

A Tale of Two Markets

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Trinity University Policymaker Breakfast Series

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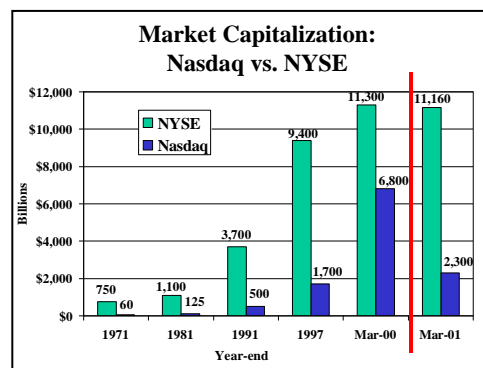
April 16, 2001

It was the best of times, it was the worst of times; it was the age of wisdom, it was the age of foolishness; it was the epoch of belief, it was the epoch of incredulity. . . it was the spring of hope, it was the winter of despair; we had everything before us, we had nothing before us . . . the period was so far like the present period, that some of its noisiest authorities insisted on its being received, for good or for evil, in the superlative degree of comparison only.

When he began *A Tale of Two Cities* with those familiar words, Charles Dickens was writing about the wildly divergent conditions that prevailed in London and Paris in the year 1775. But were he alive today, Dickens could have used them to describe the two distinctively different stock markets that U.S. investors have experienced since the beginning of 1998. Surely “the superlative degree of comparison” is a fair characterization.

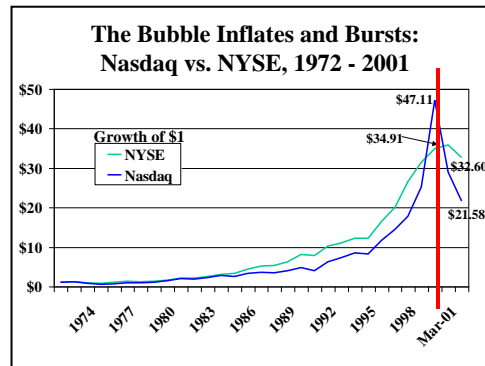
From the outset of the period through the market high last March, stocks listed on the New York Stock Exchange provided solid returns, rising steadily to a cumulative gain of 21%. Stocks trading on the “other market”—the NASDAQ market of stocks without exchange listings—soared by ten times more, an astonishing 230%. To get some perspective on this remarkable bubble, consider the near 30-year history we have in which we can compare these two different indexes. It begins at the end of 1971 when the NASDAQ Index—then known as the “over-the-counter” index of stocks not listed on a stock exchange—was a motley aggregation of the stocks of small and relatively unknown companies valued at an estimated \$60 billion, equal to about 8% of the \$750 billion value of the companies listed on the New York Stock Exchange—a pint-sized younger brother to the older and dominant giant.

A decade later, at the beginning of 1982, the little guy had grown a bit (to \$125 billion), but not much faster than his big NYSE brother (\$1.1 trillion), and equaled 11% of the value of all listed stocks. And even a decade after *that*, the NASDAQ's \$500 billion market capitalization in 1991 still represented but 13% of the NYSE's by-then-\$3.7 trillion. And even seven years after *that*, the NASDAQ value ratio had risen to a still modest 18% of the NYSE—\$1.7 trillion vs. \$9.4 trillion as 1998 began. But the *staggering* \$10 trillion *combined* increase in the value of the indexes since 1981—from \$1.2 trillion to \$11.1 trillion—makes an obvious point: *U.S. investors were in the midst of one of the greatest bull markets of all time.* Surely, we had never had it so good.



