

A Question So Important that it Should Be Hard to Think about Anything Else

JOHN C. BOGLE

JOHN C. BOGLE

is the founder and former chief executive of The Vanguard Group and president of its Bogle Financial Markets Research Center.
john.c.bogle@vanguard.com

In the past 60 years, the field of financial and securities analysis has undergone enormous growth and ever-increasing professionalization. Yet the investment principles upon which portfolio managers and investment advisors operate have in many respects remained unchanged.

Consider this advice regarding the responsibilities of the financial analyst:

"It is my basic thesis—for the future as for the past—that an intelligent and well-trained financial analyst can do a useful job as portfolio adviser for many different kinds of people, and thus amply justify his existence. Also I claim he can do this by adhering to relatively simple principles of sound investment; e.g., a proper balance between bonds and stocks; proper diversification; selection of a representative list; discouragement of speculative operations not suited for the client's financial position or temperament—and for this he does not need to be a wizard in picking winners from the stock list or in foretelling market movements."

While it might surprise those who may be familiar with the ideas I've advocated during my career, these words are not mine but rather the words of the legendary Benjamin Graham, as they appeared in *the Financial Analysts Journal*

of May/June 1963, celebrating the 25th anniversary of the New York Society of Security Analysts. To say that I passionately subscribe to these simple principles of balance, diversification, and focus on the long term—to say nothing of being skeptical that stock-pickers and market forecasting wizards can, on balance and over time, add value—would be an understatement. Indeed, it's pretty much what I wrote in my college senior thesis in 1951.

I devote a chapter of my most recent book (*The Little Book of Common Sense Investing* [2007]) to showing that, given the radical change in our investment environment since 1963, Graham would have gone even further; he would have endorsed the stock market index fund as the core strategy for the vast majority of investors. Warren Buffett, who worked closely with Graham, not only personally assured me of Graham's endorsement of indexing but put it in writing in his own endorsement of the *Little Book*.

When I entered the mutual fund industry 56 years ago—to work for fund pioneer Walter Morgan, whose Wellington Fund was and remains today the exemplar of these principles—the industry invested pretty much in the manner prescribed by Graham. The portfolios of the major equity funds consisted largely of a diversified list of blue-chip stocks, and their portfolio managers invested for the long term. They eschewed speculation; they oper-

ated their funds at costs that were (by today's standards) minuscule; and they delivered market-like returns to their investors. What's more, as their long-term records clearly show, those fund managers were hardly "wizards in picking winners."

AN INDUSTRY CHANGES

But if the conservative investment principles of the Wellington Fund have remained substantially unchanged to this day, the fund industry has become a vastly different creature from all those years ago. How different?—let me count the ways. Consider these seven changes in the industry that I entered in 1951 and the industry that I see today.¹

1. *Enormous growth.* In 1950, mutual fund assets totaled \$2 billion. Today, assets total more than \$12 trillion, an astonishing 17% rate of annual growth. Then, equity funds held about 1% of all U.S. stocks; today, they hold a stunning 30%.²
2. *Investment focus.* In 1950, almost 80% of stock funds (60 of 75) were broadly diversified among investment-grade stocks. These funds pretty much tracked the movements of the stock market itself, and lagged its returns only by the amount of their then-modest operating costs. Today, such large-cap blend funds account for only 11% of all stock funds, although they account for about 16% of stock fund assets.³ These 500 market beta funds are now vastly outnumbered by 3,100 U.S. equity funds diversified in other styles, another 400 funds narrowly diversified in various market sectors, and 700 funds investing in international equities—some broadly diversified, some investing in specific countries. Some of these new fund categories (i.e., the global stock market) have served investors well; in others there have been disastrous consequences. In any event, the challenge to investors in picking funds has become almost equivalent to the challenge of picking individual stocks. (The stock market index fund, of course, provides a simple resolution to the fund selection challenge.)
3. *Investor behavior.* But fund investors no longer just pick funds and hold them. They *trade* them. In 1951, the average fund investor held shares for about 16 years. Today the holding period averages a fourth of that. To make matters worse, fund investors don't

trade very successfully. Because they usually chase good performance, and then abandon ship after bad performance, the asset-weighted returns—those actually earned by fund *investors*—have trailed the time-weighted returns reported by the funds *themselves* by an astonishing amount—an average lag of more than 6% points per year during the ten years ended December 31, 2005.⁴

