShares. "We have had the theory behind factors for decades. The ETF is just the technology that allows you to implement it in practice."

ETFs that package up one or more factors are called "smart beta", to differentiate them from the beta derived from simply tracking an index such as the S&P 500 or the Bloomberg Barclays Aggregate for bonds. These funds have been wildly popular of late, attracting \$45bn of inflows globally this year.

This year BlackRock — the largest ETF provider — forecast that the value of smart beta ETFs would rise from \$316bn currently to more than \$1tn by 2020 and \$2.4tn by 2025.

In contrast investors withdrew \$14.2bn from hedge funds in October, taking provisional outflows for the year to a net \$77bn, according to eVestment, a data provider.

Competition from cheap passive products is proving particularly painful for equity hedge funds, some of whose common approaches are more easily replicable in an ETF format than is the case of other asset classes. While most ETFs cannot go short, for example,

multi-factor ETFs can replicate much of the performance of funds that can at a small fraction of the cost. Outflows in long-short equity hedge funds have reached \$17.5bn this year, according to eVestment.

"Long-short and some of the more equity-oriented strategies are materially impaired," says Ray Nolte, portfolio manager at SkyBridge Capital, a fund-of-funds.

And this could be just the start. Analysts at banks and investment groups have reverse-engineered the returns of most popular hedge fund strategies, and say they can replicate many of them cheaply in an ETF wrapper. Some analysts say this "alternative beta" industry holds great promise, particularly because the fees are far lower than those of traditional hedge funds.

Following a long period of poor average performance, hedge funds are having to charge less. The industry's classic fee model is known as "two and 20" — a 2 per cent management charge and a 20 per cent performance fee — but this has given way to a global average of 1.63 per cent and 17.21 per cent, according to Preqin, a data provider.

The ETF challenge is daunting. Goldman Sachs's smart beta ETFs cost between 9 and 45 basis points.

"Just from an optical standpoint, it's harder and harder for pension fund trustees to justify paying the '2 and 20' fee structure," says James Norman, president of QS Investors, the smart beta arm of Legg Mason. "In a low-return environment, there is a lot of focus on costs."

Some investors, hedge fund managers and analysts, however, say the success of many smart-beta or alternative-beta ETFs primarily stems from favourable comparisons with historical data, rather than from live results, and they point out that factors can quickly fizzle or blow up.

A good example is provided by "low-volatility", a smart beta craze for most of the year. Low-vol or minimum-vol ETFs buy less volatile shares, following research showing that boring stocks tend to outperform the market over time, and do so with less choppiness — an attractive proposition in the post-crisis era.

However, after a strong run early in 2016, the performance of low-vol ETFs has become abysmal. Their biggest holdings — stolid, dividend-paying companies such as real estate trusts and utilities — were pummelled this autumn.

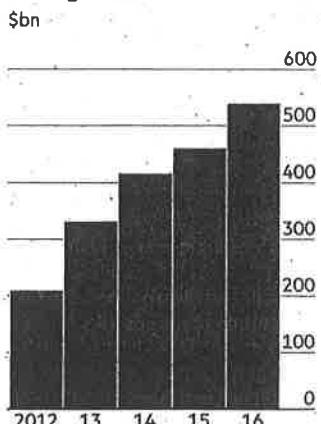
The passive industry is confident that the story that has played out in mutual funds — where ETFs have slowly and remorselessly eaten into fees and assets — will be replicated in the hedge fund world.

"We're in the early days for hedge funds, but the trends are very similar," says Andrew Ang, head of factor investing strategies at BlackRock. "Hedge funds are not immune from this."

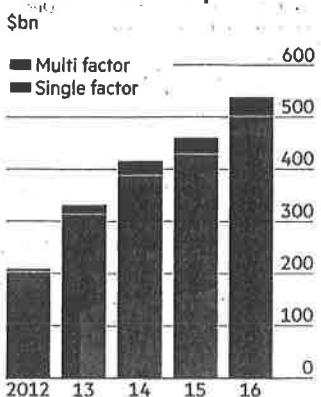
Wednesday 21 December 2016

FINANCIAL TIMES

Smart beta assets under management



Smart beta asset split



Source: Morningstar Direct

'Godfather of Smart Beta'

Rob Arnott doubts how some investors are using strategies he pioneered

By AARON KURILOFF

The "godfather of smart beta" is having fresh doubts about how some on Wall Street are using the increasingly popular passive-investing strategies he pioneered.

Smart-beta funds, which try to beat standard index funds' returns by allocating money based on factors like companies' dividend payments, sales, or volatility, attracted record inflows of \$55 billion last year. According to BlackRock Inc., which operates several of the biggest smart-beta exchange-traded funds, they are headed toward \$1 trillion under management globally by 2020.

Rob Arnott, an early architect of such investing tactics, says these funds' popularity makes some of the strategies expensive, undermining what made them appealing in the first place.

In a paper published earlier this month by Research Affiliates LLC, the investment firm he founded, Mr. Arnott questioned approaches including so-called momentum strategies, which buy stocks experiencing rapid price gains. The approach's benefits seldom exceed trading costs and fees, he said.

He has also built tools

that he said will help investors determine which strategies are overpriced.

"You can't time markets," he said in an interview. "You can't pick tops and bottoms. But you can identify what's trading cheap relative to history and what's expensive."

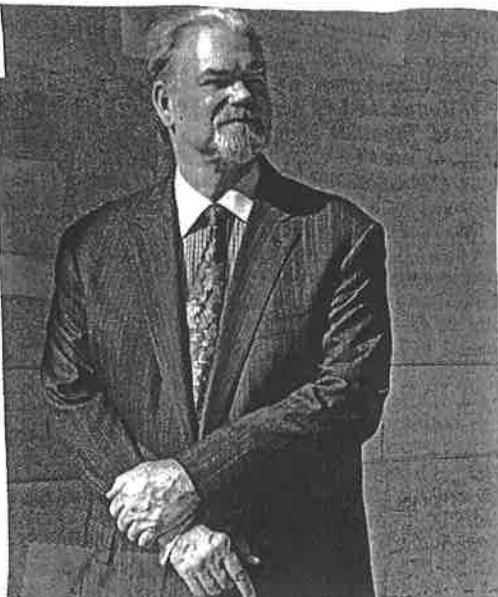
His new research follows a critique of the strategies that began in February last year, in which he said a smart-beta crash was "reasonably likely."

The paper, titled "How Can 'Smart Beta' Go Horribly Wrong?," singled out low-volatility funds—which are typically designed to produce market-like returns with less risk—saying that a surge of money from performance-chasing investors had driven up valuations to unsustainable levels, reducing the prospects for their future returns.

"Our own low-vol fund is expensive," Mr. Arnott said.

Asset managers including BlackRock and Invesco Ltd.'s PowerShares have said the strategy performs well over the

Please see BETA page B2



In a paper, Rob Arnott, founder of Research Affiliates, questions approaches including so-called momentum strategies.

Continued from the prior page
longer term, and noted the assets account for only a fraction of the investing universe.

John Feyerer, director of equity ETF products at PowerShares, called his firm and Research Affiliates "kindred spirits," adding "we've been partners more than a decade, but that doesn't mean we're always going to agree."

Cliff Asness, the co-founder of AQR Capital Management LLC and another early designer of smart-beta strategies, has said the valuations do matter, but aren't the only thing that matters. This month, he wrote that Mr. Arnott's warnings consisted of "repeated breathless white papers" instead of "give-and-take debate."

Mr. Arnott's critique of smart beta started as an inquiry into why some of his own strategies had underperformed for two years and investors were instead buying newly expensive approaches, such as low-volatility funds.

Investors poured money into low-volatility funds for much of last year, then dumped them as stocks surged to new records last autumn in what BNP Paribas SA research at the time described as "a brutal readjustment."

BlackRock's iShares Edge MSCI Minimum Volatility USA exchange-traded fund, the largest low-volatility ETF, rose roughly 13% from the beginning of 2016 through its peak for the year in July, outperforming the S&P 500's 6.4% advance, according to FactSet. It then fell 4.2% from its July peak through year-end, while the S&P 500 added 2.9%. The ETF is up 7% so far this year, compared with 6.5% for the S&P 500.

At its heights in July, stocks within the ETF traded at an average of roughly 24 times their past 12 months of earnings, more than 20% higher than the iShares Core S&P 500 ETE, according to FactSet.

Mr. Arnott's Research Affiliates manages almost no money. Instead, it designs products—such as mutual and exchange-traded funds—for clients including Pacific Investment Management Co.

and PowerShares. Licensing ideas and collecting fees for a living means they must offer those shops something their existing armies of investment researchers don't already provide, Mr. Arnott said.

Mr. Arnott, the son of a pastor, turned a love of computers, math and research into a globe-spanning investment advisory business.

His first target was the standard index fund. During the technology bust of the early 2000s, he was managing money at First Quadrant, cruising Pasadena, Calif., on vintage motorcycles and publishing dozens of papers on financial theory.

As the market tumbled, Mr. Arnott saw big index funds—which typically allocate money to companies based on their market capitalization—dragged down by losses from a relatively few large companies. So he joined those proposing to break the link between market capitalization and portfolio weighting, relying instead on factors such as price, momentum, volatility, or combinations of factors. Mr. Arnott's paper "Fundamental Indexation" laid the groundwork for Research Affiliates' Fundamental Index, or RAFI, series of funds with PowerShares.

Vanguard Group founder and indexing pioneer John C. Bogle called him "a brilliant academic" and "the greatest marketer I've ever met."

RAFI-branded strategies now have almost \$140 billion under management around the world. Research Affiliates also licenses strategies to partners under other brand names, including roughly \$3 billion for Pimco.

As smart beta spread, many credited Mr. Arnott for demonstrating the strategy's feasibility. As of March 31, the flagship PowerShares FTSE RAFI US 1000 Portfolio has outperformed the Russell 1000 by an average of almost 1 percentage point a year over its roughly dozen-year lifespan, according to PowerShares. The fund charges fees of 0.39%, or \$39 on a \$10,000 investment, less than most actively managed funds. It beat the index by roughly 14 percentage points in 2009, according to FactSet.

"I wish I was as sure of anything as he is of everything," Mr. Bogle said.

The Hidden Flaws of Index Funds

By SPENCER JAKAB

"What'd the market do today?"

To the extent that anyone asked this question before the late 19th century, there really was no way to give a clear answer. Then stock indexes were born—crude, price-weighted

THE PASSIVISTS

ones at first and then sophisticated versions based on market value. Even with the recent boom in new indexes, the measure of the U.S. stock market for financial professionals remains the S&P 500.

But, like those first benchmarks totted up on pencil and paper, the S&P 500 is still a human construct—a mere facsimile of corporate America's value. Despite the S&P's dominance, others continue to try to build a better market measure. And there definitely are flaws in the S&P 500 that make the pursuit worthy.

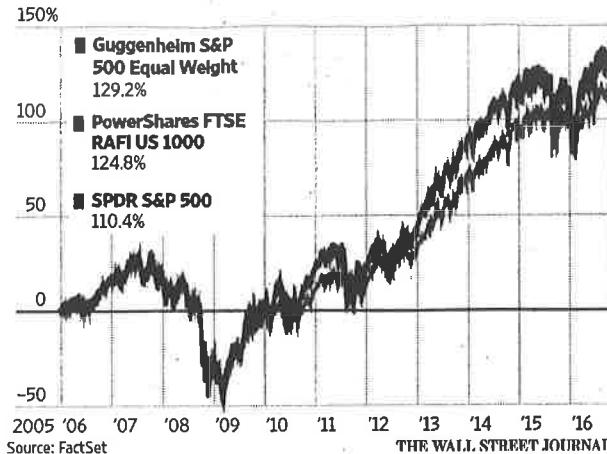
A purely passive investor following a benchmark such as the S&P 500, which weights companies based on their market capitalization, automatically owns more of what just went up and less of what just went down. In other words, he or she is along for the ride for all sorts of silly decisions made by active investors. While owning such a fund is incredibly cheap and convenient, investors who feel they are capturing the performance of "the market" may underappreciate the index's limits.

Robert Arnott, chief execu-

utive of investment-strategy firm Research Affiliates, has spent more than a decade touting what he thinks is a better mousetrap: fundamental indexing. His criticism of traditional indexes is that they are weighted by company size alone. Mr. Arnott's approach breaks the link between size and weighting by using a company's fundamental attributes to rebalance the index. These traits can be earnings, sales, book value or some combination of factors. Some criteria indirectly mimic factors used in the burgeoning "smart beta" fund category, which embraces factors such as value or dividends in designing funds that, based on backtesting, have produced superior returns.

Weighting Game

Some ETFs aim to better capture broad stock-market returns.



Source: FactSet

tive of investment-strategy firm Research Affiliates, has spent more than a decade touting what he thinks is a better mousetrap: fundamental indexing. His criticism of traditional indexes is that they are weighted by company size alone. Mr. Arnott's approach breaks the link between size and weighting by using a company's fundamental attributes to rebalance the index. These traits can be earnings, sales, book value or some combination of factors. Some criteria indirectly mimic factors used in the burgeoning "smart beta" fund category, which embraces factors such as value or dividends in designing funds that, based on backtesting, have produced superior returns.

Some indexing traditionalists see such enhanced prod-

ucts as unnecessarily costly gimmicks. A leading exchange-traded fund that tracks the FTSE RAFI US 1000 Index licensed by Mr. Arnott's firm has an expense ratio more than four times a leading S&P 500 index ETF, though that is still less than half what a typical actively managed large-capitalization stock fund costs.

Based on the past decade or so, the additional costs seem justified. An ETF tracking the FTSE RAFI US 1000 index has returned 125% since inception in December 2005, compared with 110% for the leading S&P 500 ETF. Both figures include dividends and expenses.

A long-term study from 1964 through 2012 conducted by Research Affiliates shows similar results. For example, a basket of U.S. stocks weighted by market capitalization alone

rose 9.66% a year during that time, while one weighted by book value rose 11.23%. Translated into real money, a portfolio invested in the fundamental index would, before costs, be worth a little more than twice as much at the end of that span.

An even simpler approach to beating the S&P 500 has been eschewing weighting altogether. A fund that owns the same stocks as S&P 500 index funds but in equal amounts, the Guggenheim S&P 500 Equal Weight ETF, beat even Mr. Arnott's fund, rising 129% since December 2005.

The issue with such an approach is that popularity could fairly easily cause problems to emerge. The smallest constituents in the S&P 500 are about half a percent of the size of the largest one and would see their prices distorted by large investment inflows.

Still, the success of equal weighting on paper suggests that relatively unsophisticated approaches can beat fund managers by even wider margins than traditional indexes. Experiments have shown that portfolios made up of randomly chosen stocks also do about as well as fundamental indexes. This suggests that, for all their sophistication, fundamental indexing advocates' real insight was in discovering a problem: While buying into a traditional index may be consistently superior to the crowd-following behavior that stings most active investors, it still suffers indirectly from that crowd's actions.

