Reinventing Mutual Funds

Keynote Speech by John C. Bogle
Former Chairman and Founder, The Vanguard Group
Forrester Finance Forum
New York City, NY
June 11, 2001

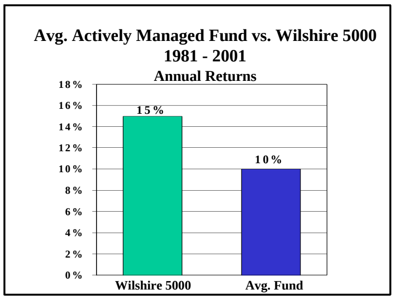
In its February 2000 paper on "Overhauling Financial Advice," the Forrester Report recalled "the vociferous attacks . . . that greeted another rogue who challenged the status quo years ago—John Bogle of Vanguard." When we began in 1974, it was said that the Vanguard *mutual* mutual fund structure would fail. Since the funds owned the investment management company and operated it on an "at-cost" basis—with the aim of improving the bottom line of the *clients*, of all people!—we couldn't *possibly* generate the capital necessary to conduct our operations, let alone become an industry leader in service and technology. And our index fund, the world's first index mutual fund and the new Vanguard organization's first creation, was not only offering guaranteed mediocrity, it was downright unAmerican: "Bogle's Folly."

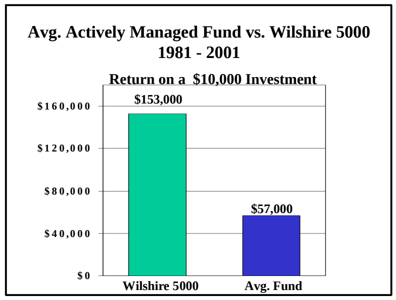
Now, nearly 27 years later, I'm still, I suppose, a rogue. But those two supposed Achilles' heels—low costs and indexing—have been, and remain, the driving force in our growth. Our fixed-income funds and our index funds now account for nearly $420 billion of our $580 billion asset base. What fixed-income and index funds share is the direct link between the *costs* of fund operations and the *returns* generated for investors. *The lower the costs, the higher the returns.* These funds most obviously honor the eternal, if eternally ignored, first principle of investing: *Investment success is defined by the allocation of financial market returns between financial intermediaries and investors*. Put less kindly, the higher the croupiers' take, the less money the gamblers take home. So, mixing the metaphor, my message is that it is high time to drive the money changers out of the temple—or at least to reduce the benevolences that investors pay for their fickle favor.

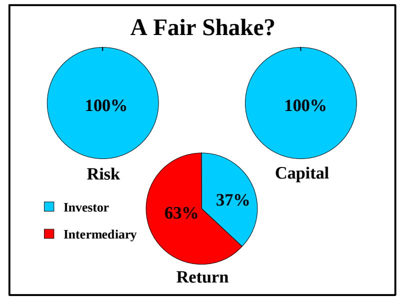
A Reinvented Fund Industry

The fund industry has ignored that message. Indeed the industry has reinvented *itself* over the past fifty years. Traveling along a road that marks an unfortunate detour from their historic principles, mutual funds have radically changed—and in ways that hardly serve investors. Despite the industry's staggering growth (from $2½ billion 50 years ago to $7 *trillion* today), the expense ratio of the average equity fund has doubled (to 1.6% of assets). During the same period, fund portfolio turnover has leaped from 15% to 100%, and the hidden cost of all that trading now consumes at least 0.7% of fund assets each year. Adding in, say, another 0.5% for the annualized impact of sales charges and an opportunity cost of 0.5%, (since most equity funds are rarely fully-invested in stocks), could bring costs to as much as 3.3% annually. But let's conservatively assume an average equity fund cost of 2½%.

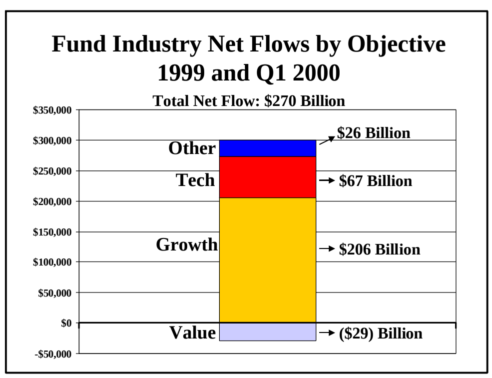
Over the past 20 years, the stock market has provided an annual return of about 15%. Deduct 2½% in fund costs for a pre-tax return of 12½%. Deduct *another* 2½% for Federal taxes (forget, for the moment, state and local taxes), and the croupiers have raked off a total of at least 5%. Net to investor: 10%. Compounded at 10%, $10,000 invested in the average *surviving* mutual fund grew to $57,000. Compounded at 15%, the same $10,000 merely invested in the stock market itself increased by $153,000. Allocating just 37% of the market's return to the fund investor—who put up 100% of the capital and took 100% of the risk—simply doesn't seem like a fair shake.