4. *Investment process.* In 1951, management by investment committee was the rule; today it is the exception.⁵ This is the age of the portfolio manager; some 1,400 equity funds are managed by a single individual, and the remaining 2,500 are run by a team of about three managers, or (in a few cases) a whole series of "portfolio counselors."

While committee management was hardly a guarantor of superior returns, the system served investors well. And while a system of individual portfolio managers is not bad in and of itself, this evolution—really a *revolution*—has led to costly discontinuities. A star system among mutual fund managers has evolved, with all the attendant hoopla, although most of these stars, alas, have turned out to be comets and hyperactive at that. The average portfolio manager serves a fund for but five years.⁶

5. *Investment strategy.* In 1951, the typical mutual fund focused on the wisdom of long-term investing, holding the average stock in its portfolio for about six years. Today, the holding period for a stock in an actively-managed equity fund is just one year. More charitably, on a dollar-weighted basis, the average holding period is about one and a half years. Either way, the typical mutual fund of today is focused on the folly of short-term speculation.
6. *Industry mission.* Over the past half-century-plus, the mission of the fund business has turned from *managing* assets to *gathering* assets, from stewardship to salesmanship. We have become far less of a management industry and far more of a marketing industry, engaging in a furious orgy of product proliferation. Our apparent motto is: "If we can sell it, we will make it."

During the 1950s and 1960s, some 240 new equity funds were formed, and during the 1970s and 1980s about 650. But in the 1990s alone, 1,600 new equity funds were created. Most of them, alas, were technology, Internet, and telecommunications funds,

and aggressive growth funds focused on these areas, which then took the brunt of the 2000–2002 bear market. Such product proliferation has engendered the expected reaction. While 13% of all funds failed during the 1950s, the failure rate for this decade is running at near-60%.

7. *Costs.* Costs have soared. On an unweighted basis, the expense ratio of the average fund has doubled, from 0.77% in 1951 to 1.54% last year.⁷ (To be fair, when weighted by fund assets, the expense ratio has risen from 0.60% to 0.87%, a lower, but still staggering, increase of nearly 50%.)

However it is calculated, this rise in costs constitutes a major negative for drag on the returns earned by fund investors. Despite the quantum growth in industry assets since 1951, managers have arrogated to themselves the extraordinary economies of scale available in the field of money management, rather than sharing these economies with fund owners. Money managers—especially the giant financial conglomerates that dominate the industry (those conglomerates now own 40 of the 50 largest fund organizations)—seem to hold as their highest priority the return earned on their own capital, rather than the return earned on the capital they are investing for their fund shareholders.

This seven-way parlay of asset growth, truncated investment focus, counter-productive investor behavior, portfolio management process, hair-trigger investment strategies, product proliferation (inevitably followed by de-proliferation), and soaring costs has altogether constituted a serious disservice to fund investors.

Perhaps I shouldn't comment so bluntly, but I'm inspired by a sentence in the *New York Review of Books* review of *The Battle for the Soul of Capitalism*: "After a heart transplant eleven years ago, Bogle retired to a life of full-time hell-raising." That's not really the way I look at it. To paraphrase President Harry Truman: "I'm not giving 'em hell; I'm just telling 'em the truth, and they think it's hell."

