In Investing, You Get What You *Don't* Pay For

Keynote by John C. Bogle, Founder and Former Chairman
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I'm delighted to be here again to keynote this conference. One very important thing has changed since I last spoke here six years ago, and two vital elements have remained unchanged. That single critical change, and those two things that have remained the same, have revealed three of the eternal verities of investing, and I'm pleased to address both the change and the constancy.

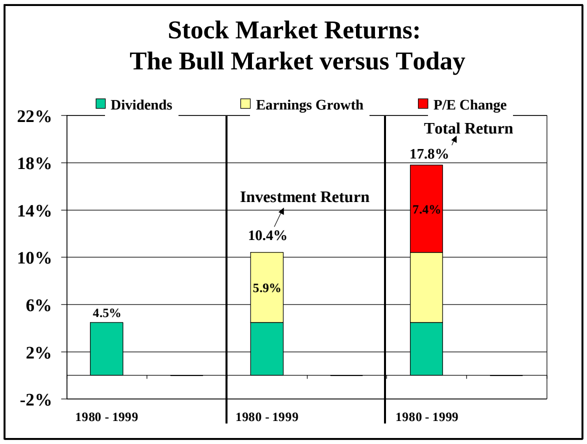
What has changed, and has changed radically, is the stock market environment. In 1999, with the market rapidly approaching its all-time peak, the bulls were rampant and optimism filled the air. Yet what gradually followed was a frightening bear market in which stocks dropped by 50 percent. After the 2002 low, we've seen a solid 60 percent recovery, although given the basic mathematics of investing, a recovery that leaves the present market level more than 20 percent below the peak—a net loss of some $3 ½ trillion. I sense much caution today, although, truth told, I also sense little bearishness.

Six years ago, we were looking back on two decades of truly sensational market return. But today, we are looking ahead to returns at far more subdued levels. How, you may ask, can I be so sure of that? The answer lies in the simple mathematics of investing. Stock market returns come from just two sources: *investment* return and *speculative* return. Investment return is the sum of the initial dividend yield on stocks, plus the subsequent rate of earnings growth. Speculative return is the impact of any change in the price investors are willing to pay for each dollar of those earnings. (You should know that over the long run investment return has accounted for about 100 percent of the market return and speculative return has contributed the remainder—essentially nothing.) In the short run, however, speculative return matters enormously.

Two Markets, Two Returns

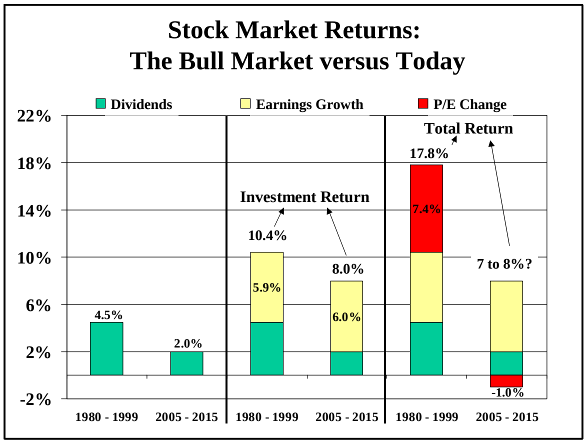
Let's do the math with a simple example, looking at the returns stocks provided during the 1980s and 1990s. First, investment return: initial dividend yield, 4 ½ percent; annual earnings growth, 6 percent; total investment return, 10 ½ percent, both quite consistent with long-term historic trends.

What about speculative return? From 1980 to 1999, the price-earnings multiple took a giant leap from a fairly low level of 8 times to fully 32 times earnings, the highest level in history. That change in valuations alone—a 300 percent increase—produced 7 ½ percent of speculative return per year. Added to the 10 ½ percent investment return, the total return on stocks came to almost 18 percent—the highest two-decade return on stocks in all recorded history. Literally, we never had it so good.

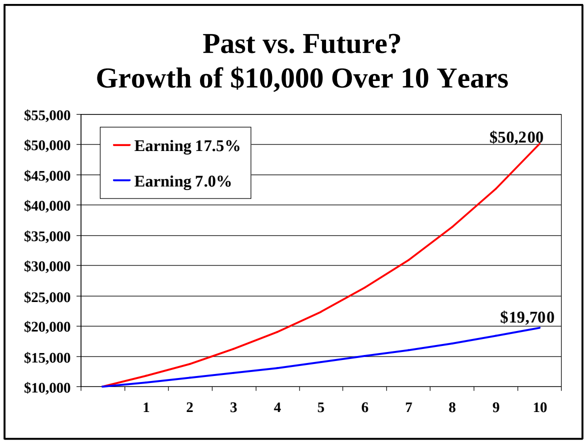


Now let's look ahead. We *know* that the present dividend yield is slightly less than 2 percent. While we *don't* know what future earnings growth will be, let's assume that the past trend of about 6 percent growth per year will continue. Result: reasonable expectations suggest an annual *investment* return of about 8 percent in the coming decade, or about 2 ½ points less than the earlier decades—all accounted for by the simple fact that the initial dividend yield is 2 ½ points less. (It *is* simple.)