Signs that smart beta price war has started

Active ETFs

Largest providers could drive out smaller rivals, says Aliya Ram

Jack Bogle, the founder of US-based asset management group Vanguard and one of the exchange traded fund industry's best-known executives, startled investors when he dismissed smart beta investment funds as "stupid".

Mr Bogle's argument, which he has made repeatedly at conferences and interviews, was that the new crop of funds that offer a mixture of passive and active management were exploiting a label to justify higher fees.

However, smart beta has become one of the fastest-growing segments of the asset management industry, with about \$500bn of assets, according to data provider ETFGI, as poor returns drive investors

'New entrants coming into the market are going to struggle to offer the fees of Vanguard'

out of traditional, actively managed funds.

But as more asset managers scramble to take advantage of the growth by launching their own smart beta ETFs, some are concerned that a price war could be looming.

"Price competition has absolutely spilled over from the realm of bulk, market-capitalisation-weighted beta to [smart] beta," says Ben

Johnson, director of global ETF research at Morningstar, the data provider.

"The easiest way to differentiate one's fund in this increasingly crowded landscape is to offer it at a lower price relative to incumbents."

Smart beta ETFs track custom-made indices that weight companies on factors such as volatility and value instead of conventional measures such as market capitalisation. They typically charge higher fees than traditional ETFs on a promise of better returns.

But after the world's largest asset manager BlackRock cut fees across six smart beta ETFs, some participants are expecting prices to come down on more smart beta products.

"There is pricing pressure across the market," says Chris Mellor, head of equity products at Source, the UK-based ETF provider.

Data from Morningstar show that average expense ratios fell between 2006 and 2016 for smart beta ETFs at a quarter of the largest 20 ETF providers in the US. However the data also show expense ratios increased for smart beta ETFs at more than half of the companies.

Anthony Davidow, a strategist at Schwab, which this month cut fees on its smart beta funds, says that smart beta ETF fees are showing resilience, because they are still less than most actively managed alternatives.

"Smart beta ETFs are taking market share from active managers, and the fee comparisons there are quite favourable."

However, according to Mr Mellor, data on average fees do not always reflect underlying trends because providers frequently launch similar ETFs at lower prices with the aim of

eventually winding down the older and more expensive versions. The concern for newer entrants is that a fee war could concentrate power in the hands of the largest providers, which have the financial muscle to cut fees.

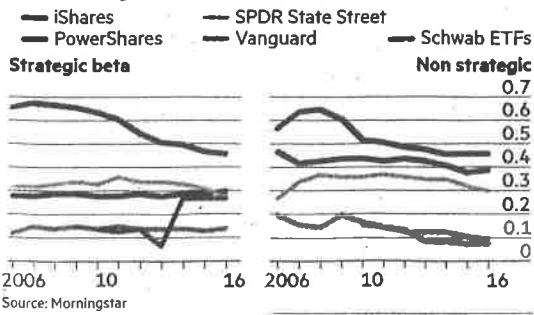
"New entrants coming into the market, yes they're going to struggle to offer the fees of Vanguard," says Mark Fitzgerald, product manager at Vanguard. Vanguard, BlackRock and State Street, the three largest ETF providers,

dominate the passive investment market, with more than three-quarters of assets under their management.

Martin Weithofer, head of smart beta at Deutsche Asset Management says that the shift to lower prices is inevitable: "In 2017 [price pressure] is the overall long-term trend we see due to the commodification of funds," he says. "It is the long-term trend in the industry, I wouldn't focus on smart beta only."

Smart beta vs conventional ETF fees

Average expense ratios for strategic (smart beta) vs non-strategic (conventional) ETFs



Source: Morningstar

Is 'Smart Beta' an Improvement Over Standard Indexing?

Investors have been rushing to sink cash into a new option that's intended to deliver a souped-up version of traditional index tracking.

Are they making the right move?

The traditional indexing approach is to buy all of the securities in a market or market segment and to weight those holdings based on market capitalization.

The idea behind the new approach—com-

monly known as smart beta—is to deliver higher returns or lower risk by putting together indexes that exploit inefficiencies in the market, or that avoid what proponents say are some of the deficiencies of capitalization weighting.

Some indexes, for instance, might put equal dollars in each holding, or emphasize earnings multiples in selecting and weighting components.

most people need anymore. Traditional indexing, which weights stocks according to their capitalization, worked well in the bull market of the '80s and '90s.

Now many experts agree we are in an extended bear market, where investors might see only a third of the returns they've gotten used to in recent years.

Hence the need for strategies that have the potential to beat the market. The average boomer and average pension plan don't have time to wait for the next big bull market. In the long run, as the saying goes, many of us will be dead.

Critics argue that smart-beta portfolios carry higher risk. But all strategies come with risk. Traditional capitalization-weighted indexes were at higher risk before the market collapsed at the turn of the millennium. There's little if any real evidence that cap weighting is "the answer," and many reasons to doubt its effectiveness.

Likewise, critics say certain investment niches that smart beta tends to favor—such as small value stocks—have underperformed over certain periods. Nothing works all the time. If it did, investing would be easy. That's the point of taking a more active approach than traditional passive index tracking.

The purpose of diversification is to manage risk, not eliminate it, by gaining exposure to a number of essentially different, and to some degree uncorrelated, risks. Smart beta provides easy and relative low-cost access to a variety of risk factors, contributing to increased diversification as well as the prospect of better performance.

The Price of It

Naysayers also grumble about cost. But smart-beta investments generally come at relatively low cost, compared with actively managed mutual funds.

Certainly, there are cheaper investments out there. But the drive to avoid costs can end up costing you even more money, if you end up in a low-price vehicle that doesn't provide the returns

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A Crucial Move

Smart-beta approaches aren't just a better alternative, they're becoming necessary—because traditional indexing most likely can't deliver what

Smart Beta: Yes

Continued from page R5

that you need.

Finally, some critics point to the idea that smart beta is heavy on marketing that masks its true nature.

Smart beta offers easy, relatively low-cost access to a variety of risk factors and adds to diversification.

Although a certain amount of marketing hype may surround the use of the term, just look at how much institutional interest it has generated. Are all of those big investors getting fooled? Doesn't it make more sense to say that all of the activity is a sign of smart beta's usefulness?

Granted, it will be tough for

smart-beta indexes to attain the scale of the Standard & Poor's 500. But they may avoid some of the index's flaws.

For example, the S&P underweights companies with significant insider ownership and even increases weightings as insiders reduce theirs. Trading against the insiders and founders is generally thought to be a bad idea.

Investors should always take care when it comes to market hype, study proposed investments carefully and form their own opinions.

But, in my opinion, smart beta deserves your attention, study and, in all likelihood, a place in your portfolio.

Mr. Benton is a registered representative and investment adviser representative of Lincoln Financial Advisors Corp., a broker-dealer and registered investment adviser. He can be reached at reports@wsj.com.

The strategy is attracting a lot of interest in the marketplace. Funds that used smart-beta weighting methods, and focused on U.S. stocks, saw net inflows of about \$42.8 billion last year, up from about \$20.5 billion in 2012, according to ETFCOM.

Proponents argue that funds using smart-beta strategies are well-positioned to outperform at a time when market returns are likely to be modest for some time to

come. Funds using simple index tracking, advocates of smart beta say, likely won't deliver the kinds of returns people want and need in the face of expected long-term market conditions.

Critics, however, say that investors are paying higher fees for smart-beta vehicles, and taking on a lot of risk they wouldn't be facing otherwise—and that they might not fully understand.

far more expensive than traditional index-tracking funds. Consider a traditional index fund like the Vanguard Total Stock Market ETF. The fund—which is designed to deliver the same return as the entire stock market—has a net expense ratio of 0.05%, and its securities turnover is very low.

Contrast that with smart-beta investments. On the lower end, PowerShares FTSE RAFI US 1000 Portfolio has a net expense ratio of 0.39% and high securities turnover. Before investors see any benefit from the strategies, the fund has to generate excess profit to cover the extra expenses. The cost for smart beta can go much higher in other products.

A Higher Risk

Smart beta also comes with higher risk. The creators of these products try to cover up the added risk with marketing jargon, but let's look at it logically.

We can't all earn above-market returns by buying these products. When a fund is created for the mass market, with the intent of attracting hundreds of billions in assets, a higher return can only be earned through higher risk. Saying otherwise defies the laws of economics.

At the same time, we can't judge these offerings by their track records—because most have only been created within the past decade. We don't know what the actual long-term returns of smart-beta funds are, because they are untested. Except for the past few years, all of the historic information we have is hypothetical. These strategies and smart-beta indexes were created with 20/20 hindsight.

And, to the extent that we can judge them by their theoretical "past performance," the future may not turn out to be like the favorable back-tested period.

There have been long stretches when quantitative strategies have underperformed the market. A common smart-beta tactic is to overweight a portfolio in small-cap value stocks. Yet, from 1983

Please turn to page R7

No: It's Riskier and Costlier—And Backed by a Lot of Hype

BY RICK FERRI

FOR MANY INVESTORS, smart beta is not a smart idea.

The term has become a catchall for any active quantitative strategy that smashes together various investment risks to create an index of sorts that beats the market in hypothetical back-testing. This index is licensed to money managers who track it in mutual funds, exchange-traded funds and other products.

The dark secret of this strategy is that it comes with higher risk and higher cost than a simple market-tracking index fund does—investors are taking a bigger chance for the hope of a seeing a higher return after expenses. Unfortunately, that trade-off is not clear in the marketing spin, and this lack of clarity is the key to smart beta's popularity.

People think that they're getting more return without more risk. It's more complicated than that.

A Costly Approach

To begin with a basic point, smart beta is not cheap.

Although smart-beta funds can be less costly than other actively managed strategies, they're

Smart Beta: No

Continued from page R5

In 2001, small-cap value stocks underperformed the total stock market, and they were nonstarters in the late 1990s.

Nobody knows when one of

people think that they're getting more return without more risk. It's more complicated than that.

those long periods of underperformance will occur for any smart-beta strategy. All that we know for sure is that there is no free lunch on Wall Street.

Jumping Ship

The potential prolonged underperformance of smart beta versus the market also presents

a behavioral risk. Less-informed investors might jump ship at the wrong time. Capitalization during a bad period in the strategy automatically locks in investors' below-market returns for the long term. That's not smart.

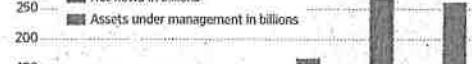
Just to be clear, I'm not against smart beta—I'm against the way it's sold. Taking more risk and paying higher fees for the hope of a higher return may make sense for people who know what they're doing.

If the strategies are not well understood, that's a big behavioral risk, and it's why I believe most people are better off sticking with low-cost total-market index funds.

Mr. Ferri is founder of Portfolio Solutions LLC and the author of six books on low-cost index-fund and ETF investing, and blogs at RickFerri.com. He can be reached at reports@wsj.com.

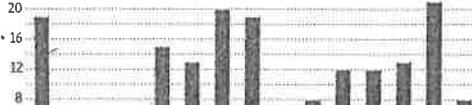
Growth of Smart Beta Funds

■ Net flows in billions
■ Assets under management in billions



Smart Beta Launches

■



Source: EFT.com

The Wall Street Journal

Tracking Exchange-Traded Portfolios

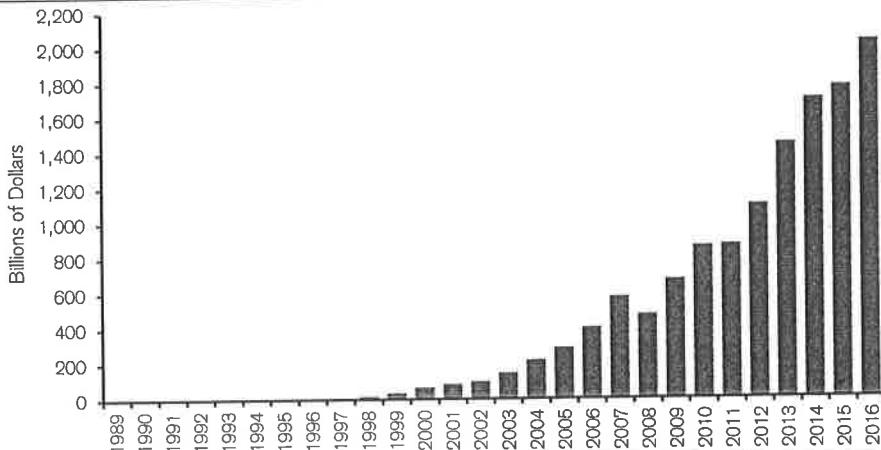
Performance figures are total returns for periods ended March 31; for largest exchange-traded funds and other portfolios, ranked by asset size.

Fund	Symbol	Assets (\$billions)	Volume (000s)	Expense ratio	Launch date	Performance (%)	March	1st-qtr	1-year
SPDR S&P 500 ETF	SPY	241.04	71,393.4	0.09	01/22/93	0.1	6.0	17.0	
iShares Core S&P 500 ETF	IVV	101.82	5,580.0	0.07	05/15/00	0.1	6.1	17.1	
Vanguard Tot Stk Mkt Idx ETF	VTI	76.13	1,815.9	0.05	05/24/01	0.1	5.8	18.1	
iShares MSCI EAFE ETF	EFA	67.30	28,850.6	0.33	08/14/01	2.8	7.2	11.6	
Vanguard 500 Index ETF	VOO	63.76	364.4	0.05	09/07/10	0.1	6.1	17.1	
Vanguard FTSE Emerging Markets ETF	VWO	50.99	12,271.8	0.14	03/04/05	2.3	10.9	17.6	
Vanguard FTSE Developed Markets ETF	VEA	47.55	9,422.7	0.09	07/20/07	2.9	7.8	12.8	
PowerShares QQQ Nasdaq 100	QQQ	47.54	19,021.4	0.20	03/10/99	2.0	12.0	22.5	
iShares Core US Aggregate Bond ETF	AGG	43.33	3,629.9	0.07	09/22/03	-0.1	0.8	0.4	
iShares Core S&P Mid-Cap ETF	IJH	38.99	2,037.8	0.12	05/22/00	-0.4	3.9	20.8	
iShares Russell 2000 ETF	IWM	38.53	28,787.5	0.20	05/22/00	0.1	2.5	26.3	
iShares Russell 1000 Value ETF	IWD	36.50	2,455.4	0.20	05/22/00	-1.0	3.2	19.0	
iShares Russell 1000 Growth ETF	IWF	34.28	1,992.1	0.20	05/22/00	1.1	8.9	15.6	
Vanguard REIT ETF	VNQ	34.26	7,167.9	0.12	09/23/04	-2.4	1.0	3.1	
SPDR Gold Shares	GLD	33.30	8,282.4	0.40	11/18/04	-0.9	7.3	0.2	
Vanguard Total Bond Market ETF	BND	33.06	2,399.4	0.06	04/03/07	-0.1	0.9	0.4	
iShares Boxx \$ Inv Grade Cor B ETF	LQD	30.60	5,772.3	0.15	07/22/02	-0.3	1.2	2.6	
Vanguard Value ETF	VTY	30.11	1,315.9	0.08	01/26/04	-1.0	3.3	18.8	
iShares Core S&P Small-Cap ETF	IJR	30.11	3,695.1	0.12	05/22/00	-0.1	1.1	24.6	
iShares MSCI Emerging Markets Index Fund	EEM	29.65	90,316.4	0.72	04/07/03	2.5	11.3	16.6	

Exhibit 9: Assets Under Management of Exchange-Traded Funds, U.S. Domestic Equity

CREDIT SUISSE

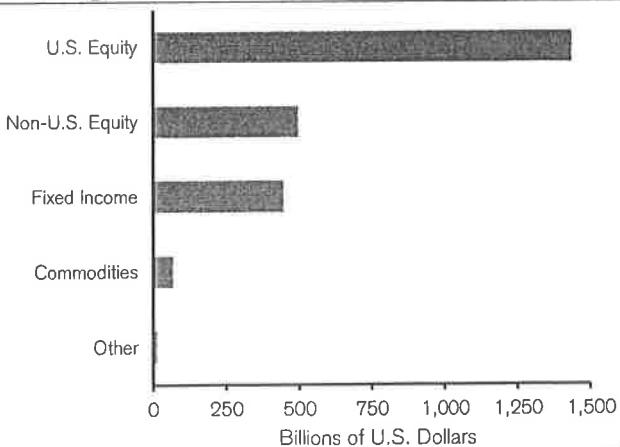
January 4, 2017



Source: Simfund.