THE U.S. FINANCIAL SYSTEM

The mutual fund industry is hardly unique in its soaring costs. In fact, it is a sort of poster child for the escalating costs that investors incur all across our nation's system of financial intermediation. The direct costs of the mutual fund system (largely management fees and operating and

marketing expenses) are currently running at some \$100 billion a year. In addition, funds are paying tens of billions of dollars in transaction fees to our brokerage firms and investment bankers and, indirectly, to their lawyers and all those other facilitators. Fund investors are also paying another estimated \$10 billion of fees each year to financial advisors.

These mutual fund expenses, plus all those fees paid to hedge fund and pension fund managers, to trust companies and to insurance companies, plus their trading costs and investment banking fees and all the other costs of the system shown in Exhibit 1, totaled about \$528 billion in 2007.⁸ But don't forget that these costs recur year after year. If the present level holds (I'm guessing that it will grow), aggregate intermediation costs would come to a staggering \$5 trillion for the next decade. (Think about these cumulative costs relative to the \$16 trillion value of the U.S. stock market and the \$26 trillion value of the bond market.)

Does this explosion in intermediation costs create an opportunity for money managers? You better believe it does! Does it create a problem for investors? You'd better recognize that too.

The argument that our financial system is costly because of the benefits it brings to investors belies the reality of our system, in that it does not operate under classic free market conditions. In fact, the system is a model of information asymmetry (which favors sellers over buyers), imperfect competition, and irrational choices

EXHIBIT 1

Estimated Costs of Securities Intermediation, 2007
(billions)

Investment Banking and Brokerage	\$308
Mutual Fund Operating Expenses	100
Hedge Funds	45
Variable Annuities	30
Pension Fund Advisory Fees	15
Legal/Accounting Fees	15
Financial Advisers	10
Bank Trust Departments	5
Total	\$528

driven by emotions rather than reason. Further, that argument defies the elemental arithmetic of investing: *Gross return in the financial markets, minus the costs of the system, equals the net return actually delivered to investors.*

To put it another way, as long as our financial system delivers to our investors in the aggregate whatever returns the stock and bond markets are generous enough to deliver, but only *after* the costs of financial intermediation are deducted (i.e., forever), these enormous costs seriously undermine the odds in favor of success for citizens who are accumulating savings for retirement. Alas, the investor feeds at the bottom of the costly food chain of investing.

This is not to say that our financial system creates only costs. It creates substantial value for our society. It facilitates the optimal allocation of capital among a variety of users; it enables buyers and sellers to meet efficiently; it provides remarkable liquidity; it enhances the ability of investors to capitalize on the discounted value of future cash flows and other investors to acquire the right to those cash flows; it creates financial instruments (so-called derivatives, if often of mind-boggling complexity) that enable investors to divest themselves of a variety of risks by transferring those risks to others.

No, it is not that the system fails to create benefits. The question is whether, on the whole, the costs of obtaining those benefits have reached a level that overwhelms them.

THE FINANCIAL SECTOR AND THE ECONOMY

Whatever the benefits, the tremendous drain on investment returns represented by the costs of our investment system raises serious questions about the efficient functioning not only of that investment system but also of our entire society. Over the past two centuries, our nation has shifted from an agricultural economy, to a manufacturing economy, to a service economy, and now to what is predominantly a financial economy. But the costs that we incur in our financial economy, by definition, subtract from the value created by our productive businesses.

Think about it. When investors—individual and institutional alike—engage in far more trading, inevitably with one another, than is necessary for market efficiency and ample liquidity, they become, collectively, their own worst enemies. While the owners of businesses enjoy the

dividend yields and earnings growth that our capitalistic system creates, those who play in the financial markets capture those investment gains only *after* the costs of financial intermediation are deducted.

