# The Investment Dilemma of the Philanthropic Investor 

Remarks by John C. Bogle<br>Founder and Former CEO, The Vanguard Group<br>Before the Philanthropy Roundtable<br>Amelia Island, FL<br>October 31, 2002

The boom and bust in the stock market, the frightening rise of worldwide terrorism, the looming possibility of war in the Middle East, the unseemly behavior of far too many of our business and financial leaders, and the slowing of our economy as well as others around the world surely set a sobering background for our gathering today. But we can't, groundhog-like, simply burrow into the earth and come out when it's all behind us. A life lived in fear is a life not worth living. So rather than just holding our concerns, reasonable as they may be, at the front of our minds, we'd best get on with our lives, and try each day to do our own part in making the world in which we live just a little bit better.

And so it is in investing. Of course the outlook is clouded by the serious concerns I've enumerated. But invest we must. Whether private investor or private foundation, you have no choice but to put your resources to work so that they can generate the returns that will enable you to fund the beneficiaries of your wonderful philanthropic impulses. What is more, America depends on capital investment. Capital is among the principal forces that drive our economy; it has been the engine of our nation's enhanced productivity and growth in the past, and it surely will continue to be so in the future.

So let's put the cares of the day aside and consider a long-term perspective for our financial markets. Of course, it's hard to do that when the minds of most investors are ingrained to give the greatest weight to the most recent events, so most of us are still in the grip of the psychology resulting from the burst of the great stock market bubble of the late 1990s. But just as the January 1995-March 2000 leg of the ebullient bull market (stocks up $250 \%$ ) was the greatest in modern history, so the powerful bear market we have endured during the subsequent $21 / 2$ years has been the longest and deepest (stocks off $50 \%$ ) since the Great Depression. (Alas, it's my sad duty to remind you that $+250 \%$ followed by $-50 \%$, doesn't leave an investor at $+200 \%$. The actual net return is $+75 \%$.)


In the plunge, some $\$ 8$ trillion-nearly one-half of the total value of U.S. stocks-was erased. 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 then we got "back to (or at least toward) normalcy" in valuations, and have since enjoyed a modest-but happy-recovery.

Even after the great bear market, however, the rate of annual return on stocks during the 19822002 era averaged $13 \%$, surely an attractive outcome. Through the miracle of compounding, those who owned stocks in 1982 and still held them in 2002 had multiplied their capital 13 times over. So for all of the stock market's wild and wooly extremes, long-term holders of common stocks have been wellcompensated 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.

## Winners and Losers

That is not to say there was not a massive transfer of wealth during the late bubble. There was! 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-a transfer of wealth from public investors to corporate insiders and financial intermediaries, a transfer, of course, that is hardly without parallel in human history. But 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: The excitement of the new millennium, the coming of the Information Age, the apparent rise of a technology-driven "new economy," a booming economy, and a stock market that had experienced only a single down year (and a mild one at that) since 1982. 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 as Edward Chancellor, author of Devil Take the Hindmost, reminded us, when we simultaneously add in a wave of deregulation and financial innovation, "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 momentary precision of the price of a stock rather than on the eternal vagueness of the intrinsic 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, and 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.

## Actions and Reactions

But speculative manias hold the seeds of their own destruction. As Sir Isaac Newton might have told us, for every action there is an equal and opposite reaction, even in our financial markets. The first reaction to the late bubble was 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 to the unacceptable actions of those we trusted to be our corporate stewards, our financiers on Wall Street, and our watchdogs in the accounting profession has already begun. Congress has passed the Sarbanes-Oxley bill, requiring among other things, 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 selfregulation of accountants with a new federal Public Company Accounting Oversight Board. While the initial choice for the Board's Chairman was extremely disappointing, I remain hopeful that the move toward reform is too strong to be deterred. Further, both the New York Stock Exchange and the Conference Board Blue-Ribbon Commission on Public Trust and Private Enterprise are hard at work producing powerful sets of "best practice" guidelines for corporate governance.

While I hate to be the bearer of bad news, I must tell you that the harrowing events of the stock market since 1995 are normal. No more, no less. Markets fluctuate. They move up; they move down. But the evidence is compelling that when decade-long real (inflation-adjusted) stock returns are inordinately high by historical standards (say, more than $12 \%$ per year), returns in subsequent decades are likely to tumble. When past returns are exceptionally low (say, below $2 \%$ per year), future returns are apt to rise. What it's all about, it seems, is reversion to the mean, although we can never be sure when the reversion will come. Indeed if we assume a possible $6 \%$ annual real return over the coming decade, the decade-long moving average declines to $-2 \%$ in the decade ending in 2009, and gradually rises to the $6 \%$ level in the 2002-2012 decade.