Note: U.S. domiciled equity funds; includes traditional, smart beta, and active ETFs; 2016 figure as of 11/30/16.

Exhibit 8: Assets Under Management of Exchange-Traded Funds by Asset Class



Source: www.etf.com.

Note: "Other" category includes currency, asset allocation, and alternatives; as of 11/25/2016.

Rise of ETFs ignores risks of fiercer volatility

Critics argue the securities move the markets they track rather than just reflect them

NICOLE BULLOCK AND DAN MCCRUM
One of the reasons exchange traded funds have become a \$3.2tn part of the world's financial system is convenience. Investors can cheaply buy or sell exposure to almost any industry or market at the click of a button.

But there is a question about whether the industry has built a giant on top of a structure designed for something much smaller. Can ETF providers really sell instant gratification, when what goes into their products is often much harder to buy and sell?

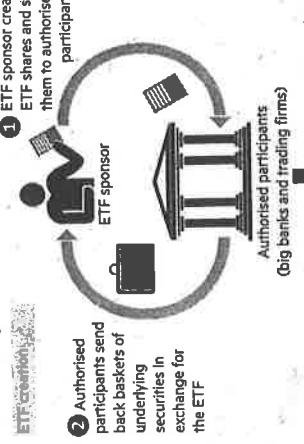
For instance, when Ben Bernanke, then chairman of the Federal Reserve, prompted investor panic around the world in 2013 when the so-called "taper tantrum" engulfed emerging markets, the price of iShares' EM exchange traded fund, known universally as FEM – its ticker symbol – changed hands for 2.6 per cent less than the value of the securities index it attempted to track.

At the time, during the US afternoon, two-thirds of those underlying securities were not available to trade. By the next day, however, the discount had all but disappeared.

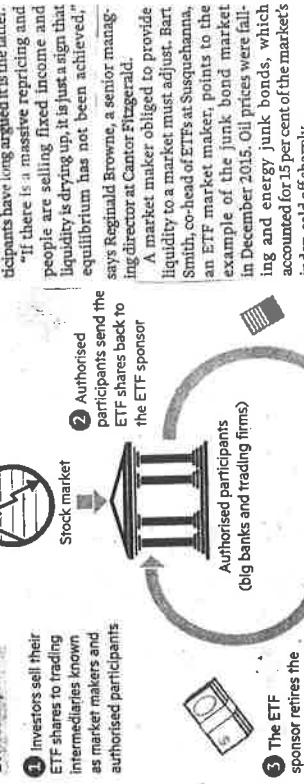
Stephen Cohen, head of fixed income beta at BlackRock, compares such ETFs to stock futures or credit derivatives, commonly used ways to trade large markets. "Once you have standardised version of something, you get an element of transparency, it gives you a sense of where the market is," he says.

"One of the challenges of products being listed in multiple markets at once is you are going to get these sorts of moves, which is going to look odd to anyone not familiar with ETFs."

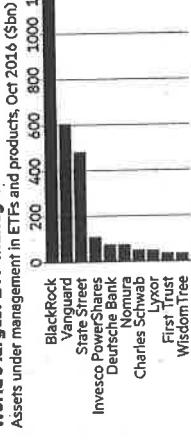
How exchange traded funds work



ETF redemptions

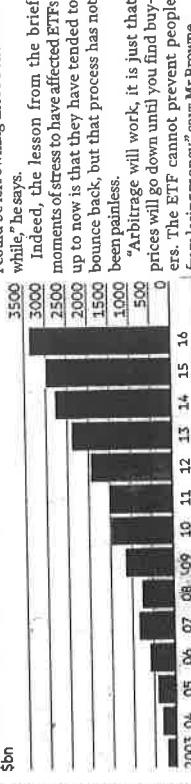


World's largest ETF managers



FT graphic source: Thomas Tressel

Global ETF asset growth



FT graphic source: Timothée Tressel

Another dose of volatility duly raised questions last year on August 24, a notorious day in the ETF industry. Declines in Asian bourses snowballed at the Wall Street open and wild trading ensued.

At the time, during the US afternoon, two-thirds of those underlying securities were not available to trade. By the next day, however, the discount had all but disappeared.

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"One of the challenges of products being listed in multiple markets at once is you are going to get these sorts of moves, which is going to look odd to anyone not familiar with ETFs."

At heart is a question of causality: do ETFs move a market or simply reflect it? Critics fear the former but market participants have long argued it is the latter.

"If there is a massive repricing and people are selling, fixed income and liquidity is drying up, it is just a sign that equilibrium has not been achieved," says Reginald Browne, a senior managing director at Cantor Fitzgerald.

A market maker obliged to provide liquidity to a market must adjust. Bart Smith, co-head of ETFs at Susquehanna, an ETF market maker, points to the example of the junk bond market in December 2015. Oil prices were falling and energy junk bonds, which accounted for 15 per cent of the market's index, sold off sharply.

Mr Smith continued to stand ready to buy and sell, but much more cautiously than normal. "In an environment where no one is willing to buy those energy names, I'm going to make a market but I need to factor into my price the risk that I could be left owning those bonds for a while," he says.

Indeed, the lesson from the brief moments of stress to have affected ETFs up to now is that they have tended to bounce back, but that process has not been painless.

"Arbitrage will work, it is just that prices will go down until you find buyers. The ETF cannot prevent people from losing money," says Mr Browne.

Within the industry, some argue the liquidity of the ETFs has fuelled their proliferation to markets where it is tested in its current size and breadth in a market maludown of such scale.

"While products such as bond ETFs look like stocks, they can be more illiquid than they appear because of the liquidity in the underlying product. Depending on what you are trying to trade, market dislocations in the under-tradable, market structure," says David LaVelle, US head of ETF capital markets at State Street Global Advisors.

"You have the transparency and efficiency of equity markets and you are mixing it with the fixed income cash bond market, which is dealer-driven, over-the-counter and offers far less transparency."

One of the more extreme examples is GREK, an ETF of Greek shares, which continued to trade in the summer of 2015 while the stock market was closed during the country's debt crisis.

INSIGHT

• Jack
Bogle



Higher ETF trading activity takes its toll on investor wealth

Each day, the investing public hears news of the latest developments in exchange traded index funds (ETFs). But rare is the mention of traditional index funds, which I call Tifs, although the acronym has yet to gain acceptance.

In 1976, I created the first Tif. It was named First Index Investment Trust (now Vanguard 500 Index Fund). Its purpose was to provide a long-term investment in the US stock market at a rock-bottom cost, compounding its returns over a lifetime. Its initial public offering was a flop, raising just \$11m, but it was the start of something big.

In 1993, Nathan Most created the first ETF. He had earlier proposed using Vanguard's 500 Index Fund in a new structure, one that would enable investors to trade the index fund "all day long, in real time". I could not agree with such a trading mentality. Time and again, clear statistical evidence has confirmed that the more investors trade, the more their returns fall short of the stock market return. I turned down his offer.

Persistent, Mr Most turned to State Street Global Advisors to implement his creation. The result: the SPDR (Standard & Poor's 500 Depository Receipts), still the largest ETF. Both Tifs and ETFs have enjoyed remarkable success. Each holds assets of about \$2.4tn. Since 2008, both have grown at an annual rate of about 18 per cent. In fact, Tifs have grown slightly faster than ETFs, yet their remarkable success has been largely ignored.

Some 80 per cent of the assets of today's 425 Tifs are represented by broadly diversified US (and non-US) funds, 15 per cent in "strategic beta" funds, and only 4 per cent in speculative strategies and concentrated sectors and regions. The asset mix of the 1,949 ETFs is starkly different. Broadly diversified funds account for the 43 per cent of ETF assets (one half of the Tif percentage), with 31 per cent in strategic beta (double), and 25 per cent (six times as high) in speculative and less diversified strategies.

The more investors trade, the more their returns fall short of market returns

The ownership and share turnover rates of Tifs and ETFs are also completely different. Individual investors are by far the largest holders of the Vanguard Tifs, with annual redemption rates in the range of 8 per cent of assets. Banks and financial intermediaries hold almost 90 per cent of SPDR S&P 500, where the dollar value of annual turnover typically runs to some 3,000 per cent of assets.

Vanguard's patented structure for ETFs – in which both its Tifs and ETFs are shares of the same underlying portfolio – presents a unique test case for evaluating investor outcomes in these two types of index funds.

Over the past months, Tif investor returns were a few basis points higher than fund returns in each of the five largest Vanguard broad-market index funds. In contrast, returns earned by the firm's ETF investors – owning the identical portfolios – trailed the returns of the funds by an average of 1.6 per cent during the same period. This anecdotal evidence seems to confirm the consensus that higher trading activity takes its toll on investor wealth.

All Tifs and almost all ETFs are index funds. Yet the differences in their ownership and share turnover attest to a natural separation between the two. Over the past 25 years their impact has been as divergent as their contrasting strategies. ETFs have revolutionised trading in the stock market; Tifs (and a few ETFs) have revolutionised investing in mutual funds.

ETFs' impact on stock trading has reached mammoth proportions. They account for nearly one half of all trading in US stocks. So far in 2016, the dollar volume of trading in the 100 largest ETFs has totalled \$13.0tn. Trading in the stocks of the 100 largest US corporations totalled \$13.9tn, only slightly larger.

But the \$1.6tn market capitalisation of those ETFs is but a small fraction of the \$12.8tn for those corporate stocks. As a result, the annualised turnover rates are different in magnitude: stock turnover, 120 per cent; ETF turnover, 880 per cent. The implications of this rapid trading – call it speculation – have yet to be fully examined.

Equally dramatic is the impact of index mutual funds on the mutual fund industry itself. Over the past decade, investor capital has poured out of actively managed equity funds and poured into passively managed funds. Since 2007, investors have redeemed \$747bn on balance of their holdings of actively managed equity funds and purchased \$1.65tn of passively managed equity index funds, a swing of \$2.4tn in investor preferences. This trend is not an aberration and its reversal is unlikely in the foreseeable future.

ETFs have had to compete with Tifs on the prices they charge. More importantly, index fund pricing is putting substantial pressure on the annual expense ratios of active equity mutual funds (0.87 per cent). Further, the annual expense ratios of strategic beta ETFs (0.24 per cent) and more concentrated ETFs (0.33 per cent) run far higher than for broad ETFs (0.15 per cent), and broad Tifs (0.16 per cent), with 0.05 per cent becoming the going rate.

Today's incipient trend towards "robo advisers" such as Betterment and Wealthfront would not have been possible without ETFs. Changes in strategy and asset allocations by computer-driven models continue to grow. Robo advisers are but one early aspect of the disruption that index funds will ultimately bring to traditional finance.

Jack Bogle is the founder and former chief executive and chairman of Vanguard

The perceived perils are more myth than reality

recognise the negative impact

Bill McNabb

of high fees on long-term returns.

However, while some industry watchers cannot help but wonder if there is a dark side to the growth of ETFs, we at Vanguard believe that most of these concerns are unfounded. At about \$3.4tn, the size of the ETF sector remains small – about 1 per cent of financial assets overall. ETFs are very similar to mutual funds in terms of how they are regulated and their investment approach. The biggest difference is that ETFs trade on an exchange.

However, while mutual fund investors transact directly with the fund, ETF investors

There is no denying the explosive growth in exchange traded funds. Over the past 10 years, global ETF assets have increased from \$580bn to well over \$3tn. This has been overwhelmingly positive for investors, bringing the benefits of low costs, broad diversification and, ultimately, better outcomes.

Low-cost ETFs are winning converts among investors who traditionally favoured individual stocks and high-cost mutual funds. It suggests

typically transact with one another. We have found this secondary market is responsible for the vast

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overstated, as not all secondary market transactions are disclosed in Europe. In the US, where all transactions are disclosed, figures are still high at 8 cent for equities and 8 cent for bonds.

1. In discovery what most ETF share trading does not lead to any activity in the ETF portfolio means the impact of ETFs – and the possibility of

Investors have learnt costs matter, and ETFs offer access to low-cost investing

ETFs being launched that offer access to niche areas of a

market or asset class. These strategies may be appropriate for some investors, but I believe the majority of investors are best served by well-diversified, broad-based funds.

That said, I also expect ETLs to continue to attract assets. Investors have learnt costs matter, and ETLs offer easy access to low-cost investing. It is a tangible benefit that stands in contrast to the perceived perils of ETFs that are more myth than reality.

The writer is chairman and chief executive of Vanguard, the second-biggest ETF provider. The views expressed are his own.

Fidelity, in Shift, Embraces ETFs

Fund firm ramps up offerings as money giants battle for fee-conscious customers

BY SARAH KROUSE

Abigail Johnson once resisted building up in exchange-traded funds because of the potential costs of committing to the lower-margin products. But a sea change in the money-management industry is forcing the chief executive of Fidelity Investments to alter that strategy.

Fidelity launched six new ETFs in 2016, increasing its lineup of ETFs by 40%, while the firm slashed fees to undercut competitors on price. That push came in a year when clients pulled more money from Fidelity's traditional mutual funds than in any since 2011, according to fund-research firm Morningstar Inc. Investors even withdrew money from some actively managed mutual funds that beat their benchmarks, according to the data provider.

Fidelity's top executives now say they need to be more competitive in the ETF arena despite thinner revenue from the popular products, which trade like stocks but offer low-fee access to wide swaths of the market. ETFs are less profitable than Fidelity's bread-and-butter mutual funds.

"If we don't do that, customers will leave Fidelity," said Charles Morrison, head of Fidelity's asset-management business. "The revenue impact will be what it will be."

Despite being slow to offer its own ETFs, Fidelity remains among the largest U.S. money managers, with \$2.1 trillion in assets under management and \$5.6 trillion in assets under administration. The firm reported record revenue for 2014 and 2015.