And then, in this Tale of Two Markets, a great chasm opened between the NASDAQ and the NYSE. In 1998, NASDAQ Index +41%; NYSE Index +19%.¹ In 1999, +87% vs. +11%. And in 2000, through March 10, the NASDAQ rose *another* 24%, while the NYSE Index actually declined, by 7%. With the NYSE up but 21% in the face of the 230% leap in the NASDAQ, the market capitalization of NASDAQ had leaped to \$6.8 trillion, fully 60% of the \$11.3 trillion market cap of the NYSE, compared to 25%, plus or minus, during the prior two decades. It is hardly necessary to draw a chart showing the parabolic arc that reflected this explosion in the prices of NASDAQ stocks to draw the obvious conclusion: *We were experiencing a bubble of historic proportions.*

¹ The NYSE Index and the NASDAQ Index are mutually exclusive; stocks are either listed or unlisted. It is therefore curious that the comparison of the two is so rarely made. Rather, the customary comparison is NASDAQ vs. the S&P 500, or vs. the Dow Jones Industrial Average, both of which include NASDAQ stocks. For example, at the March 2000 high, NASDAQ stocks represented some 25% of the S&P and 15% of the Dow.



The Birth of a Bubble

How did such a bubble ever come to pass? I suppose we'll never know precisely, but it doesn't require much analysis to assign the responsibility to a remarkable confluence of events like these: A once-in-a-generation economic boom, with record growth in corporate earnings; the optimism of the new millennium; a time of unity (mostly) in the U.S. and of peace (mostly) around the globe; the ebullience engendered by a quarter-century-long bull market, without a single protracted decline; the intoxicating hype of the financial press and the television networks; and the siren song of a New Era—"the Information Age."

Wired magazine was among the first to trumpet the New Era's grand promise. In an article entitled, "The Long Boom," published in mid-1997, the headline read: "We're Facing Twenty-Five Years of Prosperity, Freedom, and a Better Environment for the Whole World. You Got a Problem with That?" No, "I got no problem with that." Who among us could *possibly* have a problem with "watching the beginnings of a global boom on a scale never experienced before. . . entering a period of sustained growth that could eventually double the world's economy every dozen years and bringing increasing prosperity for--quite literally--billions of people on the planet . . . that will do much to solve seemingly intractable problems like poverty and ease tensions throughout the world, all without blowing the lid off the environment."

The *Wired* thesis predicted the triumph of the United States and the end of major wars, a truly global market, corporate restructuring, high economic growth, and waves of new technology. A virtuous circle, the article added, would be driven by an open society in an integrated world, a circle in which the Fed finally lifts its foot off the brake, productivity soars, biotechnology revolutionizes agriculture, alternative sources of energy abound, Europe is

integrated, Russia comes to have a solid foundation, and, down the road, China becomes the world's largest economy. In all, "a radically optimistic *meme*."² In hindsight, the only meme that seemed to take hold was the contagious idea that only the sky was the limit for the prices of the "New Era" stocks, and investors better jump on the band wagon...before it was too late.

There were, to be sure, some respected investors and investment professionals, made wary by their knowledge of the nature of stock market returns and hardened by their experience in previous bear markets, who spoke out with passion and eloquence, calling the market overpriced. But the prophets were few in number, for the most recent prolonged bear market had come a full generation earlier, in 1973-74, when, the NYSE Index tumbled 50%, and the NASDAQ plummeted 60%. Alas, these warnings went unheeded. As Dickens might have said of the stock market last March, "it was the age of *not enough* wisdom, it was the age of *too much* foolishness."

Recognizing the Bubble

While I'm hardly, in Dickens' words, one of the profession's "noisiest authorities," just over a year ago, right at the market peak, I did prepare a speech on "Risk Control in an Era of Greed." I pointed out that, "when reward is at its pinnacle, risk is near at hand." Reminding my audience that speculation has been around for at least 2,200 years, I quoted the Roman orator Cato: "*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.*"

After examining the stock market metrics in March of 2000, I concluded: "*So, let me be clear: You can place me firmly in the camp of those who are deeply concerned that the stock market is all too likely to be riding for a painful fall—indeed a fall that may well have begun as I began to write this speech ten days ago. Viewed a decade hence, today's stock market may just be one more chapter in "Extraordinary Popular Delusions and the Madness of Crowds."*

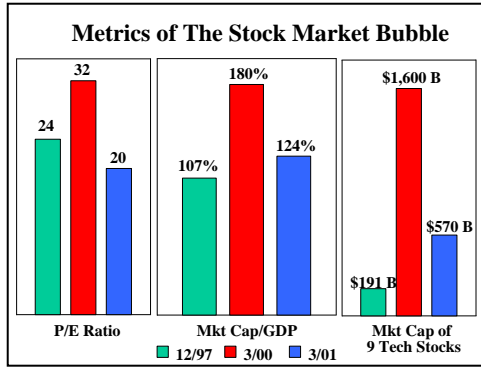
² "What is a meme?," you ask. So did I. The answer: "A contagious idea that replicates like a virus, passed on from mind to mind. Memes function the same way viruses do, propagating through communication networks and face-to-face contact between people . . . the basic unit of cultural evolution."