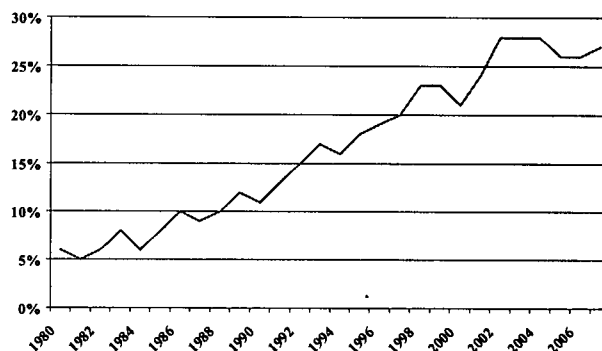
Thus, while investing in American business is a winner's game, beating the stock market before those costs—for all of us as a group—is a *zero-sum* game. And after intermediation costs are paid to the market's croupiers, beating the market becomes a loser's game.

The rise of the financial sector is one of the seldom-told tales of the recent era. Twenty-five years ago, financial corporations accounted for only about 5% of the earnings of the 500 giant corporations that compose the Standard & Poor's 500 Stock Index (Exhibit 2). Fifteen years ago, the financial sector share had risen to 10%, then to 20% in 1997, and to a near-peak level of 27% in 2007.

But that 27% figure substantially understates the importance of the financial sector, for it excludes the earnings of the financial affiliates of our giant manufacturers. (Think General Electric Capital,⁹ or the auto financing arms of General Motors and Ford.) Including these earnings would likely bring the financial sector's share to more than one-third of the annual earnings of the S&P 500. But even without those earnings the financial sector is now by far our nation's largest generator of corporate profits, larger even than the *combined* profits of our huge energy and health care sectors, and almost three times as big as either industrials or information technology (Exhibit 3).¹⁰

To some degree, of course, the growth of the financial sector reflects not only the rise in demand for financial services. (The mutual fund industry is a good

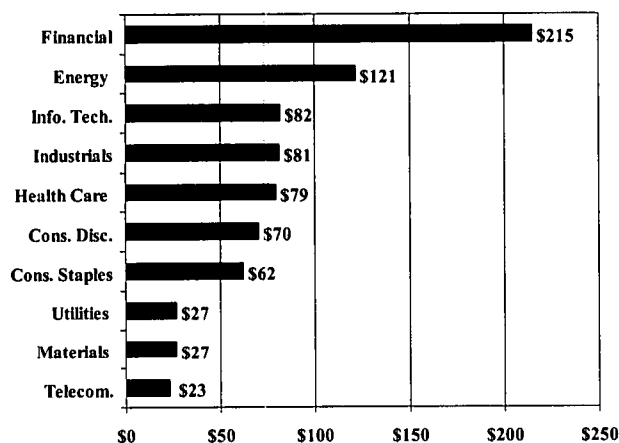
EXHIBIT 2
Financial Sector's Share of S&P 500 Earnings, 1980–2007



Source: Standard & Poor's Corporation.

EXHIBIT 3

2006 Earnings of S&P 500 Sectors (billions)



Source: Standard & Poor's Corporation.

example.) It also reflects the fact that many privately owned firms have become publicly owned, including investment banking firms, mutual fund managers, once-mutual insurance companies, and even our stock exchanges. In 1989, there were 56 stocks in the S&P financial sector, including 28 banks; today there are 92 stocks, but only 26 banks.

The combination of public ownership and earnings growth has been dramatic. For example, from 1981 to 2007 earnings of fund manager T. Rowe Price soared more than 150 times over—from \$4 million to an estimated \$650 million.

We're moving, or so it seems, toward becoming a country where we're no longer *making* anything. We're merely trading pieces of paper, swapping stocks and bonds back and forth with one another, and the house, to use a gambling casino metaphor, reaps a veritable fortune. We're also adding even more costs by creating ever-more complex financial derivatives that build huge and unfathomable risks into our financial system. Far too many financial innovations are profitable to their creators and marketers, but have proved to be hazardous and destructive to the wealth of those who purchase these devilishly convoluted products.