The tighter embrace of ETFs by a firm long known for its star stock and bond pickers embodies the cultural shift underway across the money-manage-

ment industry. Many firms that once specialized in active management are experimenting with previously unpopular approaches as they grapple with an unprecedented flow of money to cheaper, index-based products.

A big attraction of ETFs to investors is that they can be bought or sold in real time during the trading day, just like stocks, while mutual funds can be traded just once a day. ETFs, which typically carry lower costs, also have some tax and trading advantages over mutual funds.

During 2016, actively managed funds watched investors pull \$358.8 billion, while their lower-cost passive rivals, such as ETFs and index-tracking funds, received \$479.8 billion in fresh cash, according to research firm Morningstar Inc. All told, there were some \$2.5 trillion in assets invested in U.S. exchange-traded products at the end of November, according to London-based consulting firm ETFGI LLP. That is up from about \$1 trillion in assets at the end of 2011.

"We believe flows are a lagging indicator that can be expected to improve as the market enters the next cycle for active outperformance, which we may be starting to see now as interest rates rise and the difference between winning and losing stocks starts to widen," a representative from Fidelity said.

Few firms are more associated with active fund management than Fidelity, a privately held company founded by the Johnson family in 1946. Fidelity became a household name in the 1980s because of its mutual funds overseen by star fund managers such as Peter Lynch.

Fidelity first sold passively managed index mutual funds three decades ago. But from 2003 to 2013 it had just one Fidelity-branded ETF, even as such funds became one of the industry's fastest-growing offerings. ETFs and index funds both often track the performance of different benchmarks and charge lower fees than actively managed funds.

Within Fidelity there was some disagreement about how to react to the growing popularity of ETFs in the early 2000s, current and former employees say. Edward "Ned" Johnson, then chairman and chief executive, viewed ETF sales as a way to bolster assets under administration in the firm's brokerage business. But his daughter, Ms. Johnson, who led Fidelity's asset-management unit, didn't want to spend resources on the firm's own ETFs, according to former employees.

Ms. Johnson is now Fidelity's CEO and in December succeeded her father as chairman. The Johnsons control 49% of the company, while employees hold the other 51%.

Over the years, rivals raced ahead with new ETF products while Fidelity hesitated. BlackRock Inc., State Street Global Advisors and Vanguard Group expanded ETF offerings and pulled in assets at a clip. All told, those three firms have about \$2 trillion in U.S. ETF assets today.

Fidelity's dilemma was that ETFs were a low-margin business that required a scale of operation in those products that the firm lacked. Fidelity researched what it would take to start more of its own ETFs but didn't proceed with those plans because it concluded it would be too expensive to become a meaningful player in that field, said people familiar with those discussions.

But Ms. Johnson and top lieutenants later came to view those products as key to retaining clients and gathering new assets from younger investors. A generation of 18- to 34-year-olds that is larger in size than the baby boomers is increasingly opting for lower-cost passive funds. In 2015, investors pulled a net \$18.8 billion from Fidelity's actively managed stock funds even though more than three-quarters of its actively managed U.S. stock funds and 85% of its international stock funds beat their benchmarks.

Fidelity's first attempt to get a foothold in ETFs was a partnership with New York competitor BlackRock in 2010. BlackRock needed access to retail customers and Fidelity lacked its own ETF lineup. Both wanted to take on Malvern, Pa.-based rival Vanguard, which was gathering assets from retail investors rapidly.

That resulted in the 2013 launch of 10 Fidelity ETFs managed by BlackRock's iShares unit. Fidelity now charges investors 0.08% annually for those funds, less than BlackRock's own comparable iShares sector funds that cost 0.44%, though Fidelity's have fewer assets. In agreeing to the partnership, Fidelity said it wouldn't likely start its own ETFs that compete with so-called core iShares funds, according to people familiar with the matter.

Fidelity became more aggressive in the past 12 months, as it slashed fees on some ETFs, launched its own products that track nonmarket capitalization-weighted indexes, attended ETF industry forums for the first time and started selling a growing number of ETFs commission-free on its brokerage platform. In just the past month, Fidelity even cut short-term trading fees in 75 mutual funds.

Fidelity is also trying to marry its well-known stock-picking mutual funds with tax and trading advantages of exchange-traded funds. The firm filed an application with the Securities and Exchange Commission in August for a nontransparent exchange-traded product akin to a closed-end fund.

Fidelity's ETF business is still much smaller than its rivals. Its ETF assets under management just passed \$5 billion, compared with \$254.6 billion handled by outside firms that sell their ETFs on Fidelity's platform.

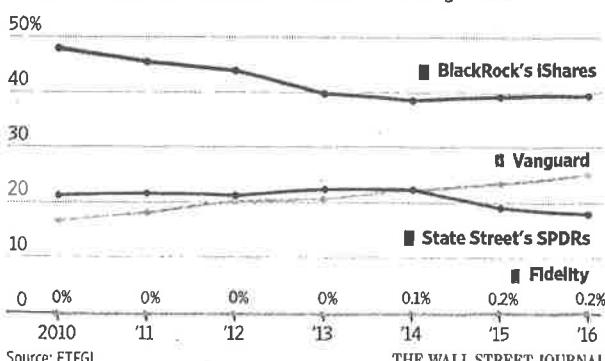
Still, not all longtime Fidelity employees and mutual-fund managers are sold on the firm's recent shift, according to current and former employees.

But Mr. Morrison, head of Fidelity's asset-management business, said the recent steps didn't signal a move away from Fidelity's "commitment to active management."

"Investor preferences shift over time," he said. "We have to make sure we respond to that. It's not an either or."

Low Fidelity

Market share of total U.S. ETF assets under management



Source: ETFGI

THE WALL STREET JOURNAL.

BlackRock Cuts ETF Fees

Action is another indication of how new retirement rules are transforming industry

BY SARAH KROUSE

The world's largest money manager is cutting fees at more than a dozen exchange-traded funds, another sign of how a federal overhaul of retirement-savings rules is transforming parts of the financial-services industry.

The move by BlackRock Inc. covers \$216 billion in assets and will lower expenses

below or on par with those offered by low-cost pioneer Vanguard Group and Boston rival State Street Global Advisors. BlackRock's price reductions affect 15 ETFs within its iShares business, trimming the cost of widely used funds like the iShares Core S&P 500 ETF to 0.04% from 0.07% and the iShares Core U.S. Aggregate Bond ETF to 0.05% from 0.08%.

The New York asset manager is betting that low-cost funds that mimic the performance of the market will become bigger staples within retirement accounts in the coming years because of new

Obama administration regulations requiring brokers to put the interests of retirement savers ahead of their own.

"We believe the rule will have as big an impact for the

216

Amount, in billions of dollars, of assets covered by BlackRock's decision to lower ETF fees

wealth-management industry as Dodd-Frank had on banks," said BlackRock Chief Executive Laurence Fink, referring to a regulatory overhaul passed after the last financial crisis designed to reduce risk taking on Wall Street.

The Labor Department's new fiduciary rule, set to take effect in April, holds advisers who work with tax-advantaged retirement savings to a "fiduciary" standard, meaning they must work in the best interest of their clients and generally avoid conflicts. Previously, advisers were required to offer only "suitable" guidance, a less-rigorous standard.

The changes are widely expected to be a boon for passively managed index funds that track markets instead of trying to beat them. Those funds are typically cheaper than funds run by managers who bet on individual stocks and bonds. Fund-research firm Morningstar Inc. expects the rule could push as much as \$1 trillion into passive investments.

Some brokerage firms already have unveiled changes to how they handle retirement products, including a smaller lineup of funds and alterations of longstanding pricing structures.

BlackRock's discounts affect a small portion of its \$4.9 trillion in assets under management. But the cuts apply to about 18% of its \$1.3 trillion in iShares assets.

Mark Weidman, the global head of iShares, said the firm wants its S&P 500 ETF, which goes head to head with similar products at Vanguard and SSGA, to be "the biggest ETF in the world."

It has \$79.3 billion in assets, leaving it more than \$100 billion short of SSGA's SPDR S&P 500 ETF, the world's largest ETF.

SPDR S&P 500 ETF has about \$197 billion in assets and a net fee of 0.0945%.

The discounts are part of a broader reduction in the price of investing as firms increasingly undercut each other on price and fight for price-sensitive clients. Over the last 12 months, \$437.3 billion has flowed into passive funds, according to Morningstar, while investors have yanked \$303.34 billion from actively managed funds.

Another BlackRock rival, Fidelity Investments, which has a distribution partnership with BlackRock for the ETFs affected by the price change, reduced prices on a set of its own funds in June. Charles Schwab Corp., another large ETF provider that has cut prices in recent years, has a strategy of matching fee reductions made by rivals.

BlackRock executives say investors that use the types of funds affected by Wednesday's price cuts are more likely to buy other ETFs and actively managed funds. The firm expects financial advisers to increasingly use ETFs in lieu of individual stocks and bonds.

THE WALL STREET JOURNAL.



JUSTIN CHIN/BLOOMBERG NEWS

BlackRock's Laurence Fink

Coming Soon? A 0.00% ETF Fee

This past week, BlackRock Inc., the world's largest money manager by assets, cut management fees on some of its iShares exchange-traded funds to as low as 0.04%, or \$4 on a \$10,000 investment.



THE INTELLIGENT INVESTOR
JASON ZWEIG

Charles Schwab Corp. quickly followed suit. But why stop there? Cambria Global Asset Allocation ETF, run by Cambria Investment Management LP of El Segundo, Calif., assesses a management fee of zero (although the funds it holds charge 0.25%). At least two ETFs in Europe have total expenses of zero, says Deborah Fuhr, managing partner of ETFGI, a research firm in London.

And why stop at zero? Why, my colleague Paul Vigna asked recently, can't funds pay you to invest?

"Will someone leapfrog us and go to negative management fees?" asks Mebane Faber, manager of the Cambria ETF. "I'd love to see it. There's a lot of room to wring out the excess fees in the fund industry."

That's for sure. As the investment-management consultant Charles D. Ellis has

THE WALL STREET JOURNAL

October 8 - 9, 2016

pointed out, fund fees are even higher than they seem.

Funds report their expenses as a percentage of the total amount you invest. But you should size up your fees based

THE INTELLIGENT INVESTOR

not on how much money you happen to have but rather on how much

the manager can make it grow. If the market goes up 5%, your fund goes up 6% and the manager charges 1%, your cost of investing is effectively 100%. The fund's manager has captured all the excess return for itself.

ETFs and other index funds are overturning that ridiculous tradition.

"There isn't a zero lower bound to expenses," says Lee Kranevuss, the former global chief executive of iShares, who now runs 55 Capital Partners, an asset manager in Mill Valley, Calif. "A negative management fee is certainly conceivable."

Because most ETFs funds track markets rather than trying to beat them, their costs are extremely low—and, with the latest iShares fee cuts, are approaching zero. Meanwhile, ETFs can generate revenue by lending their securities to short-term borrowers such as hedge funds or brokerage firms. The borrowers may need the securities to settle a trade or to sell them short in a bet that they will fall in price. The borrowers typically cover

the loan with cash collateral of at least 102% of the securities' market value, and they pay the fund a lending fee as well.

The return on securities lending, among funds that engage in it, averages about 0.03% and can exceed 0.1% on the smaller or international stocks that are most in demand among borrowers.

Think of management fees as a cost, and securities lending as a rebate. As ETF fees fall toward zero, securities-lending revenue can more easily exceed expenses. Once the rebate exceeds the cost, you are effectively getting paid to own the fund. "Securities lending is your friend," says Ms. Fuhr of ETFGI.

In the year ended March 31,

The iShares Russell 2000 ETF earned \$72 million on lending in fiscal '16.

for instance, the iShares Russell 2000 ETF earned \$72 million on securities lending while incurring \$53 million in management fees. In 2015, the Vanguard Small-Cap Index ETF (together with its sister mutual fund of the same name) earned \$48.5 million and paid only \$45 million in expenses.

In principle, says Mr. Kranevuss, a manager could charge a zero management fee and rebate a portion of the securities-lending revenue to the fund. Investors would get paid to own the fund, and the manager could still earn enough to make money for itself.

A spokesman for Vanguard Group says the fund giant doesn't believe in waiving fees, and rebates all securities-lending revenue to its funds. BlackRock says that revenue from securities lending varies so much from year to year that it can't be counted on to reduce expenses consistently.

There's another way to reduce the costs of ownership, although not to zero.

Federal mutual-fund regulations permit managers to charge higher fees when they beat the market if, but only if, they also charge lower fees when they underperform.

So how common are these so-called fulcrum fees? Thomson Reuters Lipper tracks 9,908 mutual funds; only 213, or 2.1%, charge them.

Advisor Shares Focused Equity ETF, a fund that launched on Sept. 21, charges 0.75%, which rises to as much as 0.85% if it outperforms its benchmark and goes as low as 0.65% if it falls behind. "If I beat the market, I get a bonus," says the manager, Eddy Elfenbein. "If I don't, you get a savings."

In the past, I've argued that investors should receive bonuses from their fund managers for being long-term shareholders, along the lines of the loyalty programs run by airlines and hotels. But shouldn't fund managers also earn more when they do well for investors and less when they do poorly? Of course they should. It is only fair. As some funds cut their fees closer to zero, they will put more pressure than ever on all funds to become fairer and cheaper.

When Funds Lend Out Securities, Do Investors Get a Fair Share?

BY IAN SALISBURY



Despite recent regulatory efforts, fund fees remain murky to most regular investors. But a high-profile investor lawsuit against BlackRock, whose iShares funds dominate the business of exchange-traded funds, may finally shine a light on one of the least-understood aspects of those costs.

At issue is what is known on Wall Street as securities lending, a practice in which mutual funds and ETFs pay agents to help them lend out shares in their portfolios to Wall Street traders and earn interest. The practice can boost profits—it generated about \$10 billion in annual revenue for mutual funds and other investment pools, estimates research firm Markit—as well as investor returns.

But a lawsuit filed last month in a U.S. District Court in Tennessee by two little-known pension funds argues not enough of that extra money is making it back into the hands of shareholders. BlackRock says it remits about two-thirds of the revenue it earns from securities lending to investors, while the rest goes to cover costs and boost the bottom line. The lawsuit—brought by the Laborers Local 265 and Pipefitters Local No. 572—says that is well below rivals like Vanguard, which passes all share-lending profits on to fund holders. The suit charges BlackRock with “self-dealing.”

While experts say investor lawsuits typically face long odds in court, they add that this case may help clarify a controversial area of the ETF business, and perhaps spur changes that could help inves-

tors. For example, investor lawsuits in the 401(k) arena have recently led to greater disclosure and lower prices. “You want sunlight,” says William Birdthistle, a law professor at the Illinois Institute of Technology who specializes in investment companies. “Lawsuits like this can provide an investor education.”

For its part, BlackRock, which says it will vigorously contest the suit, has long said comparing its lending policies to competitors is misleading. While BlackRock may profit from its lending program, investors ultimately benefit with “above average returns...over time,” the firm said.