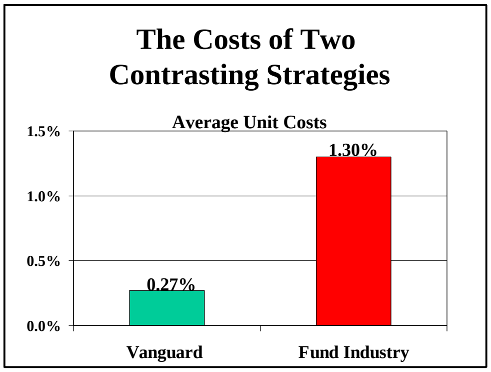


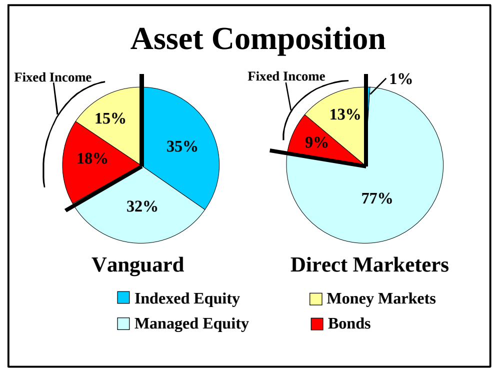
Adding insult to injury, the industry's focus has moved from management to marketing. New funds are created with no investment rationale other than the fact investors are clamoring for them. The result is just what you'd expect: Soaring fund failure rates. While 12% of all equity funds didn't make it through the 1950s, 55% failed to survive the 1990s. Past performance of fund winners is heavily promoted, never mind that it has no predictive power. At the peak of the speculative boom in 1999-2000, 100 new technology funds, including 31 internet funds, were formed. More than 100% of the industry's record $270 billion cash inflow was invested in tech funds and tech-stock-dominated growth funds—right at the very worst moment. ($30 billion flowed *out* of value funds, right before their long-awaited recovery.) What is more, the heavy marketing costs of this pandering to the public taste was financed by management and distribution fees paid by the fund investors themselves. Yes, the mutual fund *has* been reinvented, but it would be hard to argue that the reinvention has served investors well



But it was the reinvention of the mutual fund that helped pave the way for Vanguard's growth, from a $1.4 billion also-ran to a $580 billion finalist. For we were reinventing the mutual fund, too. Challenging convention, our reinvention went in precisely the *opposite* direction from our peers. Slashing costs instead of raising them. Resisting—albeit imperfectly—the temptation to form funds responsive to the principles of modern marketing rather than the principles of sound long-term investing. And staking our future largely on index and index-like funds that virtually match the returns of the stock market or the bond market (or precisely-defined segments of each)—a strategy that, for the investor, is just as boring to observe as it is exciting to profit from. The contrast between our strategy and that of our rivals could hardly be more stark. Our unit costs are about 0.27% of assets. For our peers, unit costs average 1.30%, five *times* as high. Our asset base is 35% stock index, 33% fixed-income (including 4%

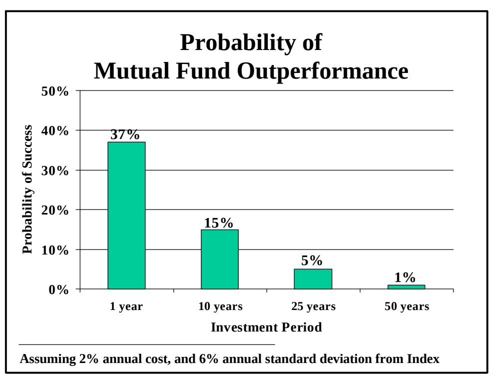
bond index), and 32% managed equity. For our peers, the figures are 1%, 22%, and 77%. It is a remarkable contrast.





The Killer App

As peculiar (and, for that matter, as self-righteous) as it may sound, indexing has proved to be "the Killer App." The secret of investing, it turns out, is long-term compounding at minimal cost. The index fund captures almost 100% of the market's pre-tax annual return, while the average actively-managed fund captures about 75% to 80%—simply because of relative investment costs. Right off the table of statistical probabilities,[1] these are the chances that an active equity fund manager has to beat the pre-tax return of the stock market: One year, 37%; ten years, 15%; 25 years, 5%; 50 years, 1%. (The actual historical experience of mutual funds is fully consistent with these data.) Those are not good odds.



