After the Fall: What Lies Ahead for Capitalism and the Financial Markets?

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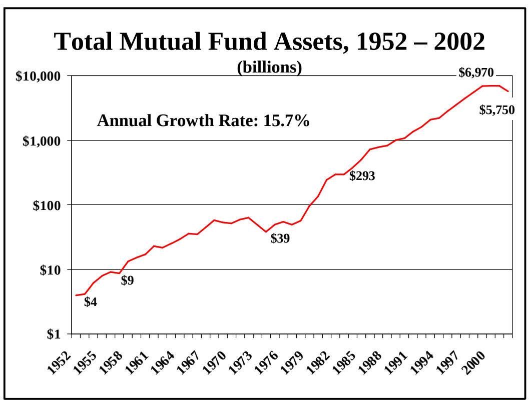
I am deeply honored by this opportunity to address both your university community and your local business leaders on the current state of our financial markets. I feel very much at home here since, by happy coincidence, both your alma mater and mine share a common mascot: the Bengal tiger. While that fierce, fast, sleek, and predatory creature of the jungle symbolizes many things, I like to think of the tiger as representing a fierce desire to learn, an impatience for achieving things, an unembellished economy of form and action, and the strength to challenge its foes. Perhaps you will sense some of those attitudes in my remarks today.

In a real sense, I owe much—in terms of my career, *everything*—to my good fortune in attending Princeton University, home of that other great collegiate tiger. For it was there, almost 53 years ago, that I happened upon the December 1949 issue of *Fortune* magazine and learned for the first time that something called "the mutual fund industry" existed. When I saw the industry described in the article as "tiny but contentious," I knew immediately that I had found the topic for my senior thesis, then as now at Princeton, a requirement for the Bachelor of Arts degree.

Over the next 18 months, I spent countless hours researching and writing my thesis. Remarkably little public information was available about this field, then with about 130 individual funds and managing assets of about $2 ½ billion. (Today, there are 9,000 funds, and assets exceed $5½ *trillion*!) . Indeed, much of my research was a result of pouring over a 3,283 page study by the Securities and Exchange Commission on what were then called "Investment Trusts and Investment Companies."



An Idealistic Senior Thesis

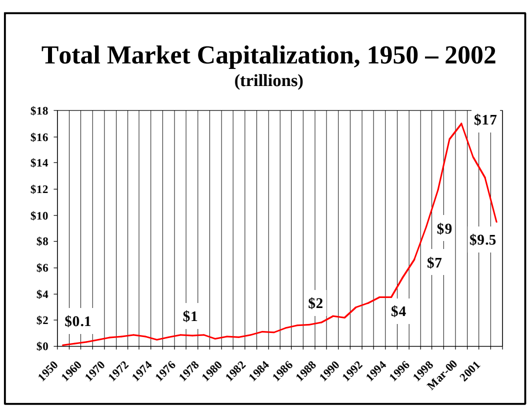
Read today (it's readily available; in 2001 it was published by McGraw-Hill as part of *John Bogle on Investing: The First 50 Years*), the thesis would probably impress you as no more than workmanlike, perhaps a bit callow, but above all, shamelessly idealistic. On page after page, my youthful idealism speaks out, calling again and again for the primacy of the interests of the mutual fund shareholder. At the very opening of my thesis, I get right to the point: Mutual funds must not "in any way subordinate the interests of their shareholders to other economic roles. *Their prime responsibility must always be to their shareholders.*" Shortly thereafter, "there is some indication that costs are too high," and "future industry growth can be maximized by concentration on a reduction of sales charges and management fees." (As it happened, fees have actually soared to far higher levels. So much for my advice!)

After analyzing mutual fund performance, I conclude that "*funds can make no claim to superiority over the market averages*," perhaps an early harbinger of my decision to create, nearly a quarter-century later, the world's first index mutual fund, and in retrospect a tribute to Alphonse Karr's only citation in *Bartlett's Familiar Quotations:* "the more things change, the more they remain the same." Still later in the thesis, "fund influence on corporate policy . . . should always be in the best interest of shareholders, not the special interests of the fund's managers." (Again, my advice fell by the wayside, and shareholders remain ill-served by the passive governance policies of most funds.)

My conclusion powerfully reaffirmed the ideals I hold to this day: Mutual funds should *serve*—"serve the needs of both individual and institutional investors . . . serve them in the most *efficient*, *honest*, and *economical* way possible . . . Providing advantages to the investor is the function around which all others are satellite . . . *The principal function of investment companies is the management of their investment portfolios. Everything else is incidental.*" And the very last sentence of my thesis sets forth the optimum economic role of the mutual fund: "To contribute to the growth of the economy, and to enable individual as well as institutional investors to have a share in this growth."

The Boom and the Bust

Well, despite the fact that this industry has failed to measure up to the high ideals I expressed all those years ago, grow it did. And grow *massively*, as the great bull market in both stocks and bonds that began in the early 1980s produced the most generous investment returns in all our nation's history. But these recent years have not been very happy ones for idealists. The great stock market bubble of the late 1990s burst, and we have endured the painful experience of the greatest bear market in stocks since 1929-33. Some $8 trillion—nearly one-half of the total value of U.S. stocks—has been erased in the plunge. But most of the air that inflated the bubble was *hot* air—enormous investor expectations that could never be fulfilled, fed by aggressive projections of growth that were self-serving and grossly unrealistic.