As evidenced by the growing crisis in mortgage-backed collateralized debt obligations, these risks are starting to come home to roost. In this context, it's worth considering the keen insight of the great British economist John Maynard Keynes, who some 70 years ago warned that "when enterprise becomes a mere bubble

on a whirlpool of speculation," the consequences may be dire. "When the capital development of a country becomes a by-product of the activities of a casino, the job (of capitalism) is likely to be ill-done" [1936, p. 156].

Once a profession in which business was subservient, the field of money management has largely become a business in which the profession is subservient. Harvard Business School Professor Rakesh Khurana is right when he defines the standard of conduct for a true professional with these words: "*I will create value for society, rather than extract it*" [2007, p. 15]. And yet money management, by definition, extracts value from the returns earned by our business enterprises.

Warren Buffett's wise partner Charles Munger [1998], lays it on the line:

"Most money-making [i.e., money management] activity contains profoundly antisocial effects ... As high-cost modalities become ever more popular ... the activity exacerbates the current harmful trend in which ever more of the nation's ethical young brain-power is attracted into lucrative money-management and its attendant modern frictions, as distinguished from work providing much more value to others."

Yet even as I write this article, I read that this brain-power is pouring into financial services at a breath-taking rate. Today, the number of chartered financial analysts is at a record high of 78,000, and *Barron's* recently reported that "no fewer than 140,000 new applicants—also a record high—from every corner of the earth are queued up to take the exams that will confer on the lucky ones the coveted [CFA] imprimatur." In one sense this explosion is wonderful, suggesting that our professional designation is highly valued. But it also raises serious concerns that the field will become more and more crowded, pushing the costs of financial intermediation to even higher levels.

I don't dismiss out-of-hand the possibility that this influx of trained professional investment advisors might help individual investors make better choices than they have in the past. But the record of financial advisors is discouraging, suggesting that they subtract value from investor returns. A study by Bergstresser, Chalmers, and Tufano [2006] finds that advisor asset allocations were no better than allocations those investors made on their own, that advisors chased market trends, and that the investors whom they advised paid higher up-front charges. The

study's conclusion: The weighted average return of equity funds held by investors who relied on advisors (excluding all charges paid up-front or at the time of redemption) averaged just 2.9% per year, compared with 6.6% earned by investors who took charge of their own affairs.

This is not to say that bright people in today's remarkable younger generation should not enter the profession of money management. Rather, it is to say that those who enter the field should do so with their eyes wide open, recognizing that any endeavor that extracts value from its clients may, in times more troubled than these, find that it has been hoist by its own petard.

While it is said on Wall Street that money has no conscience, the future leaders of this profession must not let that truism cause them to ignore their own consciences, or to alter their own conduct and character. Indeed, I expect that these future leaders will bring to the operation of our system of financial intermediation a level of honest introspection that I find too often lacking among today's leaders, as well as a return to our traditional focus on fiduciary duty, on service to others before service to self.

LOWER EQUITY RETURNS IN PROSPECT?

What's more, the burdensome costs of financial intermediation are all too likely to occur in an era of falling returns on equities. Briefly put, the 100-year return of 9.6% annually on stocks included a 4.5% dividend yield (Exhibit 4). Today's 2.0% yield represents a dead-weight loss of 2.5% points in future investment returns. By the same token, the

