The Financial Markets and the Mutual Fund Industry—

What the Past Half-Century Can Tell Us About the Future

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It's hard for me to believe that I've now been in the financial field for one-half a century. For it was in 1950 that I began to write my senior thesis on the mutual fund industry, and I have been part of it ever since. The title of my brand new book, *John Bogle on Investing: The First 50 Years,* includes the publication of that ancient thesis, as well as my thoughts about the financial markets, the fund business, and Vanguard and I'm delighted to have this opportunity to discuss with you the changes that have taken place during that half-century. "May you live in interesting times," may be an ancient Chinese *curse*, but it has been a *blessing* beyond compare for me to be, not merely an eye-witness to history during this, well, *interesting* era for investing, but an active participant in it.

What a difference half a century makes! In 1950, stocks and bonds were barely in the public consciousness; now they seem rarely *out* of it. Then, past market returns had been dull and plodding; since then they have been the highest in all U.S. history. Then, the dividend yield on stocks was three *times* the bond yield; now the *bond* yield is nearly seven times the yield on stocks. Then, the market was dominated by individuals; now it is dominated by financial institutions. Then, a ticker tape machine actually *printed* stock price changes every step along the way; now electronic networks display real-time prices on our computers. Then, trading was peaceable and orderly; now, trading is competitive and hyperactive. The world of investing in 2000 little resembles its 1950 counterpart.

With today's pervasive public interest in investing, reflected in the deluge of financial information that races down on us by the hour, it's hard to imagine how far removed from our concern the financial markets used to be. In 1950, perhaps one million families—one in 45—owned common stocks. Business pages were rare, except in the metropolitan papers (and even sparse there). *Fortune*, *Forbes*, and *Business Week* had few rivals in the financial magazine marketplace. And if there were a single television (or even radio) program about investing, I don't recall it.

The Rise of People's Capitalism

What a difference a half-century makes! Today, some 60 million families—six of every ten—own common stocks. A half-dozen cable television channels are importantly, even slavishly, devoted to investment news. Even the national networks regularly present business and financial stories along with daily—even hourly—updates on the stock market. *Money*, *Smart Money*, *Your Money, Young Money, Family Money,* and a score of other magazines about money—some with readerships in the millions—compete vigorously with those three familiar business magazines of the 1950s.

America has truly become the world's first bastion of "people's capitalism." Karl Marx' 1848 prophecy that the proletariat would own the means of production has at last come true! Much of this growth in share ownership has come from the formerly embryonic mutual fund industry, a growth fostered by, of all things, our government. Mutual funds have been the primary beneficiary of tax-

favored savings plans—IRAs, 401(k) corporate thrift plans, 403(b) retirement plans of non-profit organizations—that would not have been possible without Federal legislative and regulatory action. These programs provide investors with the incredible advantage of long-term compounding on a tax-deferred basis, a concept so pervasive today that it is hard to imagine that fifty years ago it was barely in the public consciousness.

As the 21st century begins, it's fair, if ungrammatical, to say that stocks and bonds are "where it's at." Small wonder, given their sheer dollars-and-cents importance on the balance sheets of American families. Back in 1950, U.S. citizens held $500 billion of financial assets, of which $154 billion—less than one-third—represented equity holdings. Today, we collectively hold $32 *trillion* of assets, with $15 trillion—nearly *one-half*—represented by equities. With so much of our future now dependent on the stock market, hovering over the daily peregrinations of the Dow Jones Industrial Average, the Standard & Poor's 500, and the NASDAQ has become—for better or for worse—our way of taking the temperature of our financial well-being.