But now we are "back to (or at least toward) normalcy" in valuations. Even after this great bear market, however, the rate of annual returns on stocks during the 1982-2002 era totaled 13%, surely an attractive outcome. Through the miracle of compounding, those who owned stocks in 1982 and still held them in 2002 had multiplied that capital 13 times over. So for all of the stock market's wild and wooly extremes, *long-term* holders of common stocks have been well-compensated for the risks they assumed. For such investors, the coming of the bubble and then its going—the *boom* and then the *bust*—simply did not matter.

But that doesn't mean there weren't winners and losers during the mania—and lots of both. Simply put, the winners were those who sold their stocks in the throes of the halcyon era that is now history. The losers were those who bought them. Let's think first about the winners. A large proportion of these shares that were sold were those of corporate executives who had acquired vast holdings of their companies' stocks through options, and those of entrepreneurs whose companies had gone newly-public as Wall Street investment banking firms underwrote huge volumes of initial stock offerings. *Fortune* magazine recently identified a group of executives in just 25 corporations in those categories, whose total share of sales came to $23 billion—nearly a billion dollars each. I don't think it is unreasonable to estimate that the total of such insider sales came to as much as several hundred billions of dollars.

Other winners included financial intermediaries—the investment bankers and brokers who sold the high-flying stocks to their clients, and the mutual fund managers who sold them to the public as money poured into the funds they managed. Why were they winners? Because the compensation for their activities reached staggering levels. I've known of individual investment bankers whose five-year compensation reached into the hundreds of millions, and owners of fund management companies whose personal wealth came to exceed $1 billion or more, including one family said to be at the $30 billion level.

The losers were, of course, those who bought the stocks, the great American public—often in their personal accounts, and often through ever more popular 401-k thrift plans—sometimes *directly*, by buying individual stocks*;* sometimes *indirectly*, through mutual funds. It is not given to us to know the extent to which the public followed sound investment principles in their decisions, nor the role played by the absence of common sense, or by naivete, or by salesmanship, or even by greed. But what does appear clear is that "new economy" stocks—in technology, the internet, telecommunications, and medical services—were the greatest objects of public favor. Witness that during the peak two years of the bubble, mutual funds favoring those types of aggressive growth stocks took in nearly $500 billion of investor capital, compared to just $30 billion that flowed into the "old economy" value funds.

It is reasonable to conclude, I think, that during the late bubble there was a massive transfer of wealth—a transfer from public investors to corporate insiders and financial intermediaries. Such transfers, of course, are not without parallels all through human history. For when *speculation* takes precedence over *investment*, there is always a day of bounty for the few followed by a day of reckoning for the many. Speculative bubbles are as old as time—or at least as old as Ancient Rome. Indeed, it was there, nearly 2200 years ago, that the orator Cato told us:

> *There must certainly be a vast Fund of Stupidity in Human Nature, else Men would not be caught as they are, a thousand times over, by the same Snare, and while they yet remember their past Misfortunes, go on to court and encourage the Causes to which they were owing, and which will again produce them.*

History Rhymes

As it is said, "while history doesn't repeat itself, it rhymes." And while the recent bubble bears many resemblances to its predecessors—tulips in Holland, shipping in the South Seas, stocks in 1929—it had its own distinct ethos: A strong economy, a stock market that had experienced only a single down year (and a mild one at that) since 1982, the excitement of the new millennium, the coming of the

Information Age, and the apparent rise of a technology-driven "new economy." It is hardly surprising that rational expectations were replaced by irrational exuberance.

If those had been the only ingredients, I doubt the speculative bubble would have been so large. But when we simultaneously add in a wave of deregulation and financial innovation, as Edward Chancellor, author of *Devil Take the Hindmost*, has noted, "there is a tendency for business to be managed for the immediate gratification of speculators rather than the long-term interests of investors." If there was a single dominant failing of the recent bubble, it was the market's overbearing focus on the *price* of a *stock* rather than on the *value* of a *corporation.* Nonetheless, the price of a stock is *perception*, and acting on that perception is *speculation*. The value of a corporation is *reality*, and acting on that reality is *investment.*

Our, well, flexible financial system cooperated in the madness. Aggressive earnings guidance from corporate executives, realized by fair means or foul; manipulation of income, expenses, balance sheets; the debasement of accounting standards; public auditors who became consultants to management, in effect, business partners; Wall Street sell-side analysts motivated by attracting investment banking clients; mutual fund managers who, succumbing to the spirit of the mania, put aside their training, experience, and skepticism. *The speculative mania, like victory itself, had 1,000 fathers*.

The Role of Stock Options

But if we had to name a *single* father of the bubble, we would hardly need a DNA test to do so. *That father is the fixed-price stock option*. When executives are paid for raising the price of their companies' stock rather than for increasing their companies' value, they don't need to be told what to do: Achieve strong, steady earnings growth and tell Wall Street about it. Set "guidance" targets with public pronouncements of your expectations, and then meet your targets—and do it consistently. First, do it the old-fashioned way, by increasing volumes, cutting costs, raising productivity, developing new products and services. But in a competitive economy, these targets are not easy to meet. So when you can't meet them by *making*, you meet them by *counting*. Push the accounting numbers to the edge—and sometimes beyond. Undertake mergers, not for business reasons but because of loopholes in accounting rules that allow such transactions to provide a short-term boost to earnings. And when all of that isn't enough, *cheat*. And, as we now know, a number of large firms did exactly that.