## Investing Today: Look Forward, Not Back

After the fall, then, how should investors think about investing? It is a curious characteristic of 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. (Indeed, sometimes our depleted balance sheets require us to sell.) But only a moment of reflection ought to remind us that buying at the high and selling at the low is no formulation for the accumulation of wealth.

So rather than looking back, let's look ahead. What returns might lie before us in the stock market, and in 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 my Princeton thesis on the mutual fund industry.

## 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 adding $9 \%$ a year to investment return during the 1950s (when the price-earnings ratio soared from seven to 17 times) to taking away $7 \%$ a year 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, dissolve.


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## 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 more than $40 \%$ since 2000 began, much, perhaps all, of the bubble's excesses have been corrected. The dividend yield has nearly doubled, to $1.8 \%$. 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/e's now at 16 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 on 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 $5 \%$, or $4 \%$ to $6 \%$ for a combined Treasury/corporate bond portfolio. 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.


Of course bonds carry the risk that interest rates may rise-perhaps sharply-depressing bond prices. But let me suggest that for long-term investors such as foundations, higher interest rates are more to be hoped for rather than feared. Why? Because the reinvestment rate on interest payments is a far more important contributor to bond returns than momentary changes in bond prices. For example, assume that today's $4 \%$ coupon on a 20 -year Treasury bond would rise to $6 \%$. While the value of the bond would promptly drop by $14 \%$, the rate of return over the next 20 years would be $5.2 \%$. On the other hand, if the return falls to $2 \%$, the price would jump immediately by $161 / 2 \%$, but the return over the next 20 years would be just $2.9 \%$. Put another way, if rates rise, $\$ 1$ million already invested in bonds would grow to $\$ 2.8$ million; if rates fall, it would grow to just $\$ 1.8$ million- $\$ 1$ million less. "It's an ill wind that blows no good."

## The Effect of Interest Rate Changes on a Bond Investment over 20 Years



In stocks and bonds alike, it appears likely that future returns of both asset classes have returned to long-term historical norms. In any event, the sharp stock market decline, combined with the steep fall in interest rates, 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.

## Investment Policy for Today

If it proves to be the case that over the coming decade stocks deliver returns in the $8 \%$ annual range and bonds deliver returns around $5 \%$, a traditional balanced stock/bond portfolio at $60 / 40$ would deliver a future nominal return of about $7 \%$. But only if-and it's a big "if"-the foundation holding the portfolio were to earn $100 \%$ of the combined markets' returns. But in the long run, of course, the resources the foundation has at its command cannot be measured in nominal dollars. They must be measured in real dollars. So if the inflation rate proves to be, say, $2 \%$ per year (hardly a hyperbolic assumption), the real annual return of the portfolio would be $5 \%$. But few investors earn that return. Why? Investment costs. Those costs of investing-consultant's fees, investment management fees, the indirect costs of security analysts employed by investment banks, and the frictional costs of getting in and out of positions, as Warren Buffett's long-time partner Charles Munger described it to foundation officers four years ago, "can easily reach 3\% of foundation net worth per annum."

So, still quoting Mr. Munger, "we come to time for a little arithmetic: It is one thing each year to pay the croupiers $3 \%$ of starting wealth when the average foundation is enjoying a real return, say, of $17 \%$ before the croupiers' take. If the average annual gross real return . . . goes back, say, to $5 \%$ over some long future period, and the croupiers' take turns out to remain the waste it has always been, even for the average intelligent player, then the average intelligent foundation will be in a prolonged, uncomfortable, shrinking mode. After all, $5 \%$ return minus $3 \%$ cost minus $5 \%$ in donations by the foundation leaves an annual shrink of $3 \%$...
"But," he adds, "you may think, 'My foundation, at least, will be above average. It is well endowed, hires the best, and considers all investment issues at length and with objective professionalism.' And to this I respond that an excess of what seems like professionalism will often hurt you horriblyprecisely because the careful procedures themselves often lead to an overconfidence in their outcome." Well said!

## The Philanthropists' Dilemma

Now let's assume you accept the views of Messers. Munger, and Bogle both on the powerful negative impact of costs and on the fact that we face the likelihood that future financial market returns will revert to long-term norms. Here's the resultant equation: $7 \%$ combined stock/bond nominal return, less $2 \%$ inflation, equals $5 \%$ real return; reduced by costs of $3 \%$ equals $2 \%$; reduced, in turn, by annual charitable distributions of $5 \%$, equals minus $3 \%$ per year(!). Conclusion: Philanthropic assets are consigned to a likely loss of $3 \%$ per annum in real terms. In 2012, the purchasing power of the portfolio will be $26 \%$ smaller than it is today. Here's the dilemma: Should you accept this unhappy outcome? Or should you seek higher returns by investing in alternatives to U.S. stocks and bonds?