What about speculative return? Of course, we have no idea what it will be. But we do *know* that, stocks are selling at about 20 times current earnings. We also *know* that the long-term average p/e is 16 times. I'm guessing—how could I be sure?—that the p/e ratio is more likely to remain around present levels or even to ease downward to say 18 times than to rise meaningfully higher. Result: *no* speculative return—or perhaps a modestly negative one in the 1 percentage point range—during the coming decade. Combining investment and speculative return, then, the expected total stock market return in the next ten years should be between 7 percent and 8 percent per year. Let's be conservative and assume 7 percent.



What does that 7 percent average return mean imply for your accumulation of wealth? Above all, *caution*! Don't expect history to repeat. And expect far less wealth accumulation. Consider that an investment in stocks of $10,000 that earned 17 percent during the 1990s grew five-times-over, to $52,000. At 7 percent, on the other hand, that $10,000 investment would not quite double, to just $19,700. But the reduction is really much larger. At the higher return, the profit on the $10,000 investment is $40,000; at the lower return it is less than $10,000.



Beating the Market—Reality or Illusion?

Before I tell you how to earn your fair share of the humble returns on stocks that seem to lie ahead, let me remind you of one of the two major things that have *not* changed. Just as when I visited you in 1999, there are scores of workshops here that will tell you how to beat whatever returns that the stock market is generous enough to deliver.

You'll be told, for example, how to win by "shifting among sub-sectors," by "staying in touch with the primary trend," by "picking elite stocks," by "owning an anti-terrorist portfolio," by buying companies with "five stars" and selling those with only one star. You'll be offered "three ways to beat the market" and enticed into snaring "the profit in 18-karat investing," to say nothing of how much you can earn through "volume reversal analysis," "intermediate-term swing trading," "gaining 59.4 percent in the dot-com world and adding another 79 percent in the recovery," and making winning option trades optimum funds by using . . . Delta, Gamma, Theta, Vega, and Rho." (No, that's not the name of a fraternity, or even of a law firm.)

I have no particular advice to give you about these seductive strategies, except to wish you and their sponsors well, and urge you to be careful. While I concede that some of these strategies may well work for you, I'm certain that all won't, I have a clue as to which is which. So be very careful, and use them, if you must, with a sparing portion of your wealth. (If you were here six years ago, you may remember my suggestion that you divide your assets between "serious money" and "funny money," along with my strong recommendation that the funny money account not exceed 5 percent of your assets.)

Now, since I do not have the prescience to tell you how to achieve superior returns, and since I am skeptical about extraordinary claims made for allegedly market-beating strategies, what on earth am I doing here? Why, for that matter, would the sponsor even invite me? I think, and I certainly hope, that the answer to that question lies in the subject of my speech: "How to earn your fair share of financial market returns."

Why is that important? Because very few investors come anywhere *near* earning the returns that the stock market delivers. For example, a leading pension consultant estimates that over fifty years, only four percent of investors can outpace the stock market itself. One out of 25! With those odds, we can only wonder why investors don't simply hold the stock market portfolio and eliminate the 96 percent likelihood of earning less, perhaps much less.

Capturing your Fair Share

Why is it so difficult to capture the market's returns? Because the market returns we read about ignore the costs of investing. In the search for the Holy Grail of superior returns, real-life investors incur heavy costs—fund management fees, operating costs, brokerage commissions, sales loads, transaction costs, fees to advisers, out-of-pocket charges, and so on. *Performance comes and goes, but costs roll on forever.* This is the second great thing that has not changed. It remains the same tautology that is every bit as true today as it was when I was last here.

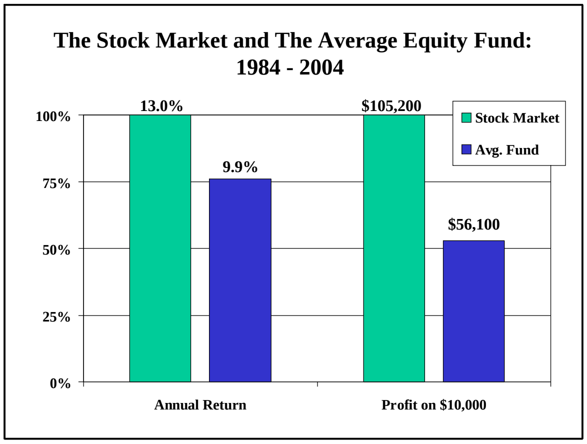
Please don't be surprised at this revelation. Consider that all investors as a group *must* earn the average return of the market *before* costs. Therefore, beating the market, like beating the casino, is a zero-sum game—but only until the croupiers take is deducted. *After* the deduction of costs, beating the market, like beating the casino, is a loser's game.