The stated rationale for such stock options is that they "link the interests of management with the interest of shareholders." And if momentary stock prices were reliable indicators of intrinsic corporate values, that might even have been the case. But only if managers *hold* their stocks, just as the long-term shareholders do. *But they don't*. Academic studies indicate that nearly *all* in-the-money stock options are exercised as soon as they vest, and the stock is sold *immediately*. Indeed, the term "cashless exercise"—where the firm lends the money to the executive for the purchase and is repaid when the proceeds of the sale are delivered—became commonplace.

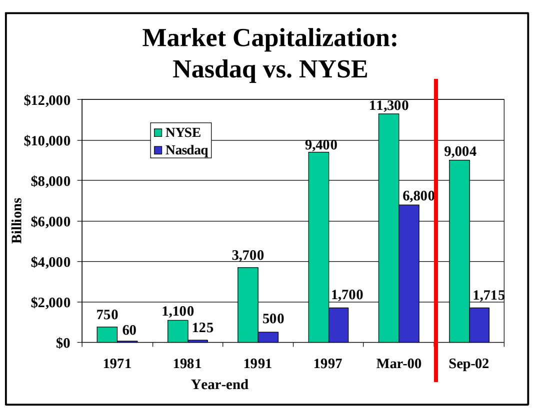
But the transitory nature of the holding period is hardly the only problem. By rewarding perception rather than reality, stock options are fundamentally flawed. Stock options are not adjusted for the cost of capital, thus providing a free-ride even for executives who produce only humdrum returns. Stock option prices are not adjusted for corporate dividends, so that there is a perverse incentive to avoid paying dividends. Stock options reward the *absolute* performance of a stock rather than performance *relative* to peers or to a stock market index, meaning that bull markets tend to create unworthy centimillionaires and bear markets tend to eliminate rewards even for worthy performers.

Most of these issues could be resolved by the use of restricted stock, or by raising the option price each year, or by linking the stock performance with a market index, in each case requiring an extended holding period. What accounts for the fact that such incentives were rarely used? The fact is that all of those alternative schemes require corporations to *expense* the costs. (Heaven forbid!) The fixed-price option alone is conspicuous by its absence on the company's expense statement. (As the compensation consultants are wont to say, fixed-price stock options are "free.") I hope that the present move to expense *all* options gains momentum, so companies can get about the business of designing sound compensation programs that, at long last, fairly link the interests of management with the interests of shareholders. After the present awful era, surely shareholders deserve no less.

How will we get that linkage? Shareholders will have to start acting like owners. While too many of our corporate stewards have failed to earn our faith, we mutual fund managers and our clients have, I fear, gotten the corporate governance that we deserve. For we have not acted as *owners*, focusing on corporate value and investing for the long-term. Rather, we have acted as *traders*, turning our portfolios over at an average of 110% per year, engaging in short-term speculation in stock prices. (We have been called, accurately I think, the "rent-a-stock industry.") Partly as a result, in the great bear market fallout, most giant institutional investors have been conspicuous only by their silence. If we simply act as good corporate citizens and recognize that ownership entails not only rights but responsibilities, we will again get the governance we deserve. If we all take the initiative to stand up and be counted, we will at last return to an era in which the great creative energy of American business and finance shifts from its short-term focus on the price of a stock—speculation—to a long-term focus on the value of the corporation—enterprise. When we do, our corporate stewards will respond appropriately, and that change will well-serve both investors and our nation.

Actions and Reactions

This process is already beginning. It turns out that Sir Isaac Newton's third law of motion—*for every action there is an equal and opposite reaction*—can also apply to our system of financial markets. The first reaction to the late bubble is that, like all bubbles, it burst. *The bear market was the inevitable reaction to the bull market.* The "new-economy" NASDAQ Index of unlisted stocks is down a stunning 78% from its high, and the largely "old economy" New York Stock Exchange Index is down 38%. (The principal difference between the two markets is that to be listed on the NYSE a company actually has to have *earnings*.) The action of the bubble drove the market value of NASDAQ stocks from 24% of the NYSE value in 1995 to 73% at the peak early in 2000. The subsequent reaction has returned it to 21%, just what it was in 1981, twenty years ago. Equal and opposite reaction indeed, and almost precisely so.



What is more, a powerful reaction has already begun to the unacceptable actions of those we trusted to be our corporate stewards, of Wall Street, and of the accounting profession. Congress has passed the Sarbanes-Oxley bill, requiring senior corporate managers to attest to the validity of their companies' financial statements, providing for disgorgement of profits by executives who sell stocks and later restate earnings, and replacing self-regulation of accountants with a new federal Public Company Accounting Oversight Board, as well as other salutary provisions.