Some independent observers agree. Dave Nadig, director of research for ETF website IndexUniverse.com, says head-to-head calculations he performed for at least one of the funds in the suit—iShares Russell 2000 Value ETF—show investors coming out ahead, despite the higher fees.

Others aren’t so sure. John C. Adams, a University of Texas finance professor, who has studied share lending, says arrangements similar to that of iShares—where an affiliate of the fund’s parent earns a cut—have ended up costing investors in the long run. Working with researchers from Virginia Tech and the University of Colorado, Mr. Adams recently examined returns from 226 mutual funds between 2003 and 2009. They found that conducting lending through affiliates lowered returns to investors by 70%. “It all boils down to incentives,” Mr. Adams says.

The Problem With ETFs

One of Wall Street's most popular products faces questions after wild swings in stocks

The extreme stock-market gyrations in August exposed cracks that many critics had warned about in the booming business of exchange-traded funds—cracks that fund managers such as BlackRock Inc.

ABREAST OF THE MARKET are now acknowledging as they work to figure out what went wrong.

At issue is one of Wall Street's most popular products ever. Investors have poured hundreds of billions of dollars

By Corrie Driebusch,
Saumya Vaishampayan
and Leslie Josephs

into ETFs over the past decade, drawn by low fees and the prospect of being able to buy or sell a mutual-fund-like product whenever they want like a stock. But trading records and conversations with investors show ETFs couldn't keep that promise when the Dow Jones Industrial Average dropped more than 1,000 points in the first minutes of trading on Aug. 24.

Steep share-price declines that Monday triggered a slew of trading halts that started in individual stocks and cascaded into ETFs. Dozens of ETFs traded at sharp discounts to the sum of their holdings, worsening losses for many fund holders who sold during the panic. The strange moves highlighted concerns raised by academics and others over the years that ETFs might not be as easy to move in and out of as advertised in times of stress.

One fund hit by the dislocations was BlackRock's iShares Select Dividend ETF, which trades under the ticker DVY and holds shares of U.S. companies that consistently pay dividends. Its largest holdings include Lockheed Martin Corp., Kimberly-Clark Corp. and McDonald's Corp.

At 9:42 a.m. in New York on Aug. 24, the ETF tumbled 35% to \$48, its lowest level of the day. At the time, the combined weighted values of the stocks the ETF held was \$72.42, down just 2.7% for the day, according to FactSet.

"It's clear this thing has creaks in it that we did not realize" before the morning of Aug. 24, said Mark Wiedman, global head of iShares, which is owned by BlackRock. "It was a wild anomaly but one we must study immediately."

For investors of all sizes, the problems set off alarms that a core component of their portfolios might not always function as expected.

The disruptions could also slow the growth of what has been one of Wall Street's greatest success stories in recent years. A spokeswoman for BlackRock, one of the world's largest ETF providers through

its iShares business, said the firm generated \$3.26 billion in ETF-related revenue last year, 29% of the company's total. Other major ETF providers include State Street Global Advisors and Vanguard Group.

Assets in ETFs in the U.S. have grown to roughly \$2 trillion from \$305 billion a decade ago, according to research and consultancy firm ETFGI LLP. In July, U.S. exchange-traded products, a group that includes ETFs, represented just over one-quarter of total stock-trading volume, according to NYSE Group. That compares with 14.9% a decade ago.

The first ETF was launched in 1990, but the product didn't take off until after the SPDR S&P 500 ETF started trading in 1993. Investors poured money into the funds over the years, attracted by typically low fees and the growing popularity of investment strategies that seek only to match the performance of big stock indexes.

Their main attraction was that unlike mutual funds, which could only be bought or sold at the end of the day, ETFs could be traded any time markets were open. The funds make it "easy to get in or out of positions quickly," according to a presentation on a State Street Global Advisors investor education site.

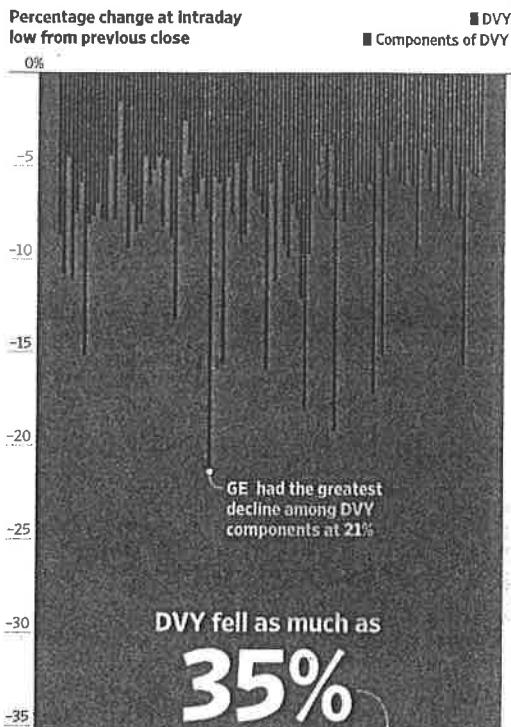
This isn't the first time trading issues have plagued exchange-traded products. In 2012, the VelocityShares 2x Long VIX Short Term Exchange note, a more complex product that not only tracks stock-market volatility but also operates with leverage, plunged even though actual volatility in the market was little changed.

There is also growing concern about how bond ETFs, a popular niche, will perform if investors rush to the exits, as some predict might happen when U.S. interest rates rise.

The trading turmoil of Aug. 24 disrupted the arbitrage activity in which traders buy and sell ETFs and their components to take advantage of price discrepancies. Those market mechanics are the key to keeping fund values in line with their underlying assets and make all-day trading possible. "I don't think we are happy with what we saw coming from ETF trading on the early morning of the 24th,"

Out of Sync

The iShares Select Dividend ETF, or DVY, dropped much more at its low point on Aug. 24 than any of its individual stocks.



Notes: Excludes AGL Resources, which is to be acquired by Southern; figures are rounded
Source: FactSet

THE WALL STREET JOURNAL.

Mr. Williams said the wild swings in ETFs his firm owned left him and his colleagues wary about the products.

At BlackRock's office in San Francisco, a team of about 20 people charged with monitoring ETF trading alerted senior managers by email and phone to apparent pricing problems. The company began calling the market makers who facilitate trading in the ETFs to quiz them about why the spreads between bid and offer prices for the funds were so wide. Among the largest market makers for BlackRock's ETFs are Goldman Sachs Group Inc. and KCG Holdings Inc.

BlackRock defended its product. The firm pointed out that trading in affected ETFs largely returned to normal within half an hour.

"The fund has been out there trading great for 12 years," Mr. Wiedman said. "It had 303 seconds where it didn't function properly, where it was pricing bizarrely. You have to keep it in perspective."

Still, the breakdowns highlighted the risk of promising instantaneous pricing of products that are assembled from dozens of individual stocks. Some observers have warned for years that this was a recipe for a breakdown.

The severe price swings and volatility that day weren't limited to the dividend ETF. When wealth manager Ryan Wibberley saw that the iShares Core S&P Small Cap ETF was tumbling, he sent in buy orders, aiming to take advantage of what he believed was an overextended 15% decline.

His purchase went through when the ETF was down more than 30% for the day. He said he was shocked and fully expected the trade to be canceled, as happened in some cases during the so-called flash crash of May 2010. In that instance, the New York Stock Exchange canceled trades that were completed 60% or more away from their precrash prices, but no trades have been canceled so far in this episode.

"I was just waiting for them to take it away from us," said Mr. Wibberley, chief executive of Gaithersburg, Md.-based CIC Wealth, which manages about \$400 million. He estimates he made about a 30% profit on the position on Aug. 24 alone. "There's someone on the other end of that who just really was not having a good day."

—Dan Strumpf
and Sarah Krouse
contributed to this article.

Blessings and hazards of fixed income ETFs

A seamless way of riding the rally – but the products have yet to be tested by a big shock

JOE RENNISON – NEW YORK
THOMAS HALE – LONDON

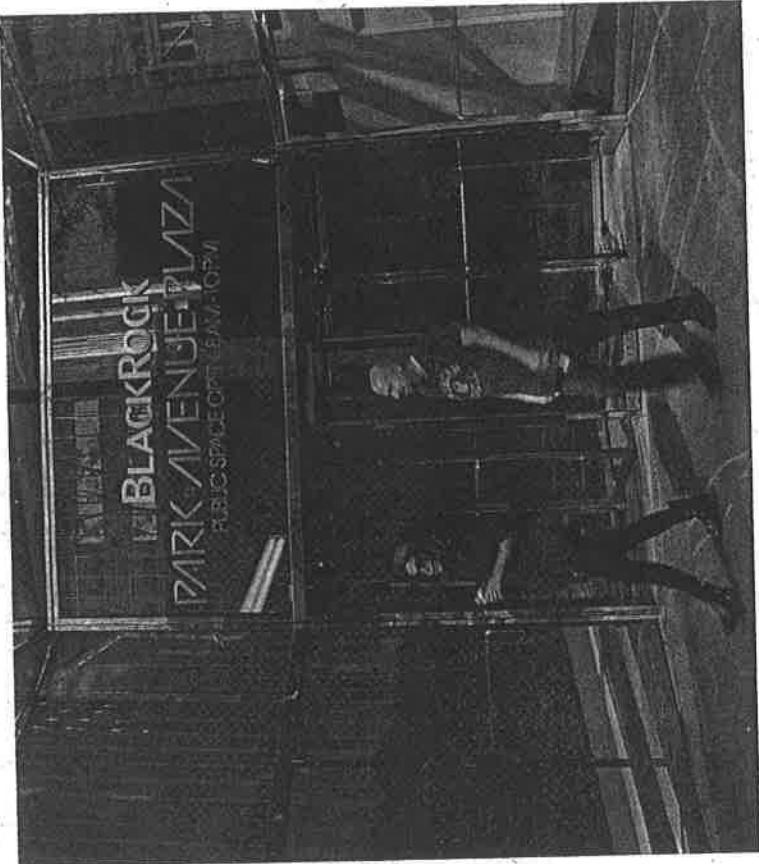
Almost 15 years after BlackRock launched the first bond exchange traded fund, these low-cost products have become a meaningful part of the way investors gain exposure to bonds – a market that often lacks the kind of transparent pricing and ease of buying and selling that typifies equities.

While fixed income ETFs have provided investors with a relatively seamless way of riding the bond market rally, critics say they have yet to be tested by a significant fixed income shock, such as a rapid and sustained rise in yields. Investors such as Carl Icahn have warned of an impending crisis in ETFs. The fear is that if debt prices suddenly decline, investors will rapidly sell the ETFs that track the underlying bonds, triggering a vicious cycle that further hits the bonds and sparks broader market volatility.

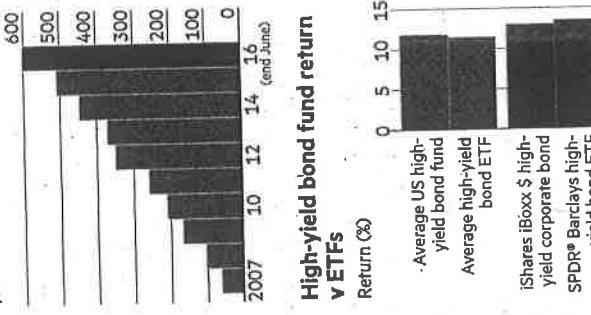
The rapid expansion of ETFs tracking fixed income comes as the business of selling and trading bonds is being transformed by tougher regulations and higher capital costs hitting the Wall Street banks that have long dominated the industry. Big flows of money into bond markets in this era of ultra low and negative interest rates have spurred hefty debt sales by companies and governments.

“I think it is very, very dangerous to assume you can turn an illiquid market into a liquid market,” says Gershon Disenfeld, director of high yield at Allianz Bernstein.

Assets invested in global fixed income ETFs have grown from about \$60bn at the end of 2007 to more than \$600bn at the end of July 2016, according to ETFGI data. This year, investors have put more money into US fixed income ETFs than the larger pool of equity



Fixed income ETFs see accelerated growth



Sources: ETFGI; Morningstar

down,” says Toby Vaughan at Santander Asset Management.

ETF providers say they help provide a reference point for investors to gauge the price they receive from banks to invest directly in bonds.

“The increased pricing discovery supported by daily ETF trading in the underlying fixed income holdings helps provide markets with bond prices for securities that otherwise might not have traded hands on a given day,” says James Meyers, director of fixed income product strategy at Invesco PowerShares.

The flipside is that any reversal in the market runs the risk of being exacerbated if an ETF begins to have redemptions, with bonds then being offloaded into an already falling market, aggravating the sell-off.

“These are tools that we can use that mean the costs for us and our clients go

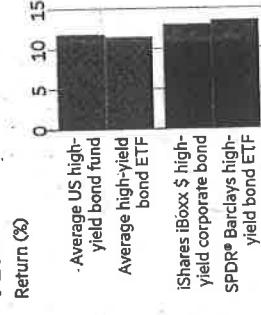
down in bonds in two days, we will see it in two hours,” says Dave Nadig, director of ETFs at Factset, a data company.

The issue will probably affect few ETF providers as the vast majority of ETFs providers as the vast majority of ETFs redeem “in kind”, meaning they hand back bonds rather than cash to “authorised participants” eligible to create and redeem shares in the ETF.

For this redemption to be in the interest of the participant, the price of the shares they buy from investors must be lower than the price of the bonds they receive back and then sell.

It is an issue the ETF industry acknowledges, but rather than seeing ETFs as financing risks if bond prices fall sharply, they argue that the products improve the situation, giving investors a product for price discovery and a way to adapt to changes as bond prices fall.

High-yield bond fund return v ETFs



Sources: ETFGI; Morningstar

Active ETFs on track to lure more fund flows

FINANCIAL TIMES

Friday 16 December 2016

STEPHEN FOLEY — NEW YORK

What if the exchange traded fund were not the enemy of active management, as it has seemed, but its saviour?

As stock and bond pickers confront the existential crisis resulting from the torrent of money pouring out of traditional mutual funds into index trackers, some are pinning their hopes on a small but growing niche within the ETF world.

Most ETFs are passive products built to track indices, but the number of actively managed ETFs, whose human managers aim to beat the market, has grown from 73 at the end of 2013 to 173 in the US now. The assets entrusted to them have doubled to \$29bn in three years, and in the fixed-income market big firms such as DoubleLine and Pimco are expanding their offerings. Vanguard has signalled it could enter the market next year, meaning that active ETFs are likely to grow in prominence.

The question is whether they may be superseded by an even newer product.

"In this industry you see that successful funds beget more successful funds, so you are likely to see more active ETFs," says Jeffrey Sherman, who co-manages the SPDR DoubleLine Total Return Tactical fund, the most successful active ETF launch so far in terms of asset gathering. It pulled in \$2.1bn in the year following its launch in February 2015 and now manages \$3bn, which is invested in a strategy similar to DoubleLine's Total Return mutual fund.