There are two completely different kinds of cost that get in the way of your ability to earn your fair share of market returns. Stock funds incur substantial costs of operation. If a mutual fund charges an annual expense ratio of 1 ½ percent per year, and carries a 5 percent sales charge (if held for ten years, 1/2 percent per year), for a total of 2 percent per year. Such a cost, however, ignores the cost of the fund's portfolio turnover, which while universally undisclosed, can add another ½ percent to 1 ½ percent to those direct costs. So total direct costs, to be generous, run about 2 percent to 3 percent of your assets each year.

Now, perhaps mutual fund managers are so smart that they'll beat all those other investors out there and outpace the market by an amount sufficient to offset those costs. Use your head. As the trained, experienced investment professionals employed by the industry's management companies compete with one another to pick the best stocks, their results average out. The average manager, it turns out, is, well, average. Thus, equity mutual funds as a group *should* earn the market's return—*before* costs. But given those costs of 2 to 3 percent per year, we *should* expect them to lag the market's return by that amount.

And they do! During the period 1984-2004, the average fund lagged the market by 3.1 percentage points per year. While the U.S. stock market, as measured by the Standard & Poor's 500 Stock Index, provided an annual rate of return of 13.0 percent, the return on the average equity mutual fund was 9.9 percent. Don't be surprised. That's just what we should have expected.

That gap may seem small. But when the returns are compounded, the gap reaches stunning proportions. An initial investment of $10,000, simply invested in the stock market in 1984, would have produced a profit of $105,200, twenty years later. The profit on the same investment, made in the average mutual fund, would have come to just $56,100.



So here's the situation: you, the investor, put up 100 percent of the capital and assumed 100 percent of the risk, but collected only 53 percent of the profit. The mutual fund management and distribution system put up zero percent of the capital and assumed zero percent of the risk, but collected 47 percent of the return. Almost half of the profit was siphoned away by those who had everything to gain, and nothing to lose.

The Selection Penalty and the Timing Penalty

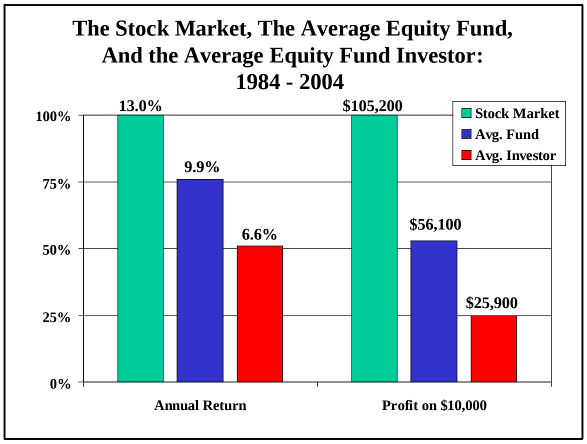
But it gets worse. For fund investors pay a second, additional cost that is even *larger*. During those 20 years, and especially during the new economy mania of the late 1990s, the fund industry organized more and more funds, usually funds that carried considerably higher risk than the stock market itself, and then magnified the problem by heavily advertising the returns earned by its "hottest" funds with eye-catching past returns. As a result, fund investors paid a huge penalty both in the *timing* of their fund purchases and in the *selection* of funds they purchased. Result: mutual fund *owners* have fared far worse than have the *funds* themselves.

We can't be sure exactly how much the average fund *investor* lagged the average fund, but we can estimate it by comparing the *dollar*-weighted returns actually earned by a fund's shareholders with the *time*-weighted returns of the fund itself (the conventional per-share calculation). During the past decade, the *dollar-weighted* returns of the 200 largest equity mutual funds—the returns actually enjoyed by their shareholders—lagged the *time-weighted* returns by fully 3.3 percentage points per year.

Let's assume that a similar 3.3 point shortfall applied for the past two decades. When we add those selection and timing penalties totaling 3.3 points to the 3.1 point shortfall of the average fund to the stock market itself, the gap grows to fully 6.4 percentage points. The average fund investor earned just 6.6 percent per year during that period, a pale shadow of the 13.0 percent of the stock market itself.

Summing it all up

So when we look at the performance of the average stock fund *investor*, and compound those returns, we see that a yawning chasm of almost mind-numbing proportions opens up between the return earned by the average fund and the return of stock market itself: $10,000 invested in the stock market two decades ago would still have grown by $105,000, and the average fund by $56,000. But on the evidence we have, that same initial investment by the average fund shareholder grew to just $25,900. Together, the cost penalty and the timing penalty and the selection penalty caused the average fund investor to earn only *25 percent* of the profit that could have been earned by simply buying and holding the stock market itself.