The New York Stock Exchange is producing a powerful set of guidelines for corporate governance, including greater director independence, new standards for audit committees and compensation committees, and even a "lead director" who is independent of corporate management. (I believe that we should go further, and require that the board chairman be an independent director, separating the powers of *governance* from the powers of *management*.) The newly-formed Conference Board Blue-Ribbon Commission on Public Trust and Private Enterprise (on which I'm honored to serve) has already produced a strong set of best practices on executive compensation, with best practices on corporate governance and on accounting standards soon to follow. James Madison said, "if men were angels, we wouldn't need government." To which I would say to our corporate leaders, "if men were angels, we wouldn't need *governance*." And we're on our way to getting better governance right now.

Investing Today: Look Forward, Not Back

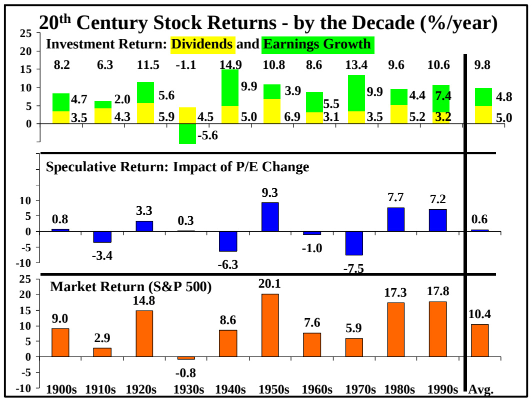
So today, after the fall, how should investors think about investing? It is a curious fact about financial markets that that they lead us to act in *exactly* the opposite direction of our best interests. As stocks reach new heights, we are exuberant (that's how stocks got there!) and our instincts tell us to buy. And as stocks tumble to new lows, we reach the point of maximum pessimism (that's largely how they get *there!*) and our instincts tell us to sell before it gets worse. (And sometimes our depleted balance sheets *require* us to sell.) But only a moment of common sense ought to remind us that buying at the high and selling at the low is no formulation for the accumulation of wealth.

Let's look at some numbers that might help us to understand what returns might lie ahead for the stock market, and for the bond market as well. I, for one, place little credence in simply looking at the historical experience of these two principal asset classes, though, heaven knows, we have more than enough data to be confident that the record of the past is as the numbers tell us. But, as I've said a thousand times, "stock market returns are not actuarial tables." Whatever the case, the watchword of investing is *uncertainty*.

To understand why the past cannot foretell the future, we need only heed Lord Keynes' words, written nearly 70 years ago: "It is dangerous . . . to apply to the future inductive arguments based on past experience, *unless one can distinguish the broad reasons why past experience was what it was*." But his warning also suggests that if we can distinguish the reasons *why* the past was what it was, we can then apply that very line of reasoning to the development of reasonable expectations about what may lie ahead. Keynes helped us make this distinction by pointing out that the state of long-term expectation is a combination of *enterprise* ("forecasting the prospective yield of assets over their whole life") and *speculation* ("forecasting the psychology of the market"). I'm well familiar with those words, for 52 years ago I incorporated them in that thesis at Princeton.

Investment Return and Speculative Returns

This dual nature of returns is clearly reflected in stock market history. Using Keynes' idea, I divide stock market returns into *Investment Return* (enterprise), consisting of the initial and dividend yield on stocks plus their subsequent earnings growth, and *Speculative Return*, the impact of charging price/earnings multiple on stock prices.[1] Consider the record of stocks during the twentieth century. Note first the steady contribution of dividend yields to total return during each decade; always positive, only *once* outside the range of 3% to 5%. Note too that, with the exception of the depression-ridden 1930s, the contribution of earnings growth was positive in every decade, usually running between 4% and 7% per year. Result: Investment returns that only once (again, the 1930s) were less than 6% annually, and only twice more than 11%.



Enter *Speculative Return*: Compared with the relative stability of dividends and earnings growth over the decades, large variations in speculative return punctuate the chart. While the spread between the best and worst *investment* return (again excluding the 1930s) was less than eight percentage points, the spread between the best and worst *speculative* return was twice as large—16 percentage points, from +9% during the 1950s (when the price-earnings ratio soared from seven to 17 times) to -7% during the 1970s (when it tumbled from 16 times to seven times).

Note, too, a curious phenomenon: Each decade of significantly negative speculative return was immediately followed by a decade in which it turned positive by a correlative amount—the quiet 1910s and then the roaring 1920s, the dispiriting 1940s and then the booming 1950s, the discouraging 1970s and then the booming 1980s. And then, amazingly, the booming speculative return *repeats itself* in the 1990s—a pattern never seen before.

If we had looked at this chart back on December 31, 1999, we would have observed that the average annual return on stocks during the century was 10.4%. Of this total, 10% represented *investment* return, about 5% from the initial dividend yield and another 5% from earnings growth. The remaining 0.6% came from the small net increase in the price-earnings ratio. Conclusion: In the long run, stock returns depend on the reality of the investment returns earned by business; the perception reflected by speculative returns counts for little. Put differently, over a long span of years, *economics* dominates equity returns; *emotions*, so dominant in the short run, dissolves.

[1] Caution: Change in price/earnings ratios are driven in part by changes in interest rates. After all, if the risk-free Treasury bill rate drops from, say, 5% to 3% over a decade, it would seem logical that the earnings yield on stocks (the reciprocal of the p/e ratio) might drop from, say, 8% to 6%, leaving the equity risk premium at 3%. (Such a 25% *reduction* in the earnings yield is the equivalent of a 25% *increase* in the p/e ratio, from 12.5 times to 15.6 times—spread over a decade, it would account for an increase of 2.2% per year in stock prices.) But because the pattern has been so erratic during the past century—the correlation between earnings yield and the risk-free rate was only 0.20%—I have not incorporated interest rates into my formula.