What were those market metrics that so concerned me? Stocks, as measured by the broad-based Standard & Poor's 500 Stock Index, were selling at 32 times earnings, up from 24 times in 1997 and twice the historic norm of 16 times. The \$17 trillion value of the U.S. stock market was nearly 200% of our nation's \$9.4 trillion GDP, up from 107% in 1997 and more than double the 80% relationship that had marked earlier *highs*. And, drawing on Jeremy Siegel's *Wall Street Journal* essay ("Big-Cap Tech Stocks are a Sucker Bet"), nine of the most popular stocks of the day (Cisco, Oracle, Nortel, Yahoo!, etc.), had risen in value from \$190 billion in 1997 to \$1.6 *trillion*. At their median price of 153 times earnings, even if the estimates of 30% annual earnings growth projected for them were actually achieved, they would *still* be selling at 95 times earnings in 2004, and 46 times in 2009. What a pipe dream!

The Bubble Bursts

We all know that trees don't grow to the sky. They couldn't . . . and they didn't. And many investment veterans had a pretty good idea of *what* was going to happen in the wildly-inflated stock market. While none of us, I think, had any idea of *when*, the burst in the bubble began at the very moment I was preparing my remarks. When reward reached its pinnacle, risk *was* at hand. The ratio of the NASDAQ's capitalization to that of the NYSE has tumbled from 60% at the high, to just 21% currently. From the March high last year to the April low this year, the NASDAQ Index has plummeted 67%, while the listed market, as measured by the NYSE Index, is now but 4% lower. After departing far from normalcy, then the relationship has returned to normalcy with a vengeance. The little brother is *little* again. And that eternal rule of the financial *markets*—*reversion to the mean*—has again asserted its time-honored force.

And what about those metrics? Well, the price/earning ratio of the S&P 500 has tumbled by 37%, from 32 times to a more realistic (if still historically high) to 20 times. The value of stocks in relation to GDP has dropped from 180% to 124%. And those nine big-cap tech stocks singled out by Dr. Siegel, *were* a sucker's bet. More than *one trillion* dollars(!) has evaporated from their combined market value—a drop from \$1.6 trillion to \$570 billion. And their median price-earning ratio is now down to 47 times—hardly cheap, but hardly ridiculous either. Reality—or at least some version of reality—has now returned to the stock market.



The Tortoise and the Hare

If we look at the relationship between the NYSE tortoise and the NASDAQ hare—it may be a trite analogy, but, by God, it’s perfect!—it is the tortoise that has won again, just as Aesop, with his ancient wisdom, described. And the tortoise wins if we start the comparison at the very beginning, with the inauguration of the NASDAQ Index at the start of 1972. Or if we start in 1982. Even if we start in 1992, when the idea of the New Economy was beginning to enter our consciousness, we have a statistical dead heat. And if we start the comparison just as the hare began his explosive dash in 1998—a dash that took him so far ahead of the tortoise that he was almost out of sight—his equally mad *reverse* dash took him back to the plodding tortoise and then behind, and he even lost that lap of the race too. And so it is that the *best of times* for the NASDAQ were too good to be true, and that the *worst of times* has restored us to some semblance of market reality.