This comparison makes it obvious that investors have paid a staggering cost for the excessive expenses and excessive marketing focus of the mutual fund industry. This is what we mean when I say that in mutual funds you don't get what you pay for. *You get what you don't pay for*. (Indeed, you probably hoped for more!) But since you paid $79,300 for the privilege of owning funds, instead of earning your potential return of $105,000 you earned just $25,900.

I don't want to tell you that there is any precision in these numbers, but they are pretty accurate. I do want to tell you that they understate—*understate*—the shortcomings of investing in mutual funds in the years ahead, for at least three reasons:

- First, future returns will almost certainly be lower than in the past two decades. While a 3 percent cost consumes "only" a quarter of a 13 percent market return, it consumes almost half of a 7 percent return.
- Second, the returns I've shown you ignore taxes. But you pay them anyway, at least on your taxable income. Mutual funds are notoriously tax-*inefficient*—realizing long-term and short-term gains as they turn their portfolios over with alacrity. Buying and holding the market portfolio and doing little if any trading, on the other hand, is highly tax-*efficient*. Result: taxes have in the past cost fund investors an *extra* 1 ½ percent per year compared to holding the market portfolio. (Deferring taxes is the clearest possible example of getting what you *don't* pay for.)
- Third, all of these figures have been expressed in nominal dollars, not the real, inflation-adjusted dollars that measure our buying power. But the costs and taxes paid each year by investors is assessed *each year* in *current* dollars, and your long-term wealth is measured in *real* dollars. In *real* terms, it is not clear that all of those costs I've described won't totally eliminate the return you earn in a stock market providing the subdued return I expect.

Lessons

The market portfolio, of course, can be simply held in an index fund. But index funds are controversial, and it's hardly my job to sell you the kind of all-stock-market index fund or S&P 500 index fund that comes perilously close to guaranteeing you both a maximum portion of whatever future returns the stock market is generous enough to provide, cost-efficiently and tax-effectively. But the case is pretty persuasive, and you owe it to yourself to measure what you are doing against what you could be doing if you indexed at least a significant portion of your equity assets. (Don't ignore bonds! But that's a topic for another day.)

Ask the Experts

Don't take *my* word for it. Ask Warren Buffett. Ask his mentor, Benjamin Graham. Ask Jack Meyer, the remarkably successful wizard who tripled the Harvard Endowment Fund from $8 billion to $27 billion. Here's what he had to say:

"Most people think they can find managers who can outperform, but most people are wrong. I will say that 85 percent to 90 percent of managers fail to match their benchmarks. Because managers have fees and incur transaction costs, you know that in the aggregate they are deleting value. The investment business is a giant scam."

When asked, "can private investors draw any lessons from what Harvard does?" Mr. Meyer answered: "Yes." He then recounted the lessons. "First, get diversified. Come up with a portfolio that covers a lot of asset classes. Second, you want to keep your fees low.' That means avoiding the most hyped but expensive funds, in favor of low-cost index funds. *No doubt about it*. And finally, invest for the long term."

In a sense, Mr. Meyer is simply stating the obvious: the all-market index fund or the Standard & Poor's 500 Index fund is a far better way to investing than searching through a seemingly-endless list of the products of the marketing-driven, asset-gathering machine that characterizes today's mutual fund industry. Other types of equity funds may approach that simple ideal, and certainly some few will surpass it. But the odds of success, as I've shown you this evening are terrible. If that's not enough, ask any economist who's won the Nobel Prize. And if *that's* not enough, just use your common sense to think through what I've just said.

Successful investing is pretty simple. Just do a few simple things right, and avoid making stupid mistakes. So let me close with three rules you should follow, whatever strategy you pursue.

The right things: First, in investing, realize that you get what you *don't* pay for. Whatever future returns the markets are generous enough to deliver, few investors will succeed in capturing 100% of those returns, simply because of the high costs of investing—all those commissions, management fees, investment expenses, yes, even taxes—so pare them to the bone.

Second: Don't do something, just stand there. Own American business . . . not one company or industry, but a broadly diversified portfolio of lots of companies and industries. Buy such a portfolio, never sell, and hold it forever.

Third, Stay the course. Invest for the long term—decades, even a lifetime—and start as soon as you can. No one knows what stocks will do tomorrow, or even what they'll do over the next few decades, but over the long pull, the dividends and earnings growth of American business will be reflected in rising stock prices.

The stupid mistakes: thinking that you know more than the market does; investing on impulse, buying on tips, believing that past success repeats itself in the future; letting your emotions overwhelm your reason; and, for that matter, ignoring the advice I've given you this evening.

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