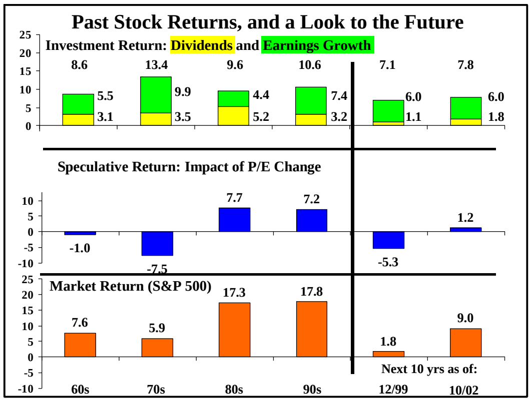
Returns in Retrospect, and in Prospect

Looking at past experience based on the structure and composition of stock returns when 2000 began, as it turns out, would have helped us recognize a bubble that was about to burst. First, of course, was that unique two-consecutive-decade expansion in speculative return. Taken over twenty years, that 7.5% annual increase reflected a rise in the market's p/e ratio from seven times to 30.5 times, more than twice the century-long 15 times norm. If one naively believed that "this time is different," and that such a stratospheric ratio wouldn't *decline*, even the realization that any further *expansion* was unlikely would have suggested a future speculative return of zero. Second, the dividend component of investment return had fallen to an all-time low of 1.1%, eliminating this element as a major driver of future investment return. So the return on stocks would inevitably depend largely on earnings growth.

How much might that growth be? Well, the long-term norm is 5%, and the average of the prior four decades was 6.8%, so a future earnings growth rate of 6% might have been a reasonable expectation. If so, investment return would have come to 7.1% for the coming 1999-2009 decade. My guess on speculative return was that the p/e ratio might drop to the neighborhood of 18 times, providing a *negative* contribution of about 5% per year. Result: An expected average return on stocks of less than 2% per year might lie ahead.

As I assured anyone who asked, however, we certainly were *not* facing ten individual years each with a 2% return—stock markets just don't behave that way. More likely was a 40% or 50% drop over a few years, followed by a return to more normal returns, say in the range of 9% annually. As I've said so often, "while we may know *what* may happen in the market, we never know *when*." While I'd been uttering that conservative call of "wolf" (or "bear") over the previous several years, this time it proved correct. Three months into the new decade, the bear market began.

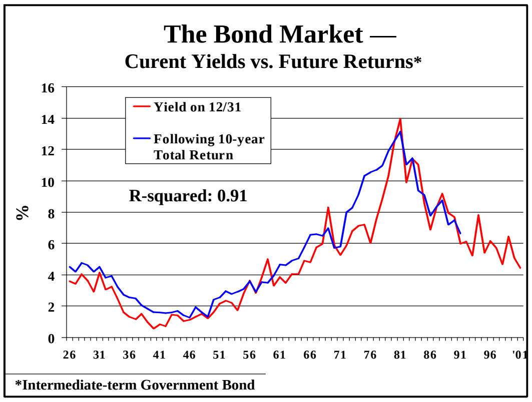
With stock prices now down some 45% since 2000 began, much, perhaps all, of the bubble's excesses have been corrected. The dividend yield has nearly doubled, to almost 1.8%. With the same 6% earnings growth assumption (it *could* be higher . . . or lower), the future investment return could be in the 8% range. And with p/es now at 15 times (based on "normalized" operating earnings, which is a bit of a stretch), it's even possible we'll see a slight increase—let's say, to 18 times—perhaps adding a percentage point or so in speculative return during the next ten years, bringing the annual market return to 9%. Precision is not the object of the game, so let's say that reasonable expectations suggest a future average return to stocks in the range of, say, seven to ten percent—but surely with much higher returns in some years and much lower, even negative returns, in others. Put another way, absent good reason, it's unwise to expect stock returns to behave much differently then they have in the past.



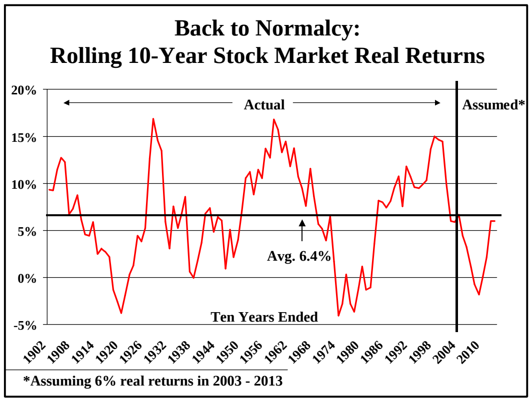
What About Bonds?