Soaring Stocks

Much of this massive increase in stock ownership, of course, simply reflects the increase in the value of the financial assets on our collective balance sheet engendered by soaring stock prices. But the Great Bull Market has also whetted our appetite to acquire more stocks. When stocks go up, we want to own even more. The rise in market values has been astounding. The Dow, for example, priced at 235 when 1950 began, currently reposes, a bit shakily, at 11,000. And that 45-fold gain is but a pale shadow of the 75-fold gain in the Standard & Poor's 500 (then 90) Index. The S&P, in those olden days an obscure index largely known only to statisticians, has risen from 20.41 to 1400. But these figures ignore the dividends paid on the stocks in the index. When dividends are taken into account, the 1950 investor would have more than a *400-fold* gain. An investment of $1,000 in the S&P Index at the start of 1950 would now be worth $416,500—nearly a half-million dollars, the result of a 13.1% compound rate of return. Remarkable!

A Frenzy of Activity

In the increasingly superheated investment environment of the Great Bull Market, stock trading, perhaps not surprisingly, has gone through the roof. Fifty years ago, two million shares changed hands each day on the New York Stock Exchange. Today, two million shares change hands every *minute*. Day after day, one billion shares trade on the Big Board, and another 1.5 billion shares trade on the NASDAQ, today's version of the tiny "over-the-counter" market of 1950. The annual rate of turnover of stocks has risen from 18% to 150%, meaning that the average share, then held for more than five years, is now held for something like eight months. "Speculative frenzy" is not too strong a phrase for today's feverish activity in stocks.

We can credit (or blame) much of this activity on the Technology Revolution, which has given us lightning-quick communication of unlimited information. Add in the media's breathless reporting of market news; the hype surrounding technology stocks (especially Internet stocks); electronic trading networks, often used by "day-traders" seated at home by their computers; tumbling unit transaction costs; and the plethora of financial data available at the finger tips of impatient portfolio managers; and we have reached a level of stock market turnover not seen since 1929.

Institutionalization and Mutual Funds

This activity comes despite one of the most significant trends of the era: The *institutionalization* of the stock market. In 1950, private pension funds and mutual funds together held some $3 billion in equities—less than 2% of all stocks outstanding. Today, equities held by these two sets of institutional investors have grown to a total of $8 *trillion*. Adding in nearly $1 trillion of equities held in bank personal trust departments, more than *one-half* of all equities are now held under professional supervision and trusteeship. Alas, fiduciary duty has failed to deter our financial institutions from joining with the general public in today's stock trading frenzy. There has been but a single major institutional exception to the wild trading of stocks: The index fund—a portfolio that owns essentially every company in the entire stock market and holds it forever. First created in 1975, index funds have gained remarkable acceptance, and now own fully one-tenth of all U.S. stocks.

The mutual fund industry is a perfect example of what's happened in the investment field during the half-century. In 1949, after fortuitously reading an article on the industry in *Fortune* magazine, I chose this industry as the subject of my Princeton University senior thesis. In it, I endorsed *Fortune's* description of the then-$2½ billion fund industry as "tiny but contentious." Now responsible for $7 trillion-plus of assets, it is tiny no longer. Then, *The New York Times* listed the prices of but 109 funds, covering just eight column-inches. Today, there are 8,000 funds, and each day the mutual fund price quotations in the *Times* require 648 column-inches, or, if you will, 54 column-*feet,* covering two and one-half full pages.

But *contentious* this industry remains. Despite the awesome responsibilities it owes to its shareholders, over the years it has become primarily a business of marketing rather than management, with funds coming and going at a high rate, with a short-term investment focus, and with significant inefficiencies and excessive costs borne by fund shareholders. The industry has pretty much ignored the clear policy recommendations I expressed in my thesis: Put the interests of fund shareholders first; focus on management above all else; don't claim the ability to beat the market; and cut sales charges and management fees! Nonetheless, the industry has realized, many times over, the "tremendous growth potential" I visualized for mutual funds all those years ago.