"If there is a vehicle via which we need to deliver something, then we are going to look at it. We are agnostic as to the vehicle," Mr Sherman says.

Many of the attractions of the ETF structure are similar, regardless of whether the underlying portfolio passively follows an index or shifts according to the analysis of a human manager.

Such funds keep their tax bills low because they do not have to sell securities to fund redemptions, unlike mutual funds. Paperwork and distribution costs are also lower. But active ETFs are still substantially more expensive than passive products.

So, can all active mutual fund strategies be replicated in ETF form? The three largest active ETFs are all fixed-income funds, suggesting the product may be more of a money spinner for bond managers than for others. Rounding out the top three, alongside the DoubleLine fund, are two ETFs from Pimco.

In all, \$22bn of the \$28bn in active ETFs is in fixed-income funds, and only \$3bn of the remainder is in equity funds, even though the numbers of funds trying to attract assets is roughly equal.

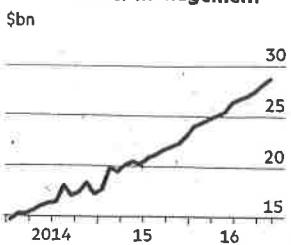
The reasons are twofold. Firstly, while the inability of equity fund managers to

beat the market over the long run has now been largely proven by research, the jury is out on bond managers. Debt markets are more diverse, and the broad market benchmarks skew to low-yielding government bonds, so the value of active management is potentially higher.

Bond managers also seem less deterred by the prospect of publishing their full portfolio every day, as ETF rules require. Stockpickers more jealously guard their secret sauce, and fret more about rival investors' front-running purchases or sales of large blocks of stock than do bond managers, says Mr Sherman.

A question is whether more equity managers, facing huge outflows from mutual funds, will overcome their trepidation and launch transparent active ETFs or instead hitch themselves to an entirely new exchange traded vehicle, such as the NextShares fund structure

Actively managed ETF assets under management



Actively managed ETF assets

December 2016 (\$bn)

International equity	0.26
Municipal bond	0.46
Commodities	0.92
US equity	1.17
Alternative	1.25
Allocation	1.39
Sector equity	1.67

Taxable bond 21.73

Source: Morningstar

created by Eaton Vance, which can be more sparing with portfolio details.

Like ETFs, NextShares funds can be bought and sold at any time, but like mutual funds the price is set at the end of the day. NextShares assets are negligible so far, since few distributors are backing them, but interest may grow.

Other fund managers are pushing alternative exchange traded models. Fidelity has suggested a new version of the old closed-end fund structure.

Ben Johnson, analyst at Morningstar, says active ETFs face competition from structures new and old — traditional mutual funds are coming down in price — but he says the structure may prove less significant than that timeworn driver of asset flows: performance.

Fidelity and Vanguard Place 'Active' Bets

Regulation issues are slowing the funds, but will they have their day?

BY DAISY MAXEY

ACTIVELY MANAGED exchange-traded funds were heralded as the birth of a new era in investments when they were launched in 2008.

Eight years later, they're still the next big thing. Active ETFs have had only limited success in attracting investors.

But rather than giving up, money-management firms see the new era as merely delayed, and are pushing further into the market. Last month, **Fidelity Investments** and **Vanguard Group** both increased their commitment to active exchange-traded products.

Fidelity became the latest company to seek regulatory permission to issue "nontransparent" active exchange-traded products, which wouldn't have to disclose their holdings daily like active ETFs do. Meanwhile, Vanguard sought permission from regulators to start offering active ETFs (the transparent kind) in the U.S. It already sells them abroad.

Those moves by two fund giants—coming after the Securities and Exchange Commission in July streamlined the approval process for exchange listings of active ETFs—could draw more interest to these funds.

Finding an alternative to lure investors is important to managers of active mutual funds as passive strategies continue to erode their market share. ETFs, known mainly for passively tracking an index, account for roughly 15% of the assets under management in the U.S. today, but that could grow to more than 40% over the next 10 years, says Craig Siegenthaler, a U.S.-stock research analyst at Credit Suisse. Actively managed ETFs and hybrid ETF/mutual fund products are meant to appeal to investors who want the ease of trading and tax advantages of ETFs but also believe a fund manager can outperform a benchmark index.

The disclosure problem

One challenge for active ETFs is disclosure requirements. Active ETFs are required to disclose their holdings every day, while conventional mutual funds have to disclose hold-

'Nontransparent' Efforts

Proposals abound for nontransparent versions of active exchange-traded products, as the fund industry tries to bring more active-management strategies to ETFs and ETF-like vehicles.

EATON VANCE

The Boston money manager was first to market with its nontransparent actively managed exchange-traded product. It has seen some adoption of its NextShares, but the structure requires a new trading platform that could leave an opening for rivals.

PRECIDIAN INVESTMENTS

A Bedminster, N.J., firm partially owned by Legg Mason Inc. proposes ActiveShares. American Funds, BlackRock and State Street Global

Advisors have filed to launch ETFs based on the structure.

REGULATION: Rejected in 2014; seeking approval.

FIDELITY INVESTMENTS

The Boston money manager's product would 'modernize' the traditional structure of closed-end funds.

REGULATION: Awaiting approval.

T. ROWE PRICE GROUP

The Baltimore investment-management firm's ETFs would disseminate

'pricing signals' and a 'hedge portfolio' to facilitate hedging and arbitrage.

REGULATION: Working to address concerns.

BLUE TRACTOR GROUP LLC

The New York financial-product developer's structure, Shileded Alpha ETF, would be licensed to money managers. The funds' trading strategies would be obscured.

REGULATION: Awaiting approval.

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ings only quarterly with a 60-day lag.

This has hampered the advent of actively managed stock ETFs. Many managers of active stock mutual funds have been reluctant to run an active ETF because they don't want daily disclosure of their holdings to tip off other investors as they build a position over days or weeks.

As a result, most of the growth in active ETFs over the past several years has been in fixed-income funds, which are harder to mimic—in part because the securities held by fixed-income funds often aren't as liquid as a typical stock fund's holdings, meaning it is harder to obtain them without moving the market, says Ben Johnson, director of global ETF research at fund tracker Morningstar.

Just \$26.5 billion of the \$2.4 trillion in U.S.-listed ETFs is in actively managed funds, up from \$14.6 billion at the end of 2013, according to Morningstar. Within the current total, active fixed-income ETFs have \$20 billion in assets, while active stock ETFs have \$3 billion and other sectors have \$3.5 billion.

Seeking OK for a delay

Disclosure concerns have led several firms to seek regulatory approval for ETFs that don't have to reveal their holdings daily. For instance, **Precidian Investments**, partially owned by Legg Mason Inc., is seeking permission for a nontransparent ETF model it calls ActiveShares; and several other firms hope

to launch funds based on the model.

The SEC has raised questions about transparency in some proposed active-ETF models. To address that, Fidelity says it plans to disclose the holdings of its exchange-traded active fund every day—but with a 30-day delay. It would, however, also publish a tracking basket daily, comprising the fund's most recent publicly disclosed holdings and representative ETFs that approximate the fund's holdings and risk characteristics. A measure of the basket's value would be disclosed every 15 seconds.

Boston-based **Eaton Vance Corp.** has taken a different direction. Earlier this year it launched three funds it calls exchange-traded managed funds, which have characteristics of both ETFs and mutual funds.

These NextShares funds don't disclose their holdings daily. They trade on an exchange, but not the same way ETFs do: NextShares investors place orders during the trading day to be executed at an increment above or below the daily net asset value to be determined at the end of the day.

That pricing mechanism requires changes in brokerage firms' trading platforms. Swaying broker-dealers to make those changes has been a challenge, even though Eaton Vance has offered to help pay for the necessary upgrades. But there are signs that the NextShares structure is gaining traction. UBS Financial Services Inc. said in mid-July that it plans to make

the funds available on its financial-adviser network next year.

Mixed opinion

Some analysts say new exchange-traded products like NextShares, Fidelity's exchange-traded active fund or other proposals could be the salvation of active management as investors pour money into ETFs.

Others put less faith in the new innovations. While actively managed ETFs and hybrid exchange-traded products will attract some assets, no structure that exists will solve the fundamental issue plaguing active funds—that "it's awfully difficult to beat the markets over a long stretch," says Mr. Johnson.

Rory Callagy, a vice president and senior credit officer at Moody's Investors Service, still has doubts about the Eaton Vance model and its unique trading mechanism.

"What I think is a challenge is that you're making a trade at 10 o'clock based on a net asset value that will be struck at 4 o'clock," he says. "So there's some uncertainty around what the cost will be."

Stephen Clarke, president of the NextShares Solutions unit of Eaton Vance, says, "NextShares are designed to support the objectives of long-term investors, not traders who seek opportunities for short-term profits."

Ms. Maxey is a reporter for The Wall Street Journal in New York. Email her at daisy.maxey@wsj.com.

SPOTLIGHT | WISDOMTREE BLOOMBERG U.S. DOLLAR BULLISH FUND

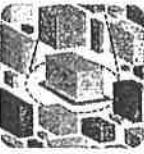
THE ANTI-BITCOIN ETF

Regulators' rejection in March of two proposed bitcoin exchange-traded products was a reminder that there are currency exchange-traded products out there already that offer much that a bitcoin fund wouldn't—currency diversification and an underlying market with enormous liquidity and regulatory oversight.

The Securities and Exchange Commission rejected a proposed listing of Winklevoss Bitcoin Trust, from Tyler and Cameron Winklevoss, and later turned down a proposed bitcoin product backed by SolidX Management LLC. The SEC cited the lack of regulation of the bitcoin market as a stumbling block to the proposed listings.

In contrast, national currencies and much of the trading in the markets for them are extensively regulated, and they provide much greater liquidity than the bitcoin market. And there is no shortage of exchange-traded products for people who want to invest in those markets. At the end of March, there were 24 exchange-traded products listed in the U.S. that invest in single currencies or currency derivatives and nine that invest in baskets of currencies or derivatives, holding a total of \$2.9 billion of assets, according to research firm XTF.

Funds that invest in a basket of currencies, like the \$193 million **WisdomTree Bloomberg U.S. Dollar Bullish Fund** (USDU), provide diversification for investors who don't want to bet on the movement of a single currency. USDU is an actively managed exchange-traded fund benchmarked to the Bloomberg Dollar Total Return Index. The fund holds currency forwards



that bet on the dollar's movement against a trade-weighted basket of currencies that includes the euro, yen, Canadian dollar, Mexican peso, British pound, Australian dollar, Swiss franc, South Korean won, Chinese yuan and rupee.

The fund was down 3% year-to-date through March but returned 5.5% annualized over three years, according to research firm Morningstar Inc. It has a 0.50% expense ratio.

"We initially viewed this holding as a tactical play on a strong dollar," says Matthew Krajna, senior portfolio manager for Nottingham Advisors in Amherst, N.Y.

Now, he says, the firm views the fund as more of a long-term holding to provide diversification for clients' portfolios. He says investors have to be mindful to take gains or minimize losses by selling shares when appropriate, because the fund doesn't provide income in the form of yield or dividends that would help cushion losses in the share price.

Another option for investors interested in diversified currency exchange-traded products is the \$736 million **PowerShares DB US Dollar Index Bullish Fund** (UUP). It has more assets and trades more than USDU, but its holdings are more concentrated: Nearly 60% of its exposure is to the euro. UUP was down 1.9% year-to-date at the end of last month but returned an annualized 6.5% over the past three years.

The Bloomberg Dollar Total Return Index, down 3.4% in 2017 through March, was up an annualized 6.1% over the past three years.

—Ari I. Weinberg

Buttonwood

The exchange-traded fund industry is getting too specialised

HERE comes a time when every financial innovation is taken a bit too far—when, in television terms, it “jumps the shark” and sacrifices plausibility in search of popularity. That may have happened in the exchange-traded fund (ETF) industry. The latest ETF to be launched is a fund that invests in the shares of ETF providers.

The notion has a certain logic. The ETF industry has been growing fast, thanks to its ability to offer investors a diversified portfolio at low cost. The assets under management in these funds passed \$3tn last year, up from \$715bn in 2008. Some investors might well want to take advantage of that rapid expansion.

But by no stretch of the imagination would this be a well-diversified portfolio; it would be a focused bet on the financial sector. And many of the companies in the portfolio, such as BlackRock, a huge fund manager, and NASDAQ, a stock exchange, are involved in a lot more than just ETFs. Even if the ETF industry keeps growing, the bet could still go wrong.

The new fund (with the catchy title of the ETF Industry Exposure and Financial Services ETF) is just the latest example of the industry's drive to specialisation. The earliest ETFs bought diversified portfolios that track indices such as the S&P 500. But there are now some 1,338 specialist funds worldwide, with \$434bn in assets, according to ETFGI, a research firm.

Some of these specialist funds are based on industries, such as energy or media. They appeal to investors who believe an industry will outperform, but who do not want to pin their hopes on an individual company. But others are pretty obscure: an ETF that invests in founder-run companies, with just \$3.1m in assets, for example; or another which buys shares in companies based near Nashville, Tennessee, with \$8.5m. A recent



fund was launched to back companies involved in the cannabis industry.

Heady stuff. But the more specialised the fund, the fewer companies it has to invest in. So these funds will probably be more volatile and less liquid—not the ideal home for the savings of small investors.

The financial industry has been down this road before. In the early 2000s Britain suffered a crisis in the investment-trust sector. Like ETFs, investment trusts are managed portfolios that are traded on the stock-market; they have been around since the 19th century. But a craze developed for so-called split-capital trusts, which had different classes of shares; some received all the income from the fund, others all the capital growth. These shares had some tax advantages and were snapped up by small investors. However, some split-capital trusts only invested in the shares of other trusts. When problems emerged in some funds, they rippled right through the asset class, eventually requiring nearly £200m (\$258m) to be paid out in compensation.

A similar pattern emerged, on a much bigger scale, with mortgage-backed securities (MBS) in America. The idea of issuing a

bond, backed by mortgage payments, dates back to the 19th century, but the residential MBS market took off in the 1980s. The market jumped the shark only in the early 2000s, with the rapid growth of vehicles known as collateralised debt obligations (CDOs) that grouped mortgage-backed bonds together, giving different investors different rights over the assets and cash flows of the portfolio. Doubts over the creditworthiness of these securities in 2007 triggered the financial crisis.

The ETF sector has not yet reached the extremes attained by split-capital trusts or CDOs. By and large, funds do not invest directly in other ETFs; although there are a few “leveraged” ETFs, where losses and gains are magnified, they represent only 1% of the industry's assets.

Still, there are signs that rapid flows into some ETFs can lead to price distortions. A rush of money into gold funds in recent years has caused the VanEck Junior Gold Miners ETF to be the largest investor in two-thirds of the 54 companies it owns, according to Factset, a data provider. The fund's assets grew by more than half, to reach \$5.4bn, between January 1st and April 17th. The rush was accelerated by another fund which made a leveraged bet on the performance of the VanEck ETF.