Bonds are the customary alternative to stocks, and so let's now consider what returns they might provide in the future. It is a curious paradox that while history gives us few clues to what lies ahead, projecting future bond returns is far less mysterious than doing so for stocks. Indeed, expectations for bond returns over an extended period are reasonably easy to establish. Again, Keynes' analysis helps, for the *investment* return on bonds—"forecasting the prospective yield of assets over their whole life"—depends largely on the interest payments they generate. And, *over the long-run,* since bonds have a fixed maturity date, speculative return plays little role. Result: *A remarkably high proportion of the subsequent ten-year investment return of bonds is explained simply by the current yield.*

The reason for this relationship is not complicated: If interest rates remain unchanged, the future return would be exactly equal to the current yield to maturity. If rates rise, bond prices would fall, reducing the return. But the higher reinvestment rate on each year's interest payment would have a countervailing impact, increasing the return. (And *vice versa*). In fact, the correlation between the initial yield and subsequent ten-year return of bonds is a healthy 0.91. (*Perfect* correlation would be 1.00.) For example, in 1980, the yield on an intermediate-term U.S. Treasury bond was 12.4%; the return during the subsequent decade was 12.5%. In 1990, the yield was 7.7%; the return in the following ten years was 7.5%. Today, with the 10-year Treasury bond yield at about 4%, its return in the coming decade is highly likely to range between, say, 3% and 5%. So we can be reasonably confident that we are looking at future bond returns that are, like those of stocks, a pale imitation of those we have enjoyed in recent decades.



In stocks and bonds alike, it appears likely that future returns of both asset classes have returned to long-term historical norms. Indeed, the evidence is compelling that when decade-long *real* stock returns are inordinately high by historical standards, returns in subsequent decades are likely to tumble; when past returns are exceptionally low, future returns are apt to rise. What it's all about, it seems, is *reversion to the mean*. But, again, we can never be sure *when* the reversion will come.[2] In any event, the sharp stock market decline, combined with the steep fall in interest rates, also suggests that we might expect a 3% or 4% equity risk premium, also quite similar to the historical norm. Of course uncertainty, as ever, rules the markets and our economy alike. But rational expectations are better than the emotions of the day in deciding how to allocate our investment assets between stocks and bonds.



Who Earns the Market Returns?

But whatever returns the financial markets are generous enough to deliver, don't make the mistake of thinking investors actually earn those returns. To explain why this is the case we need only to understand the simple mathematics of investing: All investors *as a group* must necessarily earn *precisely* the market return, but only before the costs of investing are deducted. *After* these costs are taken into account—all of the management fees, the transaction costs, the distribution costs, the marketing costs, the operating costs, and the hidden costs of financial intermediation—the returns of investors must—and will—fall short of the market return by an amount precisely equal to the aggregate amount of those costs. Beating the market *before* costs is a *zero-sum* game; beating the market *after* costs is a *loser's* game. The returns earned by investors in the aggregate inevitably fall well short of the returns that are realized in our financial markets. *The great paradox of investing is that the very costs incurred by those managers who would help investors to beat the market, themselves constitute the reason that they as a group are destined to fail at the task.*

Consider the costs entailed in the ownership of equity mutual funds. For the average fund, management fees and operating expenses, the "expense ratio," comes to about 1.6% per year of fund assets. (1.3% if weighted by fund assets, since larger funds typically have lower fees.) But the expense ratio is hardly the only cost fund shareholders incur. Indeed, when we add in sales charges, portfolio transaction costs, and opportunity cost (funds are rarely fully invested), the total cost of equity fund ownership roughly doubles, to at least 2½% per year.

Do costs matter? You bet they do! And they matter most in financial instruments. Why? Because while much of the value of most consumer goods is measured by intangibles such as taste and tone and prestige and image, the value of financial products is measured almost *entirely* by the most measurable of all assets, *dollars*. And costs matter most in those financial instruments for which costs are

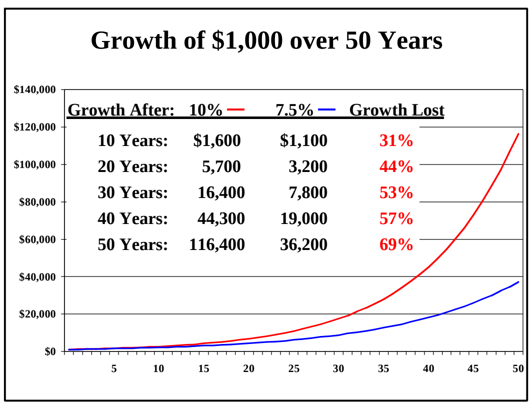
[2] I've updated Chart 7 showing real (inflation-adjusted) stock returns to reflect a possible 6% annual return over the coming decade. If so, the moving average will decline to –2% in 2009, and gradually rise to the 6% level in 2012.

(1) easily calculable, (2) *directly* related to returns, and (3) compounded over time. It should go without saying that the mutual fund is the paradigm of that definition.

How *Much* Do Costs Matter?

How *much* do costs matter? Let's look at an example: Since most individual investors are at a young age when they start their programs in an IRA or 401(k), they will still be investing, not only 50, but even 60, years from now, let's see what toll a 2½% annual cost would take on a 10% stock market return over a half century. When compounded over 50 years, each $1000 earning the stock market return of 10% would grow to $117,000. Each dollar in the fund, earning 7½% after costs, would grow to $37,000—an $80,000 dead-weight loss engendered *solely* by reason of the costs of financial intermediation. Put another way, the investor puts up 100% of the capital, takes 100% of the risk, and receives 32% of the return. The intermediaries put up 0% of the capital, take 0% of the risk, and garner 68% of the return. *It just doesn't seem like a fair deal.*

But the story gets worse. Intermediation costs are paid in *current* dollars, while the investor's final capital must be measured in *constant* dollars. Let's assume a future inflation rate of 2 ½%. Result: *Real* annual return for the market, 7.5%; *real* return for the fund investor, 5%. The final purchasing power of the initial $1,000 in the stock market falls to $37,000 in real terms, but to $11,000 in the fund. Just as the growth of $1,000 to $37,000 demonstrates the *magic* of compounding *returns*, so that reduction to $11,000 demonstrates the *tyranny* of compounding *costs*.