The Financial Markets Today

With that brief chronology of the past half-century, let's take a look at where we are today. First, the dynamics of the financial markets have changed radically. While in hindsight it now appears obvious that stocks were a screaming buy in 1950, our parents, who had suffered through the Great Depression, were not only worried about a recurrence but lacked the wherewithal to invest. Indeed, after the build-up of our national economy during World War II, many pundits were still expecting a serious recession—or worse. Today, on the other hand, fear is conspicuous only by its absence, and stock market participants seem to feel that threes can grow to the sky.

In that earlier atmosphere of caution, the 8.7% dividend yield on stocks was at its historic peak. By contrast, in today's ebullient atmosphere, the stock yield is at its historic *low*—a skinny 1.1%—an 85% drop in yield resulting from a 75-fold rise in stock *prices* in the face of a mere eleven-fold increase in dividends. Then, bonds, the traditional alternative to stocks, yielded *2.6%*—one-third of the stock yield. Now bonds yield 7.2%, fully six and one-half *times* the stock yield—an extraordinary, indeed unprecedented, reversal of fortune.

As investors look ahead from this perspective on the past, the most important thing we must realize is that it will be difficult for stocks to "do it all over again." It is not merely that the past is *not*

prologue, but that today's circumstances virtually *preclude* the past being prologue. To understand why, we need only understand the simple mathematics that drive stock market returns.

The *total* return on stocks is the simple product of their *investment* return plus their *speculative* return. Investment return consists of the dividend yield on stocks plus the annual rate of earnings growth. Speculative return is the impact on stock prices of a change in the price investors are willing to pay for each $1.00 of earnings (the "price-earnings ratio"). For example, if investors decided overnight that stocks were worth not 15 times earnings but 20 times earnings, stock prices would immediately rise by 33%. If that rise were spread over a decade, it would add slightly less than 3% a year to the investment return.

So if the *investment* return were 8% (say, a 3% stock yield combined with 5% annual earnings growth), a rise in the P/E ratio from 15 to 20 would add a *speculative* return of 3%, bringing the *total* return on stocks 11% for the decade. On the other hand, if the ratio fell to 10 times earnings, the speculative return would be *minus* 4% *reducing* the 8% annual investment return to 4%. Each of these components—dividends, earnings, and the P/E ratio—makes a profound difference in what returns stocks provide to investors, a difference dramatically enhanced by the impact of compounding.

Stock Returns in the Future

How dramatic? Wow! Consider the past half-century. The 13% annual return that stocks provided—the highest in U.S. history—reflected a dividend yield of some 4% and annual earnings growth of 6%, for a total investment return of 10%. The extra 3% per year reflected a speculative return borne of an increase in the P/E ratio from 7 times to 30 times, spread over the period. The value added by that soaring multiple was hardly inconsequential. Indeed, absent the 3% speculative return, that $416,000 of wealth created by the 13% compound market return would have been just $116,000. Put another way, that reversal of fortune in speculation, from fear to hope—or even greed—was responsible for $300,000 of the $416,000 gain.

Given the mathematics of the marketplace, it will be extremely difficult for the past to be prologue. Consider each of the elements of return: Today's dividend yield is just over 1%, a fraction of the average yield of 4% since 1950. For the *investment* return to reach 10%, then, the rate of annual earnings growth would have to increase from 6% to 9%—a 50% increase—one that, while not inconceivable, is far from assured. Yes, I *know* we're living in a New Era of technology, communications, and science. But corporations remain subject to competition, regulation, and change—now more than ever, radical change in the way we Americans live—to say nothing of the serious challenges posed by globalization. *The world remains an uncertain place.*

What is more, to add another three percentage points of *speculative* return to reach the 13% annual *total* return of the past would require a rise of another 33%—from 30 to 40—in today's P/E ratio over the next decade (I'm not sure that looking out to the year 2050 would be all that helpful.) Possible? Certainly. *In the stock market, anything can happen.* Likely? I don't think so. Consider that prior to 1995, P/E's had *never* exceeded 24 times. And whenever they approached 24 times—at the market's highs in 1929, 1973 and 1987—a major bear market shortly followed.