The Tortoise and the Hare			
Annual Returns Through 3/01			
<u>Start Date</u>	<u>NYSE</u>	<u>Nasdaq</u>	<u>NYSE Advantage</u>
1/1972	12.6%	11.1%	+1.8%
1/1982	15.4%	13.5%	+2.2%
1/1992	13.4%	14.3%	-0.3%
1/1998	6.6%	6.0%	+2.1%

Cash Flows – The Investment Essential

To explain what happened, we can again rely on Dickens' words, for we have returned from the epoch of incredulity to the epoch of belief. As I stressed in my year-ago speech, despite the dichotomy that appeared to exist between two U.S. economies—the Old Economy of Industrial America and the New Economy of the Information Age (a difference that is quite nicely captured, as it happens, between the stocks listed on the NYSE and those traded on the NASDAQ over-the-counter market), the mathematics of the market ultimately come down to the theory that is universally taught in undergraduate finance classes and graduate business schools: *In the long-run, the rewards of investing **must** be based on future cash flows.* For the purpose of the stock market, simply put, is to provide liquidity for stocks in return for the promise of future cash flows, enabling investors to immediately realize the present value of a future stream of income.

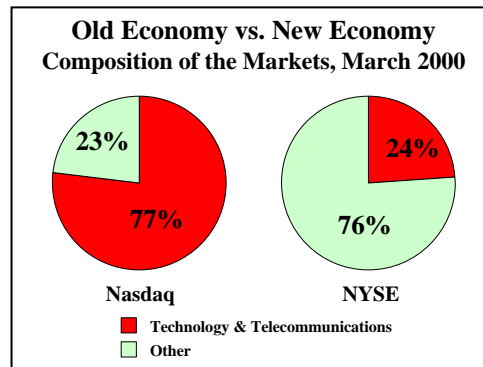
If investors didn't simply ignore this inevitable truth, they anticipated future streams of income that lost touch with reality, projecting that the earnings of the New Economy stocks would grow at unprecedented rates in order to justify price-to-earnings ratios that ranged from 50 times earnings, to 150 times, all the way to infinity. (Infinity is reached when there *are* no earnings, so the price-to-*sales* ratio is substituted, often itself reaching hundreds of times.) Such projections ignored the fact that the remarkably innovative, technology-driven, rapidly changing, dog-eat-dog New Economy would be highly competitive. When you think about it, the Internet was hell-bent on creating the most remarkable medium for unfettered price competition ever designed by the mind of man. Crowning the *consumer* as king, obviously relegates the *producer* to the status of the king's subjects. How could we have ever expected that giving "power to the people" could possibly provide a license for boundless corporate profitability?

Old Economy vs. New Economy

Meanwhile, back at the Old Economy, the NYSE market seemed virtually immune to the bubble plague that so thoroughly infected the New Economy. Why? Simply because we believed we were in a boom in which the New Economy was in the driver's seat. And the core of the New Economy was technology, with all of the "come hither" promise of a sultry siren. Only two of the NYSE's largest 25 stocks are tech stocks, but only two of the 25 largest stocks on NASDAQ are *not* tech stocks. At the market high a year ago, technology and telecommunication

stocks had come to represent 77%(!) of the value of the NASDAQ Index, but just 24% of the NYSE Index.

The idea that technology stocks would lead the way into a New Era proved to be an extraordinary popular delusion, but it was a delusion that was fomented by those who had a vested interest in creating the delusion:



First, the matter of earnings. Lacking a history of those stodgy old earnings that we know are what drive investment return, the tech companies in the NASDAQ—at least in their early years—were valued solely on investor confidence—hope and greed, if you will, both of which spring eternal until fear comes along—to drive their speculative return. Despite the fact that earnings expectations lost all touch with reality, the appetites of the entrepreneurs and the investment bankers created innumerable centi-millionaires (and more than a few billionaires) through a rash of 492 Internet IPOs (of which perhaps only 25 are now selling above their initial offering prices). What was different about the NYSE? Well, a listed stock must have, of all things, *earnings*. And not only earnings, but earnings *history*. Specifically, a listed company had to have a history of at least “three consecutive years of . . . demonstrated earning power,” as well as substantial net tangible assets. In the new high-tech offerings, both qualities were conspicuous by their absence.