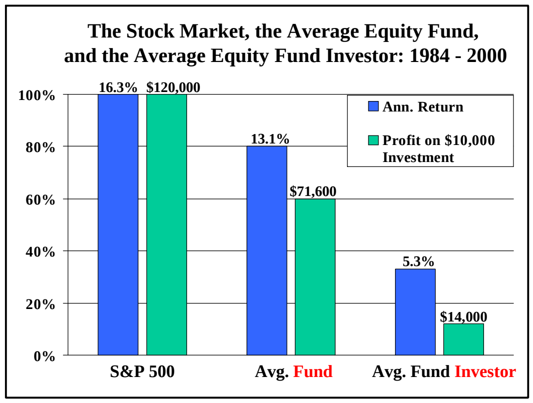


But the fund industry's problems transcend these dismal economics. Our industry's basic principles are being compromised. Fund managers have moved away from being prudent guardians of their shareholders' resources and toward being imprudent promoters of their own wares. We have pandered to the public taste by bringing out new funds to capitalize on each new market fad, and we have magnified the problem by heavily advertising the returns earned by our hottest funds.

Fund Returns vs. Fund *Investor* Returns

The result of this powerful marketing is that mutual fund investors have fared far worse than mutual funds themselves. They invested infinitely more of their dollars in equity funds during the period immediately preceding the peak of the stock market bubble than in earlier years when values were at far more reasonable levels. What is more, they invested the overwhelming portion of those dollars in technology funds and technology-oriented growth funds (including internet funds!) rather than in value funds which, bless them, both lagged as the bubble inflated and held fairly steady as it burst. And now, after the fall, equity fund investors are liquidating their holdings, month after month.

Early in 2001, an independent study showed that while the annual return of the stock market itself averaged 16% per year during the 1984-2000 period, the return of the average *mutual fund* averaged 13%, about the differential one would expect, given that fund costs amounted to about 2 ½% to 3% per year. But, because of the market timing and adverse selection issues I've just described, the annual return of the average mutual fund *investor* averaged just 5%. Today, the bear market has reduced that cumulative *market* return to about 11%, and the return of the average *mutual fund* to about 8%. If the previous relationship holds—the fund *investor* lagging the *fund* return by 8%—then the return of the average fund investor, during this excellent (from point to point!) period for stocks, was a mere break-even—0%! It is not a record of which we should be proud.



As our industry leaders accurately say, "the mutual fund industry has never had a major scandal," and certainly nothing like those we've seen among the corporate malefactors whom I've earlier described. But it's surely arguable that the astonishing shortfall in return that we've provided to our fund shareholders is itself scandalous. So we'd best learn from this recent sorry era in corporate America and put our own house in order.

That task must begin by honoring the principle set down in the very first article of the Investment Company Act of 1940, which calls on mutual funds to be "organized and managed . . . in the interests of shareholders . . . (rather than) in the interests of investment advisers and underwriters." Yet we have, I fear, honored that traditional principle of fiduciary duty more in the breach than in the observance. So we need, first, a change in attitude and a return to our founding principles.

Second, we need to reduce management fees, little of which (perhaps no more than 10%) are actually spent on investment management. By far the largest portion of the fee goes straight to the owners of the management companies themselves, who are rewarded with pre-tax profit margins in the 40%-50% range. (It's a living!) We must also reduce costs by reducing the substantial expense of portfolio turnover by, well, reducing that inevitably unproductive turnover itself. This change would also serve to move us toward how we ought to act—as *owners* of stocks—and away from how we act now—as *traders* of stocks—and doubtless enhance the net returns of our funds as well. As *real* owners, we would be forced to observe our responsibilities of corporate citizenship, another vital step forward. These changes, I believe, will make mutual funds a far better investment medium for our clients.

Six Rules of Investing

Let me close with a few ideas about what you should think about as you look ahead, first as investors, and next as citizens. And here I'm going to speak primarily to the young men and women in the audience. While the frenzy of the financial markets creates a cacophonous daily din, most of what happens each day is simply irrelevant to sensible long-term investing. So as you think about your financial futures, let me urge you to follow these six simple investment rules:

1. **Own Stocks**. Whatever returns stocks and bonds are generous enough to provide over your lifetimes, the economics of capital formation as well as the record of history give you as much certainty as is available in this uncertain world that stocks will provide the higher returns of the two. So for the accumulation of long-term wealth, the simple magic of compounding calls for an important role for equities.

2. **Never Ignore Risk**. Stocks fluctuate, and widely—a message forgotten early in the recent era but now etched in our memories. The boom and the bust were *normal*—just two more swings in stock returns over the past century. Reversion to the mean is the iron rule of the financial markets. By the accident of fate, as the ten-year moving averages in the earlier chart show, you're beginning your investment future with equities at far more reasonable values than at the hyped-up values of a few years ago. You are a blessed generation!