So it seems a bit of a stretch to look for further increases from today's P/E level of 30 times. And were the ratio to recede to 20 times—a traditional sign that stocks were *high*—the negative four percentage points of speculative return engendered by such a retreat would reduce my earlier rather optimistic projection of an *investment* return of 10% over the next ten years to a *market* return of just 6%, well below the yield available on investment-grade *bonds* today. Yes, I know that the odds are against it. After all, bonds have produced higher decade-long returns than stocks in only six of the past 60 10-year

periods, and in but one of the past 100 25-year periods. Nonetheless, the stock market is not an actuarial table, and never will be one.

Alas, The Financial Markets Are Not For Sale

Whether future returns on stocks will fall short of the bountiful returns of the past half-century or whether they will equal or even exceed them, please bear this critically important fact in mind: *The financial markets are not for sale*, except at a high price. The stock market returns I have presented to you reflect the returns on the Standard & Poor's 500 Stock Index, absent investment costs and taxes. They thus reflect the entirely theoretical possibility of cost-free, tax-free investing. But when we consider the inevitable costs of investing, *reality bites theory*. As must be obvious, all investors as a group earn the market return, and beating the market is a zero-sum game. Thus, the conclusion is self-evident and inescapable: *The net return of all investors as a group must fall short of the gross return of the market by the amount of their costs*. Then, beating the market becomes a loser's game.

The impact of cost is not large. *It is enormous!* Remember that 13.1% additional return generated by the Standard & Poor's 500 Stock Index since 1950? Well, if we assume that a mutual fund earns the same 13.1%, on its portfolio (and in fact the average funds seems to earn just about what the market earns) but carried total costs of just 1.8% per year,[1] the return would have been reduced to 11.3%. And if we assume, very conservatively, that federal and state taxes on the typical tax-inefficient fund would have consumed at least another 2.7% per year, the fund's after-cost, after-tax rate of return would have been reduced by 4.5% per year to just 8.6%, two-thirds of the market's annual rate.

But of course these are annual returns. Compounded over the years, these costs take a far greater toll. Of course, it is the *magic* of compounding high *returns* that got us to that $416,000 total I mentioned earlier. And it is the *tyranny* of compounding high *costs* that then slashes that return. After investment costs *only*, that figure shrinks by more than one-half, to $190,000. And after estimated taxes, that total in turn is reduced to—I'm glad you are sitting down!—to just $57,000, leaving the investor with, not two-thirds of the market's return, but just 14%. Astonishing! The investor puts up 100% of the capital, assumes 100% of the risk, and—after the croupiers represented by our financial intermediaries and our tax collectors have raked away their 86% share—receives just 14% of the return. It just doesn't seem like a fair share…or a fair shake.

Given that mutual funds have been plagued by high management costs, high turnover costs, high opportunity costs, and profligate tax-inefficiencies, how is it that the fund industry could become the darling of the financial services field? Why have investors been willing to seemingly ignore the slings and arrows of outrageous costs and taxes? The answers, it seems to me, are obvious.

1. The fund industry has come of age in an era of exuberant markets. Yes, with the 17% annual market return of the past 15 years, the average fund has produced a pre-tax return of only 15%. But 15% "ain't bad." Few fund investors seem to pay much attention to *relative* performance.
2. Some 40% of mutual fund assets are held in tax-deferred savings plans, and returns are not affected by taxes in these plans until investors retire. The remaining 60% of assets are held in taxable accounts, and investors pay their taxes, not out of their mutual fund

[1] Today, the annual expense ratio of the average mutual fund is about 1.6%; the portfolio transaction costs incurred by the heavy trading of mutual funds is at least 0.7%; the opportunity cost that funds incur by holding cash reserves rather than stocks would cost about 0.3% in a moderately good market, and the sales charges paid to acquire most funds, amortized over time, is at least 0.5% per year. Total cost: 3.1%, or well above my conservative 1.8% estimate.

account, but out of their checking account. Thus, they simply aren't aware that their average *after-tax* rate of return is but 12%.