EXHIBIT 4

Total Returns on Stocks, Past and Future

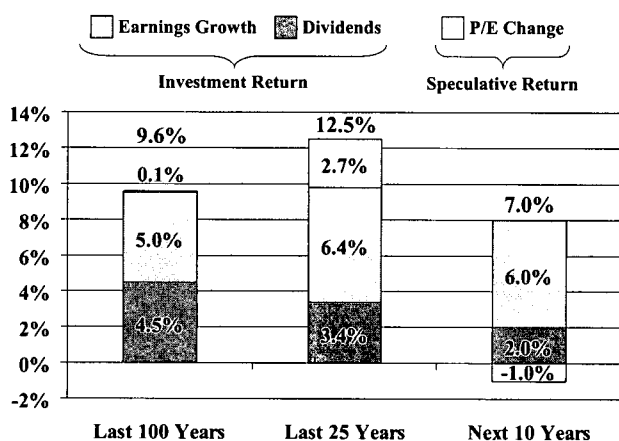
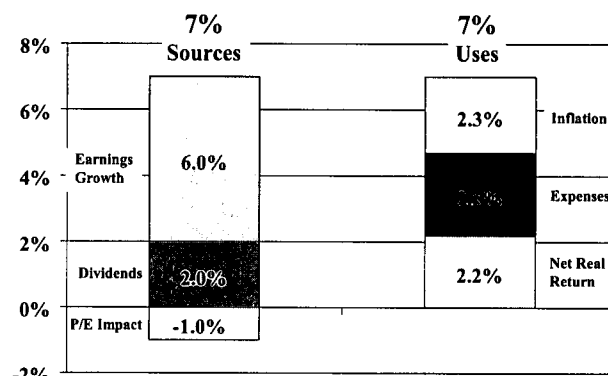


EXHIBIT 5

Equity Fund Returns Over the Coming Decade



glorious 12.5% return of the past 25 years included not only a 3.4% dividend yield and 6.4% earnings growth (well above the 5.0% long-term norm), but also a speculative return averaging 2.7% per year, borne of a price-earnings ratio that doubled from 9 times to 18 times.

The sharp drop in yields, and the likelihood (in my view) that today's price-earnings ratio of 18 will not only *not* redouble, but will rather decline by a few points in the coming decade, means that we are likely to experience a future return on stocks of about 7%.¹¹

Annual fund costs—sales loads, expense ratios, and hidden turnover costs—now running at about 2.5%, would reduce a nominal 7.0% return on stocks to 4.5% for the average mutual fund. Shamelessly, I persist in reducing that likely *nominal* net annual return of 4.5% for the average fund by the expected 2.3% annual rate of inflation, slashing it to a humble *real* return of just 2.2% per year (Exhibit 5).¹² Clearly, reducing investment costs is at the crux of the ability of our nation's families—the very backbone of our savings base—to accumulate the wealth to which they properly aspire.

A MATTER OF INDIFFERENCE

Yet most economists have been indifferent as to the issue of costs in our financial sector. One exception is Ronald H. Coase, who produced his seminal work on transaction costs, "The Nature of the Firm," in 1937. His paper postulates that the entrepreneur's choice between organizing activities within the firm vs. relying on an exchange transaction in the marketplace depends on the level of transaction costs. But it was not

until 1991—more than a half-century later—that Coase received the Nobel Prize in Economics.

In that same year, Murphy, Shleifer, and Vishny [1991] argued that when excessive rewards go to rent-seekers whose returns come from the *redistribution* of wealth rather than the *creation* of wealth—the authors single out government, law, and financial services (including stock traders and money managers)—the economy suffers. The authors contrast these rent-seekers with wealth creators such as engineers. But paradoxically, the fastest growth among college engineering majors is not in traditional engineering—aeronautical, electrical, mechanical, and the like—but in “financial engineering” for those seeking careers as hedge fund managers and Wall Street “quants.”¹³

Grossman and Hart [1983] also explore the issue of transaction costs. They point out that transactions involving a principal and an agent affect the total amount of money that is available to be divided between the two parties, and develop a method for analyzing the costs and benefits of different actions to the agent. They argue that the owner (the principal) rarely monitors the actions of the manager (the agent), but rather observes the outcome. Yet it is not clear to the owner whether the manager's results are the product of skill or luck—just as in the mutual fund industry. Management fees and transaction costs are at the heart of the issue in both instances.