3. **Invest Regularly**. Dollar-averaging means you need not much concern yourself with market swings. Indeed, you should hope stocks remain at today's depressed levels for as long as you are investing, and then soar as you retire, as one day you will. But, more likely, you'll see, say, two long bull markets and two big bear markets during your investment lifetimes. Get ready for them. Accept whatever happens, and don't try to predict when. *Keep economics in investing and emotions out*.

4. **Sensible Asset Allocation**. I believe you should make your first investments largely—if not entirely—in stocks, but *only* with money you won't need for a long time. As your age and your assets increase, and the time to invest dwindles and the time to spend approaches, gradually increase your bond position. (A *very* rough rule of thumb: your bond percentage should equal your age.)

5. **Diversify, Diversify, Diversify!** Be sure to rely on widely-diversified portfolios of both bonds and stocks, simply because the greater the diversification, the lower the specific security (i.e. *non-market*) risk. *Market* risk is quite large enough, thank you, but you neither can, nor should, avoid it. So, minimize non-market risk, or even eliminate it by using a market index fund.

6. **Minimize Costs**. Mutual funds are expensive, so is trading individual stocks. Do your fishing in the low-cost-fund pond. Better yet, invest largely in the lowest-cost all-market (bond or stock) index fund you can find. It should assure that you will earn nearly 100% of the returns in the respective markets. And don't ignore *tax* costs. Put every penny that you can into your IRA and your thrift plan.

Together, these six rules should help you win the investment game. It turns out that successful investing is about following common sense principles, and avoiding the myriad potholes that lie along the road of investing. *You win by not losing.* There may or may not be *better* winning strategies than putting, say, 80% of your investments into an equity index fund and 20% into a bond index fund when you begin investing at age 25, gradually reducing the equity ratio over the years so it is 30% when you're 70. But I can absolutely guarantee you that the number of *worse* strategies is infinite. *Infinite!*

The Character of America

And now to your role as citizens. I began these remarks by telling you of the idealism I held during my college days, and as I began my career. I want to close by telling you that even a long career in the competitive, dog-eat-dog, give-and-take of the mutual fund business hasn't dimmed my idealism one jot. Indeed, I believe that today there is even more idealism in my heart and soul than there was all those 51-plus years ago. At Vanguard, I did my best to create a company that strived to live up to those ideals. While the industry has yet to emulate them, I'm certain that moving in that direction is only a matter of time.

Please don't underrate the power of idealism. This nation's founding fathers believed in high principles, in a moral society, and in the virtuous conduct of our affairs. Those beliefs shaped the very character of our nation. If *character counts*—and I have absolutely no doubt that character *does* count—the failings of today's business and financial model, the willingness of those of us in the field of wealth management to accept practices that we know are wrong, the conformity that keeps us silent, the selfishness that lets greed overwhelm reason, all erode the character we'll require in the years ahead, especially in the post-September 11 era. The motivations of those who seek the rewards earned by engaging in commerce and finance struck the imagination of no less a man than Adam Smith as "something grand and beautiful and noble, well worth the toil and anxiety." Somehow, in our corporate governance system at the outset of the 21st century, Smith's great ideal has been lost in the shuffle.

As you read about the state of capitalism in America each day, I can't imagine that you young citizens aren't thinking: "Wow! Our parents and grandparents really screwed it all up!" *And you're right.* The mutual fund industry today, charging ever higher costs, investing as *traders* rather than *owners*, and focusing on *salesmanship* rather than *stewardship* is not nearly as good an industry as it used to be, nor as it could be. And Corporate America today still has a long way to go to mend the damage done during the awful era that I believe is at last coming to a close. What should have been "*owners*' capitalism," where the idea is to serve the shareholder, was transmogrified into "*managers*' capitalism," placing the personal enrichment of executives as the highest priority.[3] By ignoring their role in corporate governance, institutional investors share considerable responsibility for this debasement of our capitalistic system, and its high time we fixed it.

And don't you dare get discouraged. You have the opportunity of a lifetime—an opportunity to restore ethics, good practices, and a touch of altruism to corporate behavior and mutual fund behavior as well. What has been described as "a pathological mutation in capitalism" must be reversed, and it is your generation's great challenge to do so. So carry forward the ideals of your youth into the vineyards of business and investing. Maintain your optimism about America and the world. Never lose the exuberance of your college years for learning and discovery. Have the courage to speak out for what you hold high. Above all, in your approach to life and career alike, *be tigers*!

I'll try to help in any way that I can. For, at this stage of my life, I feel like Ulysses must have felt after returning from his marvelous odyssey:

[3] Journalist William Pfaff, *International Herald Tribune*, September 10, 2002.

. . . Come my friends,
‘Tis not too late to seek a newer world.
Push off, and sitting well in order smite
The sounding furrows; for my purpose holds.
To sail beyond the sunset . . . ‘til I die.
Tho much is taken, much abides, and ‘tho
We are not now that strength which in old days
Moved earth and heaven, that which we are, we are;
One equal temper of heroic hearts,
Made weak by time and fate but strong in will
To strive, to seek, to find, and not to yield[4].

[4] *Ulysses*, by Alfred Lord Tennyson

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