3. Fund investors rarely assess with precision the actual returns they earn, likely remembering the funds that have done well for them and liquidating those that have not. When they move their money to other funds, it is usually on the basis of their past performance, unmindful that the predictive power of past performance is virtually nil.
4. Most important of all, precious few fund investors focus attention to the long term, and are thus unaware of the baneful toll that the compounding of costs takes on the accumulation of wealth. Imagine if young investors were aware that a 50-year investment horizon is relatively *short*. (If you begin investing at age 25 and retire at age 65 with a 20-year life expectancy, that's *60* years.) Imagine if they were informed of the 86% reduction in wealth I've just shown Fund shareholders simply don't seem to realize, not only *that* cost matters, but *how much* cost matters over the long-run.

Enter Vanguard

Of course there cannot possibly be an experienced fund executive who is not fully aware of these serious performance shortfalls of which their investors seem so blissfully unaware. Yet I observe that precious few fund organizations are willing to deal with these issues. Fund fees and expenses keep rising, short-term investment strategies have become almost omnipresent, taxes remain largely undisclosed and virtually ignored, and the focus on charismatic marketing rather than disciplined management is intensifying. What is more, in recent years many no-load organizations traditionally have sought to build distribution by adding sales charges to their funds. I wish that I could point to a dozen firms that stand as exceptions to these trends, but the fact is that Vanguard, the firm I founded 26 years ago last month is one of a precious few, in fact as well as in reputation.

Vanguard was designed as an experiment in mutual fund governance—in structure and philosophy—in which the interests of the clients would be paramount. From the outset, I have frankly described our firm as "the Vanguard Experiment," since the fund shareholders themselves, not the external organization that traditionally has represented the way the fund firm is organized, who are in the driver's seat. Back in 1974, there was no way of knowing whether a truly *mutual* mutual fund firm—a firm that would operate at cost, would place stewardship before the personal gain of the managers, would be operated in a Spartan fashion, would eschew marketing, would enter into advisory contracts only with firms that would negotiate fees at arm's length, would espouse simple strategies like owning the entire stock market (or, for that matter, the entire bond market), and would dedicate itself to giving its shareholders a fair shake—could succeed in its unique and hitherto untried mission.

Without my citing endless batches of boring numbers cataloging our assets, our growth, our market share, our fund investment returns, our innovation, and, Heaven knows, our famously low costs, I think you know enough about Vanguard to determine for yourselves the extent to which we've succeeded. But whatever we may have accomplished, our corporate character can be easily described: *The magic of simplicity in an empire of frugality.* We march to a different drummer: *Of the shareholders, by the shareholders, and for the shareholders*. Our unremitting ethic: *Put the shareholder first.*

A Question of Ethics

Reprise: The Mathematics of the Markets

What Vanguard is trying to demonstrate, really, is the inherent, inevitable, unavoidable mathematics of the financial markets that I described to you earlier. *Beating the market is a loser's game*.

And, a loser's game by a wide margin, as you've seen, given the heavy burden of investment costs. What this wide gap between market returns and fund returns means is that the odds of an investor outpacing the stock market itself over the long-term can be reasonably estimated at one in 40. With those odds against winning, and with the average fund earning perhaps 75% of the market's annual pre-tax return (after taxes, it's worse), it seems amazing on the face of it that so relatively few investors have yet awakened to the fact that as much as 99% of the market's return is there for the taking, and virtually guaranteed to boot. How? Through a low cost all-market index fund—a fund that, in the ideal, owns every stock in the U.S. market and holds it, well, forever. (Or a bond market index fund doing essentially the same thing.)