More recently, in 2000 Obstfeld and Rogoff discussed the issue of transaction costs in the context of international macroeconomic theory. They conclude that it is relative transaction costs that illuminate a wide range of puzzles, including why trading in goods and services is more national than international and why investors have a home bias in their portfolios (e.g., U.S. investors have 90% of their equity holdings in U.S. stocks). When trading costs are close to zero, these problems recede, but when they reach 25% of the value of trade, the negative dynamics are highly predictable. Surely an examination of the impact of the distinctly similar issue of financial intermediation costs (which are, broadly stated, simply trading costs) would illuminate the discussion of the gap between market returns and the returns that investors actually earn.

Despite the obvious importance of this issue, I know of not a single academic study that has systematically attempted to calculate the value extracted by our financial system from the returns earned by investors, nor (as far as I know) has a single article on the subject ever appeared in the professional journals, not the *Journal of*

Finance, or the *Journal of Financial Economics*, or *The Journal of Portfolio Management* or the *Financial Analysts Journal*. Perhaps the best way to honor the legacy of Benjamin Graham—and the value he created by his incisive view of our investment system—would be for our profession to join with academia and at long last tackle this vital issue of investment costs and how they relate to the benefits of an efficient system of capital formation. Only then can we begin to consider appropriate ways to improve the system, likely by some combination of education, disclosure, regulation, and structural and legal reform.

In June 2007, Princeton's valedictorian, economics major Glen Weyl, described his passion for intellectual inquiry this way (he attributes the words to Nobel Laureate Robert Lucas): *There are questions so important that it is, or should be, hard to think about anything else.*

The efficient functioning of our nation's system of financial intermediation is just such a question. It's high time not only to think about it, but also to study it in depth, to calculate its costs and its benefits, and ultimately to demand that it function far more effectively in the national public interest and in the interest of investors than it does today.

ENDNOTES

This article is based on a speech to the CFA Society of Philadelphia on the 60th Anniversary of the CFA Institute, June 12, 2007. The author thanks William Bernstein, Jonathan Clements, Steve Galbraith, Kevin Laughlin, Burton Malkiel, and Glen Weyl for helpful comments.

¹I'm confining these remarks largely to equity funds, which now represent about 70% of mutual fund assets. While not all funds have succumbed to these pervasive trends, the exceptions are quite few.

²Estimated from Federal Reserve Board and Investment Company Institute data.

³The Morningstar categories are based on nine style boxes, with three market cap categories (large, medium, and small) set on one axis of the matrix and three investment objectives (growth, value, and blend) on the other.

⁴Cumulative ten-year return reported by the 200 equity funds with the largest cash inflows: 133%; return earned by their investors: 27%, for the years 1996–2005. Source: Bogle Financial Markets Research Center.

⁵Ironically, committee-managed Dodge and Cox is among the industry's most accomplished performers.

⁶According to Morningstar. Since these data began to get collected about a decade ago, average tenures have remained at about that level.

⁷Source: Wiesenberger Investment Companies Yearbook, Strategic Insight, and Empirical Research Associates.

⁸Bogle Financial Research Center estimates based on data from Securities Industry Association, Lipper Analytical Services, and Empirical Research Associates.

⁹For the nine months ended September 30, 2007, financial services produced 42% (\$52 billion) of General Electric's total revenues (\$124 billion).

¹⁰Source: Standard & Poor's Corporation. The 2006 operating earnings of the S&P 500 totaled \$787 billion.

¹¹Please consider these numbers crude estimates. I've rounded the yield to 2.0%; earnings growth could easily revert to the long-term mean of 5.0%; and who can really be confident about the stock market's price-earnings multiple in 2018?

¹²That may be a best-case scenario. While I've ignored taxes, most fund investors cannot ignore them. I've also ignored the likelihood, based on the past experience described earlier in this article, that the annual return of the fund investor will continue to fall far short of the net annual real return of 2.2% expected for the average fund.

¹³For example, at Princeton University there were 148 traditional engineering majors and 25 financial engineering majors in the Class of 2000. In the Class of 2009, there are 122 traditional engineering majors (down 17%) and 68 financial engineering majors (up 172%).

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