Earnings Management and Executive Compensation

Second, as the market’s focus moved from earnings to earnings growth, corporations began to report earnings that lost touch with reality. In what I have called a “happy conspiracy” among corporate managers, public accountants, Wall Street analysts, investment bankers, and

individual and institutional stock owners alike, market participants developed a *vested* interest in promulgating aggressive earnings expectations, and a *survivor's* interest in measuring up to them, quarter after quarter. The flexibility of the day's accounting standards turned earnings management into what could be called "metrics fraud," with the publication—and acceptance by a greedy marketplace—of so-called "pro-forma earnings" or "core operating earnings." What did those managed earnings mean? As the Mad Hatter told Alice, they mean "exactly what I say they mean."

And even traditionally conservative corporations came to play such games as booking investment gains into earnings, financing purchases made by customers, under-depreciation, counting revenues from goods not yet delivered, and securitization of receivables. The liberal use of these dubious accounting procedures, often required simply to meet the so-called "earnings guidance" targets provided to the financial community made, well, *everybody* (except the short-sellers!) happy in the short-run, but had the worst possible effect over time. For the aggressive management of earnings undermines the confidence of investors in the integrity of corporate financial statements. Alas, financial integrity is a lot easier to lose than to reclaim.

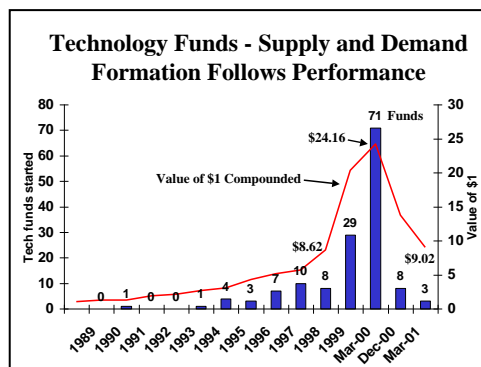
Third, led by the young technology companies, the compensation structure of American business changed. In the New Era environment, technology firms and established firms alike made enormous grants of stock options to their managers. In effect, management demanded a large share in the huge rewards created by soaring stock prices, never mind that corporate earnings—even managed earnings—lagged far behind. What is more, while options have an easily-measurable value, that value was not considered a compensation cost, further inflating these earnings (and giving rise to Warren Buffett's question, "if options aren't compensation, what *are* they?"). Now, as we reach toward the bottom of the bear market, the options game is being played in reverse: Options are being repriced (and some that have been exercised at high prices have even been retroactively cancelled), a great benefit to executives, at an equally great cost to the owners of the company. It's high time we required that stock options be based on real corporate cash flows, and not on fickle stock prices.

Who Profits? Investment Bankers and Mutual Fund Managers

Fourth, many Wall Street so-called research reports played a shocking role in building the optimism of investors, inflating the future prospects of companies beyond their power to achieve

them. Price/earnings ratios were replaced by price/sales ratios; volume of goods sold was replaced by *visits, impressions, and eyeballs*. Rather than analyzing, analysts came to predict the future, without removing the rose-colored glasses that became the analysts' hallmark. Many analysts came to be paid multi-million dollar salaries, *not* because they could predict high earnings growth with accuracy (recent events have surely given the lie to that supposition), but because puffing a corporation's prospects might give *their investment banking* colleagues a chance to underwrite the client's next foray into the capital markets, while a negative report might cost them the client. That may explain, according to a recent press report, why, among 8,000 stock recommendations by Wall Street analysts, only 29 recommended "sell."

And fifth, the mutual fund industry. It too poured fuel on the technology fire. Never mind that we were in a NASDAQ bubble, there was money to be made by fund sponsors in selling technology funds to the public. Marketing strategy, of course, aims to sell the public *exactly* what it wants, and the mutual fund industry was quick to pander to the public's taste. When tech stocks were ho-hum performers during the first half of the 1990s, only two new tech funds were formed. But when tech stocks approached their peak, the industry hares spawned them like baby rabbits—29 in 1999 and 71 *more* in the first quarter of 2000. During that final, overheated surge of tech *stocks*, tech *funds* accounted for fully 30% of the all-time record high of \$112 billion of cash that flowed into equity mutual funds during the quarter. Alas, the 92% *annualized* return that the established tech funds had achieved during 1999 and early 2000 promptly—and predictably—vanished, with tech funds now off nearly 70% from their March highs. *Millions of dollars of fees to the managers, billions of dollars of losses to the investors.* Sweet marketing, it turns out, is usually sour investing.