We created the first stock-index mutual fund in 1975, and the first publicly-available bond index fund in 1986. We now manage some 30 funds tied to various indexes or asset allocation strategies, and are alone managing fully *two-thirds* of all the indexed assets in the fund industry. It is not enough to say that these funds represent some 40% of our $580 billion asset base. We also apply the principles that make indexing work—essentially, broad diversification, low turnover, low cost, and carefully-defined investment style—to most of the actively-managed stock funds and *all* of the fixed income funds that Vanguard offers. We have, in effect, "bet the ranch" on a single principle that flowed so easily and naturally from our structure virtually from the very day we began 26 years ago.

An index fund can capture *almost* 100% of the market's return. And while taxes are certain, such a fund, by eschewing the hyperactive trading that afflicts most mutual funds, is remarkably tax-*efficient*. Assuming an index fund modeled on the S&P 500 had operated over the past 50 years, we can easily make the comparison. Operated on an easily attainable cost of 0.2% a year and estimated taxes of but 1.3% per year, the S&P has annual returns of 13.1% would have been reduced to 11.6%, fully three percentage points greater than the 8.6% return of the average fund in my earlier illustration and then those twin miracles of compound interest—the magic of return, the tyranny of cost—do their work. That initial $1,000 investment grows, after cost, to $400,000 in the index fund, compounded to $190,000 for the active fund. After costs *and* taxes the results were: Index fund, $190,000; active fund $55,000. *Double* the return after costs are considered. Four *times* the return after costs and taxes. "Betting the ranch" turns out to have been a *low-risk* strategy for our investor.

Through Vanguard's Bogle Financial Markets Research Center, I remain vigorous and active at the firm I created in 1974. I've now written three books on investing, which I hope have made the world just a little bit better for investors. I'm of course honored that McGraw-Hill selected my newest book as the first volume of its series, "Great Ideas In Finance." As I re-read my Princeton thesis, I found a surprising consistency in the ideas and ideals that I continue to express to this day. The thesis begins by stating that "the prime responsibility (of mutual funds) must always be to their shareholders," and ends with a demand that funds must *serve*—"serve both individual and institutional investors . . . serve them in the most efficient, honest, and economical way possible." In this case at least, I guess it's fair to say that "the more things change, the more they remain the same."

Conclusion: Looking Ahead

In that vein, I'd like to conclude by returning to that idea of change and sameness, and what the past half-century may tell us about the next half-century. Despite the lingering suggestion in the title of my new book that I'm going to be around for the *next* 50 years, such a horizon might seem to be a bit of a push. Not so fast! For as some of you may know, I'm the fortunate beneficiary of a medical miracle. Five years ago, almost to this day, close to death's door with a rapidly failing heart, I entered Philadelphia's Hahnemann Hospital. After a 128-day wait, supported by constant intravenous infusions, I became the recipient of a 26 year-old heart. So it is a mere child of thirty—"heart-wise," as they say—who stands before you today. Given the second chance at life I've been given by my heart transplant, all that heart has to do, by golly, is make it to *its* age 80 and carry this frail body along.

In the world of finance, it is certain that one thing that will remain the same is that investment success will be represented by the allocation of market returns between investors on the one hand and financial intermediaries on the other. That is why beating the market remains a loser's game today, just as it was over the past 50 years, and, for that matter, forever. The title of a popular book of 1940 pungently summarized the idea: *Where are the Customers' Yachts?*

Yet while the market is the same old formidable foe, the returns we can expect from the stock market *will* change. And you've earlier heard my view that returns are apt, indeed almost destined, to be significantly lower in the coming era. While we are in a New Era in the economy, there is no New Era in the stock market. The eternal paradigm remains: hope, greed, and fear will drive the speculative enthusiasm of the day, but it is the fundamentals—earnings and dividends—that will drive the markets era-long returns.