So let's think about what are called "alternative investments"-investments other than U.S. stocks and bonds, such as international stocks, private equity, hedge funds, venture capital, real estate, and so on. Many of our large university endowment funds have followed that course and made substantial commitments in these areas. Just $33 \%$ of the Princeton endowment fund, for example, is invested in U.S. stocks and bonds, with $25 \%$ in hedge funds and $15 \%$ in venture capital and private equity.

I won't deal in detail each of these areas today, but I will touch briefly on international equities, venture capital, and hedge funds. By fluctuating more or less independently from a U.S. stock portfolio, these investment classes are considered to reduce-as they almost surely do-the standard deviation of the total portfolio. But I take issue with considering a lower monthly volatility of returns as being a proxy for lower risk. The fact is that investments in each of these asset classes themselves carry higher risk than owning the entire stock market, an investment in which specific security risk (i.e., non-market risk) is eliminated. With market risk, as we now know, quite large enough, such risk reduction can fairly be described as priceless. So I would urge you to consider the paradox involved when you endeavor to reduce portfolio risk by adding riskier individual alternative investments to the portfolio.

Let's think first about international equities. Yes, they are a reasonable diversifier. But the economies of most developed countries are not as sound as ours, with lower productivity, considerably more troubled social insurance obligations, and, in most cases, less stable governments. Yes, emerging market stocks have greater growth potential than the U.S., but the risks of investing in these often fragile nations should hardly be assumed blindly. And owning foreign stocks involves the assumption of a risk-currency risk-that the U.S. investor need not assume.

Since monthly fluctuations in foreign markets have a long-term correlation of only about 0.25 with the U.S. market (about 0.50 in more recent years), international equities should reduce the standard deviation of a portfolio. Fine! But to what avail? When the stock market plummets, it seems to do so all over the world. For example, in the recent bear market, the $49 \%$ decline in the international stock index was actually a hair larger than the decline in the U.S. total stock market index. As a wise man observed, "just when we need it most, international diversification lets us down."

Second, let's consider venture capital. Venture capital is a highly risky field, whose fortunes have been very cyclical and whose costs create a heavy drag on returns. In his fine book, Pioneering Portfolio Management, Yale Endowment Fund's David Swensen notes that, during 1980-1997, venture capital returns of $8 \%$ actually lagged U.S. equity returns of $151 / 2 \%$ by nearly one-half. But the hope is always there: Top quartile venture capital earned $17 \%$ per year, while the third quartile return was $1 / 2$ of $1 \%$. "Burdened by fees," Mr. Swensen writes, "investors face the extraordinarily difficult task of selecting top-decile funds to realize the promise of private investing." He is correct.

## Hedge Funds: Beware!

Third, I want to focus on the current favorite alternative investment for endowments and foundations, the hedge fund. One-third of all foundations have some assets in these so-called "absolute return" vehicles. Indeed, hedge funds have become so popular that the notion of a hedge fund bubble may not be far fetched. While that may be an extreme position, it is only prudent to remember some of the events of the past few years: Long-Term Capital Management went virtually bankrupt; Tiger Fund threw in the towel and ceased operations; George Soros changed strategies; Leon Cooperman had the worst year in his history; and more than a handful of hedge funds, some of large size, were hit with serious ( $25 \%-35 \%$ ) losses.

Part of the challenge is that the term "hedge fund" is a remarkably broad umbrella that covers a bewildering array of strategies, including "global macro," "event-driven," "managed futures," "long-short equity," and "market neutral," so the decision as to what strategy to pursue in a hedge fund is itself a major decision. Further, given the diversity of hedge funds, the premium on making the right hedge fund selection is many times the comparable premium on selecting the right mutual fund-something that, according to my own research, is itself a high-risk proportion. In addition, the failure rate among hedge funds is shocking. According to a study by Yale Professor William Goetzmann, only two of every ten hedge funds survive for more than seven years.

Since 1995, the number of hedge funds has leaped from 40 in 1982 to 2,400 in 1992 to 7,000 today. During the same two decades, assets have burgeoned from $\$ 200$ million to $\$ 95$ billion to $\$ 600$ billion. It is fair to ask: 1) Are the number of capable and honest hedge fund managers growing at an equal rate? 2) Does that very growth mean that too many assets are now chasing too few opportunities? And 3) Can all of those funds possibly justify a fee structure that, to a thrifty fellow like me, seems confiscatory? With typical fees of $1 \%$ or $2 \%$ of assets, plus $20 \%$ of the fund's return, it takes a gross return of $9 \%$ to deliver just $5 \%$ or $6 \%$ to the investor.

So if you like the idea of enhancing future returns with alternative investments, please be aware of the risks and costs involved, and limit your commitments. And don't forget Mr. Munger's warning that, "smart, hard-working people are not exempt from professional disasters from over-confidence . . . Most good things have undesired side effects, and 'thinking' is no exception."