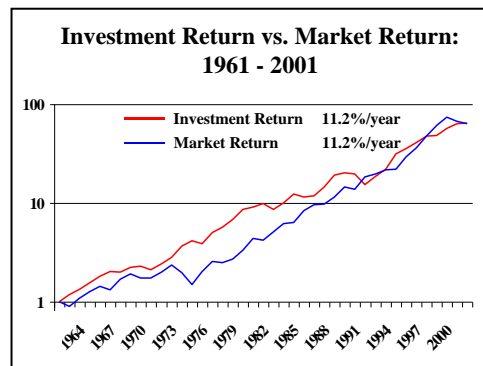


And so it was that after the spring of hope a year ago, we have now completed a summer, a fall, and a winter of, if not despair, surely disappointment. We await the next season. What does it hold for investors?

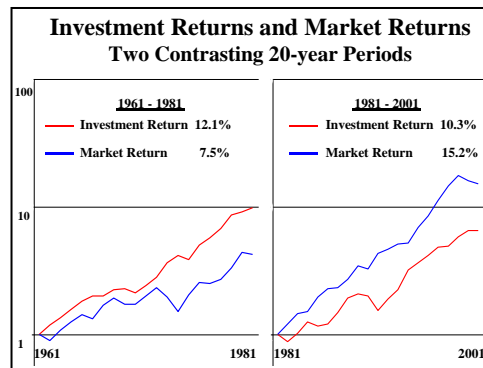
The Sources of Stock Market Returns

With apologies to Dickens, I turn again to a tale of two markets . . . but a tale of two *other* markets: Stock markets past, and stock markets yet-to-come. Do we have *everything* before us, or *nothing* before us? To answer that question, we must look at the U.S. stock market *in total*, well-represented by the Standard & Poor's 500 Stock Index, which includes both listed stocks (now 85% of its value) and Nasdaq stocks (15%). Let's begin with the eternal mathematics of the stock market, in which returns are derived from two distinct elements: Investment, and speculation. *Investment* return is represented by the sum of a stock's dividend yield plus the rate of its earnings growth: It tends to be steady, recurrent, and almost always positive.

Speculative return is measured by the willingness of investors to pay more—or less—for each dollar of earnings: It is intermittent, spasmodic, and may as easily be negative (a falling price-earnings ratio) as positive (a rising price/earning ratio). Simply adding the two elements together gives us the total market return. But over the long run, it is investment return—earnings and dividends—that calls the market's tune. Consider the past 40 years: Dividend yield plus earnings growth came to a total of 11.2% per year. The actual return of the stock market came to an *identical* 11.2%.



If speculative return came, as it did, to zero over the full period, in the short-term, and even over extended periods, it plays a crucial role, beautifully exemplified by dividing that 40-year period into two equal 20-year segments. Both periods saw excellent annual *investment* returns: 12% during 1961-1981; 10% during 1981-2001. But speculative return *subtracted* 4½% in the first period and *added* 5% during the second. Result: a *market* return of 7½% in the first 20 years, and 15% in the second.



Curiously, despite a *lower* rate of corporate earnings growth and dividends during the second period, the annual return on stocks *doubled*. Why? Because the price/earnings ratio, which had tumbled from 22 times in 1961 to 8 times in 1981, had returned to 20 times in April 2001 (after reaching an astonishing 32 times at the market high last March). The point is that the *economics* of market returns—the earnings and dividends of America’s corporations over two centuries—are almost always both *predictable* and *productive*. The *emotions* of market returns, on the other hand—the change in the price that investors are willing to pay for each dollar of earnings—are *unpredictable*, at times remarkably *productive*; at other times, remarkably *counterproductive*.

This dramatic example of the two forces that determine stock returns—investment and speculation—helps us look ahead and consider what returns we might expect over the coming decade. We begin with a dividend yield that is only 1%, a fraction of the historical norm of 4%. That, to put it bluntly, is not a lot of gas in the market’s tank. But if we assume that corporate earnings growth will continue at its 7% annual rate of the past 40 years, stocks would enjoy a total *investment* return of 8% annually during the coming decade.