The obvious upshot of the unarguable proposition that investment success is defined by maximizing the investor's share of market returns and minimizing the intermediary's share: Sooner or later, intelligent investors will exhibit the kind of investment behavior that serves their own best interests, and gradually force the mutual fund business to offer more commodity-like funds, with less deviation from financial market returns, much less shortfall, and *much* lower costs. Former Citicorp Chairman John Reed seemed to anticipate this trend a year ago, when he told Forrester Research that the winner in online financial services, "won't be a financial institution—it'll be a technology-based start up."

[1] Conservatively assuming a 2% annual cost and an annual standard deviation of 6% from the market. Such a variation seems fully consistent with the 0.64 correlation of the average fund—including large cap, mid-cap, and small-cap funds—with the total stock market. On an after-tax basis, given the remarkable *tax-inefficiency* of active mutual funds, the percentage of funds outperforming would drop significantly.

And in a certain sense, that's what Vanguard is. Before you laugh, consider this: For our shareholders, by far the most important aspect of Vanguard for our shareholders is their trust in the simple, productive investment strategies that go hand in hand with our low costs. But from a resource allocation standpoint, we look far more like a technology-based start-up than a financial institution. Last year we spent $1.2 billion of our $1.3 billion operating budget on administration and operations, almost $600 million of which was spent on technology.[2] Contrast this total with the $30 million we spent on investment management. (The remaining $70 million went for marketing and distribution.

Financial Institution or Technology-Based Startup? Vanguard's 2000 Budget

	Millions
Technology	**$ 600**
Admin/Operations	**600**
Marketing & Distribution	**70**
Investment Management	**30**
Total	**$ 1,300**

It simply doesn't require legions of crewmembers to manage index funds and fixed-income portfolios with rigorously-defined investment strategies, high quality standards, and low turnover. But it *does* require extraordinary technology and a deep and dedicated crew to provide real-time information and transaction capability for our 15 million owners. Half of our contacts with them are now made through the Internet, and nearly all the rest over the phone. Our only bow to bricks and mortar are the buildings where our 11,500 crewmembers go to work each day. More than any firm in our field, we have become a *virtual company*.

Technology and Mutual Funds

But whether we are a virtual company or not, technology will clearly play an ever-growing role in the mutual fund industry. In many respects it will be a blessing. But if the over-riding mission of the industry is as I've described it—*to provide investors with their fair share of financial market returns*—technology in our business leaves much to be desired. Let's look at the pros and cons in four key areas:

- **Financial Market Technology**. *Positive*: The emergence of a financial system that has enabled professional money managers to offer a whole new variety of investment products, to enjoy remarkable liquidity for transactions, in large volumes, around the globe, and at the speed of light. *Negative*: Excessive trading, at lower unit costs but higher total costs (good for the money-changers); development of funds for marketing, not investment, purposes; focus on short-term strategies at the expense of long-term goals.

- **Information Technology**. *Positive*: The provision of an up-to-date information network that provides data about mutual fund operations, portfolios, and past performance so vast as to be beyond the ability of the human mind to absorb. *Negative*: The data investors rely upon by far the most are the past returns of funds, giving rise to "the star system," hot sectors, and hot funds.

[2] Outside of our operating budget, shareholders of our actively-managed funds paid $180 million in advisory fees, equal to 0.12% of assets managed.

The siren song of past performance, sung by fund managers and distributors and danced by investors, has resulted in investment decisions that are unwise to a fault.

- **Transaction Technology**. *Positive*: Ease of operations and transactions; reduction of frictional costs; the availability of a communications network so efficient that investors, without ever moving from their desktop computers, can purchase and redeem fund shares almost instantaneously. (Even, as recently announced, from their automobiles!) *Negative*: Investors value their portfolios too frequently, and trade their fund shares like stocks. These characteristics lead to foolish investment behavior.

- **Financial Planning Technology**. *Positive*: The development of websites that not only provide fund shareholders with real-time account valuations, but also financial planning advice and recommendations that enable investors to plan their financial futures with decimal-point precision—on paper. *Negative*: Even the voguish Monte Carlo simulations that are ascendant today require assumptions about the unknowable: Expected market returns, inflation, and taxes; retirement age and Social Security payments; the identification of superior managers and styles, inevitably based largely on their past results. *Yet computers cannot predict the future*. The single most important attribute of investing remains what it has always been: *Uncertainty*.