## There Is a Better Way

If this discussion of more modest future returns, the penalties of high cost, and the high risks of alternative strategies sounds scary, confusing and counterproductive, let me assure you that your philanthropic resources are not necessarily consigned to a bleak future. For there is-I'm sure you must know what I'm about to say-an answer, a way of escaping the horns of the dilemma faced by the philanthropic investors. And it happens to be very close to one recommended by Mr. Munger: "Dispense with your consultants and reduce your investment turnover by changing to indexed investment in equities." Or as Warren Buffett says, "when the dumb investor realizes how dumb he is and invests in an index fund, he becomes smarter than the smartest investor." Benjamin Graham says essentially the same thing, and other Nobel Laureates-including Paul Samuelson and William Sharpe-not only agree, but invest that way in their personal portfolios.

Before we consider the facts about how well indexing works, however, let me put forth my own view that for private investors, discretion is the better part of valor. I don't believe that a foundation should be invested $100 \%$ in equities. Mr. Munger disagrees. If the foundation doesn't index, he says, "just three fine domestic corporations could be sufficient. And . . . even $90 \%$ in one equity can be a rational choice in some situations." But I just can't give up my innate conservatism. So I recommend that most foundations consider $60 \%$ stock and $40 \%$ bonds as a reference point in balancing those two asset classes. Yes, stocks will probably provide a risk premium over the long term. But don't forget the need for income, and the $5 \%$ yield on a combined government/corporate bond portfolio today is more than $2 \frac{1}{2}$ times the $1.8 \%$ yield on equities. Don't forget, too, my earlier warning about how our emotions drag us into making counterproductive decisions. You have no idea what comfort you will gain from a balanced portfolio in the next market decline.

So here's one good answer to the philanthropic dilemma: (1) Hold a balanced 60/40 portfolio, and rebalance it regularly as stock and bond prices change. (2) Own the entire bond market on the fixedincome side and own the entire stock market on the equity side. And (3) Keep operating expenses and portfolio turnover costs to the bare-bones minimum; annual all-in costs of 20 basis points should do the job (just one-fifteenth of Mr. Munger's "croupier's cost" of 3\%). All of a sudden, you get virtually the entire market return, as that loss of $3 \%$ annually in real terms you might otherwise expect vanishes. The value of your foundation's principal—after a $5 \%$ distribution each year-maintains its purchasing power. It may not sound elegant, but it works.

Let me close by showing you how such a program might have worked in the past for a nonfoundation investor, reinvesting all dividends. $\$ 1,000,000$ invested in a $60 / 40$ balanced index portfolio at the start of 1970 and regularly rebalanced (and with costs imputed at $0.2 \%$ ) would have grown to $\$ 22$ million currently (after the bear market), while a similar investment in the average actively-managed balanced fund would have grown to $\$ 17$ million. Result: $\$ 4.9$ million more assets- $30 \%$ more total wealth-all the while assuming risk that was $15 \%$ lower.


Since the day that I joined Wellington Fund in 1951, right out of college, I've been a great believer in the idea of investment balance. Since the day that I finally figured out how much costs matter in investing, say 35 years ago (I'm a slow learner!), I've tried my best to minimize them. And since the day that I started the first stock index fund (1975) and the first bond index fund (1986), I knew it was only a matter of time before we'd create the first balanced index fund. That turned out to be in October 1992. So Vanguard Balanced Index Fund has just celebrated its tenth birthday. Just as it ought to work in theory, happily, the fund has proved to work in practice, and it has outpaced its average peer in eight of the past nine years. (While 2002 isn't quite over, we hold a margin of nearly two percentage points.)

One of the fund's charter investors just happened to be Business Week journalist Robert Barker. In his regular column, less than a week ago, he gave this appraisal of "My Favorite Mutual Fund":
"First, with an expense ratio of $0.22 \%$, it is an alluringly low-cost way to own 3417 stocks and 529 bonds-efficient diversification. Second, it captured much of the decade's rewards from investing at relatively little risk, easily beating the typical balanced fund at less risk. The single best attribute of my single favorite fund: the miniscule share of time and mind it takes . . . As it silently tracks the full stock and bond markets, rebalancing itself daily, it won't squelch all your worries. Just most of them."

Well, I'm not here to sell you that fund, only to show you that the sound principles on which it is based actually work. No matter what lies ahead, invest we must, and while those principles of broad diversification, minimal turnover, and rock-bottom cost won't make you the winner among your foundation peers, they are virtually certain to make you $a$ winner over most of them.


[^0]:    ${ }^{1}$ 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 since 1926-the correlation between earnings yield and the risk-free rate was only 0.42 I have not incorporated interest rates into my formula.