The danger is of a feedback effect: as the fund pours money into the smaller companies in its portfolio, their prices rise, attracting more money into the ETF. But should investors change their mind and want to withdraw their money, there could be a sharp fall in these mining shares. VanEck is allowing the fund to invest in larger companies in an attempt to solve the problem. But the more the ETF industry specialises, the more often such difficulties are going to arise.

Socially Responsible Funds

BY ALEX DAVIDSON

PLENTY OF investment professionals have their compensation tied to hitting specific financial targets. But does that metric make sense for increasingly popular socially responsible funds?

As these funds attract investors, some of the firms behind them have decided to tie the compensation of their portfolio managers to the impact the investments have made. The reasoning is clear: Investors in these funds are hoping to have an environmental and social impact, and managers' compensation should reflect how well they achieve those goals.

Skeptics, however, question the effort. For one thing, measuring impact is a tricky endeavor. And second, they worry, such a compensation strategy could reduce returns significantly, as fund managers pursue doing good at the expense of doing well.

Right mix

"Compensation has to be very carefully designed so that you're creating the right enticements for behavior," says Betsy Moszeter, chief operating officer at Green Alpha Advisors, an asset-management firm that focuses on sustainability and has one of the more advanced impact-based compensation structures among fund managers. In addition to managing investment portfolios, Green Alpha is a subadviser to Shelton Green Alpha, a mutual fund that focuses on green companies. "Having good incentives helps our marketing message and helps us talk to our clients," Ms. Moszeter says.

Currently, Green Alpha uses financial returns and sustainability data from third parties to help it determine compensation for its portfolio and fund managers. Starting next year,

Tie Pay to Impact

Managers must 'do good' to get rewarded.

But figuring out the metrics can be tricky.

sustainability ratings by fund researcher Morningstar Inc. also will be used to determine compensation for the two managers of the Shelton Green Alpha fund. Ms. Moszeter says that if the fund scores in the top 1% of sustainability funds, as ranked by Morningstar, the managers will qualify for a bigger bonus than if the fund fails to make the top 1%.

Another piece at Green Alpha, Ms. Moszeter says, is to look at what managers and analysts are doing to increase investor appetites for socially responsible investments. The thinking is that the more investors that portfolio managers and analysts can bring to the fund, the more investment there will be in socially responsible companies. Efforts of this kind that are encouraged, and rewarded, at Green Alpha include writing blog posts about investment choices and attending conferences to convince others of the merits of socially responsible investing.

For companies looking to tie compensation to social and environmental impact, one of the biggest obstacles is measuring

that impact in the first place. Some firms that specialize in sustainable investing rely on third-party providers of sustainability ratings, which in turn are based on such issues

Can pushing fund managers too far disrupt their overall vision for their funds?

as a company's use of energy or its water consumption. The third-party providers typically gather this information by submitting questionnaires to the companies. Some information is also gathered from companies' public filings with the Securities and Exchange Commission. Such filings sometimes include details about business operations that have an impact on the environment.

Third-party providers of sustainability data tend to use different systems to measure impact, so firms that try to tie compensation to such measures have difficulty comparing efforts

across the board. In addition, it is mostly larger companies with the resources to produce social responsibility reports. Thus, there tends to be a bit of an information gap where smaller companies are concerned.

The lack of a gold standard in assessing sustainability gives some portfolio managers pause.

Eye of beholder

"Performance data is objective, standardized and audited," says Billy Hwan, a portfolio manager at Parnassus Investments. "Measuring impact is not."

Mr. Hwan, whose firm incorporates environmental, social and governance factors into its investment process, says his firm doesn't link impact to compensation. He says without more reliable impact data, it is better to do research into a company before buying its stock, looking at both the fundamentals and sustainability perspectives, and then to compensate portfolio managers and analysts based on the performance of the stock.

"It's important to consider both in tandem, but the ultimate measure of sustainability

is in the returns," he says. Truly sustainable firms will have healthy profits. For example, a company that saves water or energy might have lower operating expenses. Or, a company that pays fair wages can have less employee turnover and lower recruiting and retention costs. Thus, focusing on returns, Mr. Hwan says, is compatible with assessing sustainability.

Joseph Keefe, president and chief executive of the sustainable-investment firm Pax World Funds, echoes the sentiment that, while some firms are eager to show that their portfolio managers and analysts have skin in the game, the tools to accurately measure and account for impact aren't there yet.

"There's still not a lot of quantitative metrics out there," Mr. Keefe says. "To the extent impact can be measured, and to the extent incentive compensation might take impact into account, it will probably be important to avoid straitjacket numerical formulas in favor of a more nuanced approach."

Mr. Keefe says his company takes an informal approach. Impact is incorporated into some salary considerations, he says. Employees who write and work on shareholder resolutions, for example, are assessed on how many resolutions they wrote or whether they encouraged corporate dialogues around certain issues. Issues the company focuses on typically have an environmental or social bent. But as a whole, Mr. Keefe says, salaries are still in mostly traditional formats.

"We would love to get there someday, yes," he says of impact-based compensation structures. "But I think we're in an early stage."

Mr. Davidson is a writer in San Francisco. He can be reached at reports@wsj.com.

JOURNAL REPORT | BIG ISSUES

Does Socially Responsible Investing Make Financial Sense?

Socially responsible investing has come a long way from the days when it mostly meant not buying the shares of companies in controversial industries such as tobacco, firearms, alcohol or gambling.

Now, investors who favor this approach

routinely consider a broad range of corporate behavior under the umbrella of so-called ESG factors—environmental, social and governance, as in corporate governance.

For many investors, socially responsible investing is now a guiding principle. The

number of mutual funds and exchange-traded funds catering to those investors has mushroomed in recent years, with industry heavyweights BlackRock Inc. and Goldman Sachs Group Inc. prominent among those launching funds last year.

YES

The Evidence Is Clear That Investors Undervalue Socially Responsible Firms

BY ALEX EDMANS



SOCIAL RESPONSIBILITY investing makes financial sense precisely because many investors incorrectly think that it doesn't—and so they undervalue socially responsible companies. That means bargains are available for astute investors.

Traditional investing focuses on tangible measures of a company's value, such as profits and sales growth. But those measures are easy for anyone to see and understand, and so they're already reflected in the stock price.

In contrast, social responsibility is intangible, and so investors have a particularly hard time valuing it. How do you measure the value of a company's environmental stewardship? As a result, traditional investors mostly ignore companies' social responsibility. They only catch on when its effects show up on the bottom line, for everyone to see. But then it's too late—the stock price has already risen.

Years ahead

Where's the evidence that socially responsible investing pays for investors?

Let's look at the findings of academic studies of four common social-responsibility factors. Returns for companies with high scores on the American Customer Satisfaction Index were double those of the Dow Jones Industrial Average from 1997 to 2003. Turning to governance, studies found that firms with greater shareholder rights and firms where the chief executive holds a large stake outperformed, and those that use corporate jets underperformed. Moving to the environment, companies with high eco-efficiency—that generate the least waste relative to the value of their products and services—outperformed.

Finally, on employee satisfaction, my own study shows that the returns of the 100 Best Companies to Work for in America beat their peers by 2.3 to 3.8 percentage points a year from 1984 to 2011. And although the list is public, it takes the market four to five years to incorporate it into stock prices—because this information is ignored by most investors.

A look at specific market sectors provides further evidence of the financial value of socially responsible investing. Ethical investors typically overweight health care (based on the social benefits of treating disease) and technology (because e-commerce uses far fewer resources than physical stores). Both sectors have far outperformed the S&P 500 over the past 10 years, while the energy sector (dominated by production from nonrenewable sources) has been flat overall and coal stocks have fallen substantially.

But is concern for customers, governance, the environment and employees really socially responsible? Isn't this just good business sense? To a degree. The question is what comes first. Traditional firms will invest in stakeholders only if they can calculate a clear bottom-line impact of doing so. But, many benefits of social responsibility simply can't be predicted. What's the payoff to reducing emissions beyond the threshold that would avoid a fine? Responsible firms invest simply because they think it's the right thing to do, without a mathematical calculation. The profits come as a byproduct, they're not the end goal.

Legwork pays

None of this means that ethical investing is foolproof. Many socially responsible funds underperform their peers. But so do many traditional mutual funds, and that doesn't mean traditional investing strategies don't make financial sense. The crux is to evaluate socially responsible *strategies*, not socially responsible *funds*, because even ethical funds use criteria other than pure social responsibility. The shortcomings of any number of socially responsible mutual funds or companies don't alter the premise proved by broad-based research: Ethical investing works.

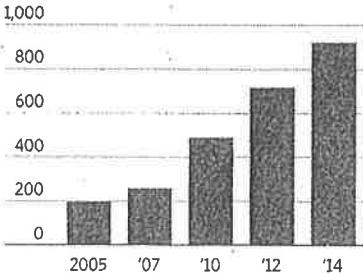
It isn't easy, but it's getting easier. Investors don't have to rely solely on companies to report their own socially responsible activities. Independent information like the Best Companies list or the American Customer Satisfaction Index is out there for investors willing to do the legwork. Most investors aren't—and again, that's the advantage of socially responsible investing.

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Growth Factor

U.S. Investment funds that Incorporate environmental/social/governance issues into their Investment decisions

NUMBER OF FUNDS



Note: Includes mutual funds, variable-annuity funds, closed-end funds, exchange-traded funds, alternative investment funds and other pooled products, but excludes separate account vehicles and community investing institutions.

Source: US SIF Foundation

Unsettled Practice

Questions about socially responsible investing remain in the absence of guidance from regulators

1. There isn't yet a standard definition of a sustainable investment.

Source: Wall Street Journal

2. Companies aren't required to disclose environmental/social/governance behaviors and associated risks.

3. There is no audit system to assess what companies report as sustainable.

THE WALL STREET JOURNAL.

NO

It's Absurd to Even Try to Separate Responsible From Irresponsible Firms

BY DAVID J. VOGEL



THERE ARE several reasons why a socially responsible investment strategy is unlikely to produce superior returns.

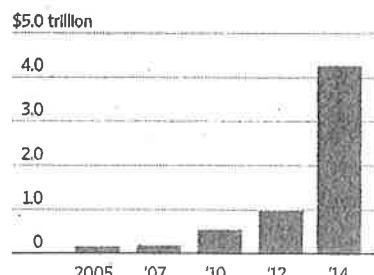
First, there is no consensus on how to define corporate social responsibility or how to construct a portfolio based on the concept. Social investment funds and socially screened portfolios employ widely diverse and often inconsistent criteria to assess both corporate responsibility and irresponsibility. How can a socially responsible investment strategy claim to produce superior returns when there is no agreement on what corporate social responsibility means or how to measure it?

Some of the strategies employed by social investment funds and socially screened portfolios have succeeded—but most have not. Over the past five and 10 years, 65% of socially screened funds have trailed the average returns of their peers.

Blind spots and complications

Second, the data used to assess a company's social responsibility is limited and of

NET ASSETS



Note: Includes mutual funds, variable-annuity funds, closed-end funds, exchange-traded funds, alternative investment funds and other pooled products, but excludes separate account vehicles and community investing institutions.

Source: US SIF Foundation

Something else has changed, as well: Investors now expect a competitive return for investing with a conscience. Some have gotten just that; others haven't. So amid the rising popularity of ESG investing, the question of whether it pays remains.

ten flawed. For example, the Global Reporting Initiative, the largest voluntary reporting guideline, contains data on only 1,295 companies—less than 2% of the world's publicly traded firms. Moreover, in the critical area of carbon emissions, analysts must rely on business self-reporting, which may not be accurate and rarely includes the carbon footprints of a firm's products or its supply chain. These and other information gaps severely compromise the value of the criteria on which "ethical" investors typically rely.

Further complicating the picture are the mixed or ambiguous records of many companies. Does Monsanto's support for genetically modified agriculture make it responsible or irresponsible? Should Dow Chemical be excluded from a sustainability-screened portfolio because of past pollution or included because of its recent leadership in tracking and reducing its environmental impact and that of its products? What about a fossil-fuel company that has recently expanded its renewable-energy investment portfolio? In the real world, a company's ethical behavior is both constantly changing and often mixed.

Third, a company's record or reputation can be a poor predictor of its future behavior. Consider, for example, BP, Volkswagen and Chipotle—all of which had highly positive reputations for social responsibility before environmental, safety and health disasters brought down their share prices.

Missing links

Fourth, the argument that a socially responsible investment strategy "pays" assumes that paying more attention to a firm's social responsibility—or lack of it—makes for a better predictor of future share prices. But a firm's social-responsibility policies or practices are rarely of sufficient importance to its earnings to affect its share price. For example, while Wal-Mart's costs have been reduced by its many "green" initiatives, those reductions have been ignored by analysts because they aren't material to the firm's future earnings.

Studies that have shown a connection between certain aspects of corporate social responsibility and future share prices don't negate studies that have shown no effect or even a negative impact from such responsibility. And any such connection shouldn't be generalized into the superior wisdom of a socially responsible investment strategy.

As for the gains of the health-care and technology sectors in recent years, they have little to do with social responsibility—indeed, some of the behavior of many companies in both fields can hardly be called responsible.

Finally, a more responsible business strategy is no more likely to be financially successful than one that pays little or no attention to corporate social responsibility. The number of relatively responsible firms that nonetheless have suffered financial reverses is a long one and recently includes DuPont and American Apparel.

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Coming of age

Investing to do good as well as to make money is catching on

WHEN investors gathered in Amsterdam in late 2016 for perhaps the largest annual conference on “impact investing”, the mood was upbeat. The concept of investing in assets that offer measurable social or environmental benefits as well as financial returns has come a long way from its modest roots in the early 2000s. Panelists at the conference included, among others, representatives of two of the world’s largest pension funds, TIAA of America and PGGM of the Netherlands, and of the asset-management arm of AXA, a French insurance behemoth. A niche product is inching into the mainstream.

In the past two years BlackRock, the world’s biggest asset manager, launched a new division called “Impact”; Goldman Sachs, an investment bank, acquired an impact-investment firm, Imprint Capital; and two American private-equity firms, Bain Capital and TPG, launched impact funds. The main driver of all this activity is investor demand. Deborah Winshel, boss of BlackRock Impact, points to the transfer of wealth to women and the young, whose investment goals, she says, transcend mere financial returns. Among institutions, sources of demand have moved beyond charitable foundations to hard-bitten pension funds and insurers.

The sector has also been boosted by increased attention from policymakers and the development of industry standards. International organisations—such as the UN, and a global task force founded under the aegis of the G8—have promoted impact in-

vestment. Bodies such as the council of investors and borrowers that sets the Green Bond Principles, guidelines for bonds earmarked for environmental projects, have helped set common standards.

Definitional squabbles still plague the impact community. For sticklers, investment only deserves “impact” status if it delivers both near-market level returns and strict measurement of the non-financial impact: eg, of the carbon emissions saved by a renewable-energy project; or of the number of poor people who borrow from a microcredit institution. Others, however, include philanthropic investment, where financial returns are sacrificed for greater social benefits; or less rigorous types of do-good investments.