The problem, then, is that the remarkable ability of mutual fund websites to facilitate, expedite, and abet investment activity is to a heavy extent counterproductive. We have a cornucopia of *information* at our fingertips, but it seems rarely to lead to *knowledge*. And in those rare cases when it does result in knowledge, it seems more likely to increase investment activity than to constrain it. For most investors, to put it bluntly, knowledge is all too seldom translated into *wisdom.* And wisdom is what investing is all about.

Educate, Inform, Implement

The fund industry's principal challenge, it seems to me, is to use technology and web services to educate the investor—to help bring wisdom into a world where wisdom is such a rare commodity—to provide the financial information our investors need to make sound decisions, and to facilitate the expeditious implementation of those decisions. *Educate-Inform-Implement* must be our technology mission. Index funds and bond index (or index-like funds) are a major asset in each of those areas. First, simply because lower costs *must* lead to higher returns, the strategies actually *work* for the investor. (That's important, too!) Second, index funds are risk-averse. All-market indexing, for example, substantially eliminates three of the four risks of investing: (1) Individual security risk, (2) style risk, and (3) manager risk. *Only market risk remains*. For investors who seek to build their wealth, there is no way around that risk. And returns that match the market are virtually guaranteed.

Educating the Investor	
Platform One: Active Management	**Platform Two: Index Funds**
A. Explain Stock Risk	**A. N/A**
B. Explain Style Risk	**B. N/A**
C. Explain Manager Risk	**C. N/A**
D. Explain Market Risk	**D. Explain Market Risk**

Focusing on the financial *markets* themselves, it turns out, is an extraordinary advantage in educating investors. For when there is no need to tread the uncertain terrain of investment *styles* and portfolio *managers*, an education platform becomes the essence of simplicity. E-learning, e-meetings with clients, web demonstrations, and "collaborative browsing" (integrating personal contact with web services) become even more effective. The interesting, but finally meaningless, reliance on style choice and manager selection need not be central to the conversation. At that point, education revolves around the relatively certain, not the inevitably speculative. Call it, if you will, "The Joy of Indexing."

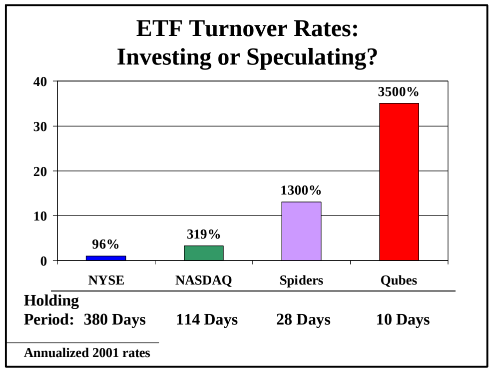
As Forrester Research correctly notes, advice is becoming more widely available at lower cost, and life-strategy oversight is becoming increasingly self-directed. Intimacy, the third side of the triangle, remains, however. Most investors will come to value most highly their fund provider's ability to customize their financial interactions, another major role for efficient web technology. But by eliminating many (but not all!) of the variables, investors still need advice, and the market-focused approach works equally well in this arena. The number of investment strategies, for example, that are *worse* than a 50/50 bond index/stock index strategy (with the ratio adjusted to each investor's particular circumstances) is infinite. That being the case, it is worth considering that the best investment advice may be not only *priceless*, but *price-less*. Think about the implications of that!

The realities of investing, the majesty of simplicity, the escalation in investor education, the great potential of the web to do good rather than to wreak havoc—all point to the need for a long-term approach to investor's needs and *much* lower costs. Lower expense ratios, lower turnover costs, lower distribution charges. That being the case, it is hard to take seriously the warning I heard last month at the Investment Company Institute General Membership Meeting: "The no-load business is dead." That prediction flies in the face of the fact that it is the no-load fund that relies most heavily on technology, and most closely approaches the virtual company. Please don't hang by your thumbs waiting for the funeral.

The Mutual Fund Dinosaur?

While I'm confident that a bright future lies ahead for firms that emulate *Vanguard's* reinvention—the Killer App represented by our low-cost indexing and fixed-income strategies—I'm not nearly as confident of the future of *the industry's* reinvention that has brought us the modern mutual fund. The sins of this industry—high costs, low-tax efficiency, fad-following, hot products, marketing hype, excessive opportunism—have created ample opportunities for competitors to leap into the fray, offering better alternatives. I see that as a *positive* development, however, for it should accelerate the return of today's industry to its founding principles, long abandoned. Let's briefly consider four of the alternative products that seek to harvest the assets of fund investors.