What else may change and what else may remain the same? Let's speculate a bit, starting with what may change:

- Today's overweening focus on the daily sound and fury of the stock market will abate, as investors recognize that prices move up and down, and that simply ignoring these fluctuations and eliminating (or trying to eliminate) emotion from the investment equation is the secret of optimizing investment returns.
- As investors recognize the futility of trading, today's extraordinarily high transaction activity in stocks will recede, if not to 1950 levels, at least to annual turnover levels well short of this year's 150%. Symbolically reaffirming this change, the NASDAQ bulletin board on Times Square—"the largest television screen in the world!"—will move to Wall Street, where it belongs.
- As investors realize the heavy toll taken by costs and taxes, they will at long last begin to abandon their short-term focus and do what they should have been doing all along: Invest for the long-term. Again symbolically, the Weather Channel will replace the business channel as the most popular day-long TV fare.
- Economic and financial education will increase sharply. But it will begin to focus on what matters. One symbol of progress, I predict, will be when high school classes stop their titillating "stock-picking" contests and begin to learn the simple, boring mathematics of long-term compounding.
- As investors vote with their feet, the mutual fund industry will recognize it has no monopoly on the affections of investors. We will change, as we at last find our way, returning to the principles of stewardship and fiduciary duty, fulfilling our natural role as "the greatest contributor to financial democracy ever devised."

What Will Remain The Same

With all this change, however, much will remain the same.

- Common stocks will remain the investment choice for America's families. Despite the fact that the market is all too likely to suffer a few severe bumps during the next few years, most investors will learn to stay the course. Where else can investors turn other than the ownership of American business to find the extra returns required to assure the financial resources that will maintain their retirement?

- Common stocks will continue to provide a long-term risk premium over bonds. However, as both their risks and returns become even better understood, the historic 6% *real* (inflation-adjusted) premium accorded equities will ease downward, perhaps to as little as 2% to 3%.

- Indexing will—as it must—continue to prove itself year after year to all but the "I'm too smart for that" and the "Hope springs eternal" crowds. Statistics being statistics, of course, in some years indexing won't *look* as if it wins, and we'll be told by the vested interests that the era of the active manager has miraculously returned and "it's a stock picker's market again," ignoring the plain fact that the reality of the mathematics of the market is inescapable. No matter. The use of indexing strategies will increase steadily and significantly.

- Social Security will—and this may surprise you—remain intact. But only because long-overdue adjustments are at last made to increase revenues (some means-based standards) and reduce distributions (more realistic inflation adjustments; a retirement age that reflects our longer lives). However, an optional stock-investing plan, overseen by an independent Social Security Investment Board, will become available for a portion of an employees regular contributions. The vehicle? No surprises here: A low-cost all-market index fund.

And Finally, Some Important Imponderables

While "People's Capitalism" will remain the American ethos, I'm not at all sure what the social impact of ownership of stocks by our entire population of those millions who can afford to invest—and hence *defacto* corporate control by the public—will have on our political system. How, for example, can the citizenry be *against* "big business" when, by owning stocks, "we the people" *are* big business? In the fullness of time, we shall see.

At the same time, we'll have to consider the implications of living in a "market-dependent" economy. With one-half of the assets of our families invested in stocks, and with the financial markets ever subject to expense waves of optimism and pessimism, will that be translated in greater volatility in the economy itself? Clearly, as risk is increasingly transferred upon corporations and financial institutions to individuals, enlighten and rational attributes about the stock market will be required. But, in the long run, stocks cannot be propelled up to unsustainable levels by words or even monetary policy. I hope our governmental authorities, as stocks inevitably enter the political area, will have the wisdom to let the markets take their own course as, finally, they must.

I've covered an exciting half-century of investing for you today. I've been blessed with the opportunity to be both an observer and an active participant. You can be sure that the future will be filled with surprises and challenges, elation and heartbreak, things that change and things that remain the same. And if the miracles of life that have carried me this far—if my body doesn't change too much and if my heart remains the same, in 2050 I'll be back with you to discuss how my predictions worked out!

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