The Crucial Role of Speculative Return

Will *speculative* return enhance or reduce that investment return? I suspect that it may change the return only modestly. For, given an increase in earnings and the market's decline, the price-earnings ratio has now fallen to 20 times, not too far above its long-term norm of 16. If, ten years hence, investors continue to pay the same \$20 for each \$1 of earnings they pay today (a price-earnings ratio of 20), then the market return must—and will be—that same 8%. If the p/e ratio were to fall to its long-term average of 16, that would result in a *negative* speculative return of about minus 2% per year, bringing the 8% investment return down to 6%.

If, on the other hand, the p/e ratio were to *rise* to 24 times, we'd have a *positive* speculative return of 2%, bringing the market return to 10%. Rational expectations, then, suggest a future return for stocks on the 6% to 10% range during the coming decade; that is, a return ranging from about the same as today's bond yield to a nice equity premium of 4%. So, provided only that American business works through the present slowdown with its customary energy, resiliency, determination, and imagination, we're unlikely to be facing the *worst* of times.

What would it take to bring us to the *best* of times? For argument's sake, let's call that a return on stocks of 15% during the coming decade. Still assuming an *investment* return of 8%, we'd require a *speculative* return of 7%, which would require a final p/e ratio of nearly 40 times. Wow! I simply don't believe that number is in the cards. In any event, the point is that when you consider most market forecasts, realize that they are largely guesses, *not* about earnings and dividends, but about market sentiment—in other words, about investor confidence. In that sense, simply predicting, in the abstract, the future level of the stock market is one giant *confidence game*. (I didn't say *con game*, but I could have.) And who among us can do that with any claim to prescience?

Market Returns in the Coming Decade?				
(April 2001 - April 2011)				
	Negative- P/E 16x	Neutral- P/E 20x	Positive- P/E 24x	Wow! P/E 39x
Dividend Yield	1%	1%	1%	1%
Earnings Growth	<u>7</u>	<u>7</u>	<u>7</u>	<u>7</u>
Investment Return	8%	8%	8%	8%
Speculative Return*	<u>-2</u>	—	<u>+2</u>	<u>+7</u>
Market Return	6%	8%	10%	15%

*Annualized impact of change in P/E ratio

So that investors would have no illusions about the nature of market predictions, we would all be better-served if the popular market gurus of the day would present their forecasts in the two distinctive components that I have described: How much is investment? How much is speculation? For example, when one of today's most respected seers predicts, as she does, a level of 1650 for the Standard & Poor's 500 Stock Index on December 31, 2000 (nearly 45% above its recent price of 1160), she's actually forecasting a p/e ratio of 32 times. While I don't share her conviction (I don't even understand the *basis* for it), I do share her hope. But I wouldn't bet a red cent on it.

Stay the Course!

So, my approach to considering future market returns rests on rational expectations. For it is my deep seated conviction, reinforced by the lessons of stock market history, that, in the long run, reason will prevail. Yes, as Lord Keynes reminded us, "markets can remain irrational longer than you can remain solvent." I remind you that it is foolhardy to borrow money to invest in stocks, and that your own asset allocation should include a healthy measure of fixed income securities such as bonds, and that the courage to press on regardless—regardless of whether we face calm seas or rough seas, and especially when the market storms howl around us—is the quintessential attribute of the successful investor.

Investors will require these qualities more than ever in "the present period," using Dickens' words, "for good or for evil, in the superlative degree of comparison only." For in this double-edged Tale of Two Markets, we have seen both the spring of hope and the winter of despair in the NASDAQ market, a despair that now seems to be easing over to the NYSE market. And we have also seen two remarkable decades—the 1980s and 1990s—which began when investors in the U.S. stock market had everything before us. The best of times—literally—that came to pass in the stock market has now been succeeded by the worst of times—at least, the worst of times investors in our generation have ever seen. So we must move from incredulity about the past to belief in the future, and confidence in our Nation's economic strength. As the age of speculative foolishness gradually vanishes in our stock market, it must be succeeded by an age of wisdom, as we learn from the lessons of market history. Armed with the perspective of that character-building experience, we can take the long view, and stay the course.