Exchange-Traded Funds. **($70 billion)** Standard and Poor's Depository Receipts ("Spiders") are a beautifully designed product, offering low cost and high tax-efficiency, just like the best S&P 500 index funds. But Spiders are marketed to—and so far largely utilized by—short-term traders, and their shares turn over at a spectacular 1300% annual rate. But the Spider is apparently not speculative enough for traders, and the NASDAQ 100 "Qube" (now $23 billion) is almost as large as the Spider. It turns over at a 3500% annual rate, a loser's game writ large. I don't believe that the long-term investors who should be the core of the mutual fund base will turn to ETFs. But if I'm wrong, fund firms can easily create their own. (We just did!)



Folio-type Accounts. **(Assets Unknown)** Pioneered by Folio/fn, customized portfolios ("baskets") of individual stocks are now a reality. Except by Vanguard's standards, the cost is truly rock-bottom ($295 per year, or 30 basis points on a $100,000 portfolio), and the idea of selecting, say, an equal-weighted portfolio of 50 large growth stocks and holding them forever is an intelligent strategy. (In 1998, I recommended we create mutual funds that would do just that.) But I suspect that marketplace acceptance will be very slow, that more short-term traders than long-term investors will be attracted to these accounts, and that folios will have more impact on the brokerage business than on the fund industry.

Separate Accounts. **($125 billion)** Brokerage firms have had considerable success in offering these "fund-of-funds" accounts, often using investment managers who do not manage large funds. They offer the opportunity for individual attention and potential tax-efficiency, but the cost (up to 1¾% of assets annually, plus the costs of the underlying funds) is a monumental hurdle to leap. Warren Buffett's partner Charlie Munger has said that this sort of layering of advice reminds him of Bernie Cornfeld's late but unlamented "Fund-of-Funds." I agree, and do not see separate accounts as a major threat.

Managed Accounts. ($300 billion) Brokerage firms are ever more active in this burgeoning area, working with consultants and advisers to offer stock selection and asset management services. The main advantage is said to be tax-efficiency, but I'd be surprised if these accounts don't prove to be just another—because of technology, perhaps more efficient—form of brokerage account. Certainly the potential tax advantage exists, but I'm going to guess it will be overwhelmed by the trading mentality that so many investors and managers are unable to shake. The fees of the intermediaries tend to run in the 1% range, 70% of which is, in effect, a marketing cost and a dead weight to performance. So I don't see managed accounts as a long-range threat to mutual funds either.

The End of Mutual Fund Dominance?

Forrester Research predicts "The End of Mutual Fund Dominance." Is that correct? Despite the dominance of stock, bond and money market funds in U.S. savings flows today, will this industry gradually become marginalized? Answer: Yes, and no. Yes, we're history if the industry fails to return to management rather than marketing as our driving principle. Yes, we're gone if we fail to focus on stewardship, and persist in our fad-following approach to marketing, distribution, and advertising. Yes again, if we fail to reduce costs and increase tax efficiency. But no, our future is bright if we forthrightly recognize our failure to deliver a fair share of market returns to our investors. No again, if we heed the powerful lessons of the past, and if we focus on the power of long-term compounding. And no, fund dominance will not end if we give fund shareholders—lest we forget, the *owners* of the funds—their proper share of the staggering economies of scale the industry has enjoyed. There is no reason under the sun we can't accomplish these goals. The task that lies ahead comes down to giving the investor a fair shake, a fair shake—the whole spectrum of funds that cover the financial markets—equity funds, bond funds, money market funds, too. If we do that, mutual funds are certain to remain the investment of choice for America's families.

Technology has a role to play in the outcome, and technology can help. But the industry must re-examine its approach to web services. Our responsibility is to push technology to the highest and best use for our clients—to educate, to inform, to implement. It is foolish and short-sighted for the fund industry to adapt to the Internet. We've done too much of that already. Rather than being the *servant* of the incredible technology that rests in the palm of our hand, we must be its *master*. Our long-run interest is hardly served by facilitating a focus on the ephemeral and the short term, by laying out for investors a panoply of funds that are born doomed to death at an early age, and by encouraging investors to treat their funds as if they were individual stocks.

Believe me, there *are* eternal investment principles, and technology doesn't alter them: *Time is your friend. Impulse is your enemy. Buy right and hold tight. Cost matters. If you aren't sure, diversify. Invest for the long-term. Stay the course*. If we ignore these principles—as we as an industry are doing today—the mutual fund *is* indeed an endangered species. Not *because* of the new technologies, but because, like Dr. Frankenstein, we have created a monster. It is not that we must reinvent mutual funds. Rather, we must *un*reinvent the investment practices that we have developed in the industry's modern era. The sooner we return to our founding principles, the better.

Note: The opinions expressed in this speech do not necessarily represent the views of Vanguard's present management.