Such disagreements make it hard to gauge the true extent of impact investment. For instance, BlackRock Impact and Goldman both also offer two looser investment categories: “negative screening” (ie, not investing in “bad” sectors—say, tobacco or oil); and “integrated” investments that take environmental, social or governance (ESG) considerations into account (eg, by selecting for firms with, say, good working conditions). Neither firm, however, provides a complete breakdown of these categories by assets under management.

The industry is also held back by a restricted choice of asset classes, and by the limited scale of investment opportunities. According to a survey by the Global Impact Investing Network, which organised the conference in Amsterdam, investors were managing \$36bn in impact investments in 2015. But the median size of investment remained just \$12m. Urban Angehrn, chief investment officer of Zurich Insurance, says the Swiss firm has had trouble fulfilling its pledge to commit 10% of its private-equity allocation to impact investments.

Cynics may still dismiss impact investing as faddish window-dressing. Of Zurich’s \$250bn-plus in assets under management, only \$7bn-worth are classified as impact investments. At Goldman’s asset-management arm, impact and ESG-integrated investments combined only make up \$6.7bn out of a total \$1.35trn in assets un-

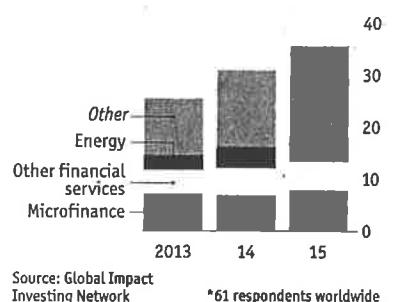
der management.

But that is to ignore the scale and progress that large institutional investors have brought to impact investing. Although \$7bn is a tiny slice of Goldman’s portfolio, it is huge compared with the investments of even well-established impact specialists, such as LeapFrog, whose commitments total around \$1bn. And the entry of hard-nosed financial giants sends an important message about impact investing: that they see it as profitable for themselves and their clients. It is not enough to make investors feel good about themselves; they also want to make money. ■

Doing good doing better

Impact investing

Assets under management, by sector*, \$bn



Source: Global Impact Investing Network
*61 respondents worldwide

Limit exposure to climate change

Low-carbon ETFs

Global warming points to importance of new products, writes *Chris Flood*

With extreme weather events becoming more common, some asset managers are urging investors to think more about climate change when building their portfolios and to reduce their exposure to companies that could be left behind in a shift to a lower-carbon economy.

Mainstream exchange traded funds tend to offer exposure to a whole index – with weightings determined by market capitalisation – but there are lower-carbon ETF choices from well-known providers such as BlackRock, the world's biggest asset manager; State Street, the US bank; Amundi, the Paris-based asset manager; and BNP Paribas, the French bank.

These greener ETFs have been constructed to follow traditional market indices as closely as possible and minimise potential short-term underperformance by reducing exposure to companies with high carbon emissions or with high carbon reserves – such as energy companies.

BlackRock's low-carbon ETF, known as CRBN, was launched in December 2014 with the help of seed finance from the UN's staff pension fund and University of Maryland. Currently it has assets of about \$35m.

Jessica Huang, a member of the impact team at BlackRock, says demand so far has come mainly from institutions such as public pension funds, foundations and endowments, especially those that have a philanthropic focus. However, interest is also developing among wealth managers and retail investors, she says.

"Climate change is an issue of growing importance for clients who are increasingly concerned that they could lose money if they don't adjust their portfolios to take account of global warming," says Ms Huang.

Industry observers estimate that the combined assets of low-carbon ETFs globally is probably less than \$1bn out of a global total of over \$3tn, but say this low amount understates the level of interest from institutional investors.

For example, pension funds including Calstrs of California, AP4 of Sweden and Fonds de Réserve pour les Retraites of France have also invested in very similar low-carbon strategies but chose other investment vehicles – low-carbon ETFs carry total expense ratios of about 20 basis points and institutional investors are able to negotiate lower fees.

Supporters of low-carbon ETFs also argue that demand will grow as financial markets get better at pricing climate change risk into their portfolios.

Energy companies, for example, could be overpriced if BP's warning about a long-term oil glut that it issued last month proves accurate.

The energy company said there was twice as much recoverable oil available as the world is forecast to consume between now and 2050.

Frédéric Samama, deputy global head of institutional clients of Amundi, says that only a few specialist analysts factor such so-called stranded assets into their valuation models for oil company stocks.

He adds that very few incorporate any discussion of carbon risks in the reports they send to investors.

"Financial markets are underpricing carbon risks," says Mr Samama.

His view is supported by BlackRock, which says that current market prices do not reflect the social costs of burning fossil fuels.

In a research paper published in August, BlackRock said that the price companies have to pay for emitting carbon is inconsistent and called for governments to raise carbon prices.

The measure would encourage businesses to adopt greener approaches and allow investors to better recognise the climate change risks embedded in portfolios, it said.

But reaching an agreement on an accurate price for carbon emissions remains highly problematic. About 1,000 of the world's largest companies now disclose carbon emissions, but carbon taxes or market pricing in emissions trading schemes vary widely between and within different industries.

Companies in the utilities sector report paying up to \$306 a tonne whereas healthcare, information technology and financial companies all report carbon prices well below \$50 a tonne.

Steps are being taken to address these problems and higher carbon pricing could come in. A task force set up by the Financial Stability Board, a global regulator, last month outlined a set of recommendations for climate-related disclosures to be included into the mainstream financial reports published by companies.

Mr Samama believes that green ETFs will start to outperform conventional passive funds when climate risks are properly taken into account by financial markets.

At that point low-carbon ETFs might become far more common. But at present, advisers face restricted choices. Greg Lessard, founder of Aspen Leaf, a Colorado-based wealth manager that specialises in building socially responsible investment (SRI) portfolios using index funds such as ETFs says he has no choice but to sometimes use actively managed SRI mutual funds due to the lack of suitable ETFs.

"Conversations with our clients suggest that everyone is interested in improving environmental, social and governance standards if they can be persuaded that the risk and return of an ESG-weighted portfolio [for environmental, social and governance factors] does not differ from that offered by a conventional portfolio," says Mr Lessard.

He adds that it has been "frustrating" not to see more response from asset managers to the growing interest in green investment strategies.

Ms Huang says that people like Mr Lessard should not have too long to wait as awareness of climate change risks spreads.

"More product innovation is coming," she says.

'Financial markets are underpricing carbon risks'

Stealth socialism

Passive investment funds create headaches for antitrust authorities

The Economist September 17th 2016

THREE is a contradiction at the heart of financial capitalism. The creative destruction that drives long-run growth depends on the picking of winners by bold, risk-taking capitalists. Yet the impressive (if not perfect) efficiency of markets means that trying to out-bet other investors is almost inevitably a losing proposition. Algorithmic punters trade away the tiniest of arbitrage opportunities near-instantaneously. Active investment strategies therefore amount to little more than a guessing game: one in which, over time, the losses from bad guesses eventually top the gains from good ones. Betting with the market—through broad index funds, for instance—is therefore a good way to maximise returns. Yet where does that leave capitalism, red in tooth and claw, and its need for bloody-minded nonconformists?

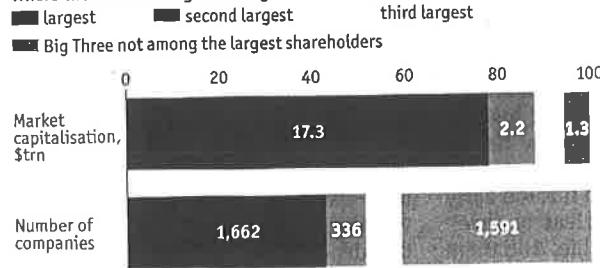
“Passive” investment vehicles, like those low-fee index funds, now soak up enormous amounts of cash. In America, since 2008, about \$600 billion in holdings of actively managed mutual funds (which pick investments strategically) have been sold off, while \$1 trillion has flowed into passive funds. So the passive funds now hold gargantuan ownership stakes in large, public firms. That makes for some awkward economics. Research by Jan Fichtner, Eelke Heemskerk and Javier Garcia-Bernardo from the University of Amsterdam tracks the holdings of the “Big Three” asset managers: BlackRock, Vanguard and State Street. Treated as a single entity, they would now be the largest shareholder in just over 40% of listed American firms, which, adjusting for market capitalisation, account for nearly 80% of the market (see chart). The revolution is here, but it was not the workers who seized ownership of the means of production; it was the asset managers.

A growing number of critics reckon this cannot be good for capitalism. Some argue that because such funds take investors out of the role of allocating capital the outcome does indeed resemble Marxism (or worse, since communists at least dared to suggest that some activities were more deserving of capital than others). In August analysts at Sanford C. Bernstein, a research firm, thundered: “A supposedly capitalist economy where the only investment is passive is worse than either a centrally planned economy or an economy with active market-led capital management.” This is over the top. Passive investment pays because active investors rush to price in new information. If passive investors took over the market entirely, unexploited opportunities would abound, active strategies would thrive and the passive-fund march would stall.

Powers of concentration

Ownership of US listed companies*, %

Where the shareholding of the Big Three investment firms[†] is the:



Source: “Hidden Power of the Big Three?”, Fichtner, Heemskerk and Garcia-Bernardo, 2016

*June 1st 2016
†BlackRock, Vanguard, State Street

Others worry that concentrated ownership will lead to managerial complacency. Actively traded mutual funds might sell a stake in a poorly managed firm; passive funds lack that option. Captive shareholders could allow management to run amok. Yet that worry, too, seems overstated. Passive asset managers can still be active shareholders. Most have signalled their intent to push executives for good performance. Rather, the big problem with concentrated ownership may be that firms are too mindful of the interests of their biggest shareholders. A fund with a stake in just one firm in an industry wants that firm to out-compete its rivals. Big asset managers, which take large stakes in nearly all of the dominant firms in an industry, have a somewhat different view. From their perspective, the best way to generate portfolio returns might be for rivals to treat each other with kid gloves.

In a series of recent papers, Martin Schmalz of the University of Michigan and a cast of co-authors work to detect the anti-competitive effects of concentrated ownership. Their results are striking. Institutional investors hold 77% of the shares of the companies providing services along the average airline route, for instance, and 44% of shares are controlled by just the top five investors. Adjusting measures of market concentration to take account of the control exercised by big asset managers suggests the industry is some ten times more concentrated than the level America’s Department of Justice considers indicative of market power. Fares are perhaps 3-5% higher than they would be if ownership of airlines were truly diffuse. In theory large asset-management firms might be quietly instructing the firms they own not to undercut rivals. But the writers suggest nothing so nefarious need occur to cause trouble. Fund-appointed board members could simply refrain from urging conservative CEOs to compete aggressively, or CEOs might anyway conclude that their big shareholders would prefer peace and profits.

Buy low, sell high

A similar analysis suggests bosses are rewarded handsomely for playing along. The authors note that large funds often approve generous pay packets for executives whether or not they are performing well. Indeed, in industries with highly concentrated ownership, bosses receive relatively less pay than peers when their firm does well, and relatively more when competing firms do well. The authors reason that a weaker link between executive pay and firm performance makes CEOs lose interest in aggressive competition, boosting profits across the portfolio as a whole.

Such findings should trigger alarm bells among regulators. There are no easy fixes, however. Limiting the ownership stakes of the large, passive asset managers might boost competition, but it would undercut the cheapest and most effective investment strategy available to retail investors. Forcing asset managers to be entirely hands-off, on the other hand, might also boost competition, but neuter shareholder oversight of management.

Yet despair is premature. Common ownership is not the only barrier to competition in the American economy. Corporate giants are all too good at buying up troublesome rivals and lobbying for privileges. As evidence of the side-effects of growth in passive funds accumulates, the best remedy might be for Washington to take its antitrust responsibilities more seriously. ■

*Studies cited in this article can be found at www.economist.com/passivefunds

Governance

Critics argue trackers can go too easy on corporate oversight, says *Madison Marriage*

Passive asset management houses have enjoyed rapid growth over the past 10 years as investors have flocked to place money with cheaper index-tracking funds and eschewed alternatives run by human stockpickers who charge higher fees for their expertise.

Such funds today account for more than a third of US mutual fund assets. But some observers and participants in the field have expressed concerns that, as passive funds continue to expand their market share, it has led to large corporations facing less scrutiny from their shareholders.

Andrew Telfer, senior partner at Baillie Gifford, the Scottish investment house that focuses on active management, set out his concerns to the FT just over a year ago: "Active managers like ourselves are getting increasingly involved in corporate governance issues [and] trying to encourage businesses to invest for the long term. [That pressure on companies] would be reduced by a move towards passive," he said.

This idea stems from the belief that passive managers have no incentive to push companies to behave better, as index funds are forced to invest in the companies they track – whether or not these businesses are embroiled in costly corporate rows or scandals.

By contrast, active managers can simply sell shares in a company that is disregarding shareholders' best interests. A leading academic, speaking on condition of anonymity, says: "There are lots of [passive] fund managers who are doing very little."

Richard Buxton, chief executive of Old Mutual Global Investors, the UK asset manager that only sells actively managed funds, acknowledges there is unease over a weakening of corporate governance pressures caused by the rapid growth of passive investing.

"If more and more of the industry is owned by passive investors who are only trying to replicate the index, there is no oversight. There is no governance," he says.

But he also recognises that some large passive houses – such as Legal & General Investment Management, the UK's largest fund manager – take corporate governance seriously.

BlackRock, Vanguard and State Street, the biggest providers of index-tracking funds globally who collectively control more than \$11tn of assets, have significantly increased

their corporate governance resources over the past three years.

BlackRock now has the largest corporate governance team of any global asset manager, with 31 specialists in this area.

But the voting patterns of large passive fund houses have continued to add to concerns about index-tracking managers' approach to governance.

Vanguard last year emerged as one of the most lenient investors when it comes to voting on company resolutions at annual meetings. In the 12 months to the end of June 2015, it voted in favour of UK pay proposals on 99 per cent of occasions, according to Proxy Insight, a data provider. BlackRock voted in favour of pay proposals on 97 per cent of occasions in the US over the same period.

Neal Epstein, senior credit officer at Moody's investor services, says these voting patterns undermine claims of taking a rigorous approach to governance. "The voting makes it look like they are management-friendly."

Passive fund houses vociferously deny they are soft on companies or disengaged when it comes to promoting good governance.

A spokesperson for BlackRock says: "As one of the largest index investors globally and a fiduciary on behalf of our clients, we take corporate governance very seriously."

"Index investors, by nature, are generally long-term investors, and will remain invested in a stock for as long as it is included in a given index. This gives us both the incentive and responsibility to be actively engaged shareholders on behalf of our clients."

"Over the longer term [ETF providers] may be exercising a positive influence. It is a mixed picture," Mr Epstein says.

State Street overhauled its own governance operation four years ago in recognition of the increased importance of policing the 9,000 companies it invests in globally, according to Rakhi Kumar, head of corporate governance at the US bank's asset management arm. This involved more than doubling the size of its stewardship team to 11 and engaging with companies more regularly.

As a result of these changes, State Street sent 1,000 letters to company executives last year, and held 600 meetings with companies in which it held shares on matter related to