Chapter 1

On Long-Term Investing

Chance and the Garden

Investing is an act of faith. We entrust our capital to corporate stewards in the faith—at least with the hope—that their efforts will generate high rates of return on our investments. When we purchase corporate America's stocks and bonds, we are professing our faith that the long-term success of the U.S. economy and the nation's financial markets will continue in the future.

When we invest in a mutual fund, we are expressing our faith that the professional managers of the fund will be vigilant stewards of the assets we entrust to them. We are also recognizing the value of diversification by spreading our investments over a large number of stocks and bonds. A diversified portfolio minimizes the risk inherent in owning any individual security by shifting that risk to the level of the stock and bond markets.

Americans' faith in investing has waxed and waned, kindled by bull markets and chilled by bear markets, but it has remained intact. It has survived the Great Depression, two world wars, the rise and fall of communism, and a barrage of unnerving changes: booms and bankruptcies, inflation and deflation, shocks in commodity prices, the revolution in information technology, and the globalization of financial

markets. In recent years, our faith has been enhanced—perhaps excessively so—by the bull market in stocks that began in 1982 and has accelerated, without significant interruption, toward the century's end. As we approach the millennium, confidence in equities is at an all-time high.

Ten Years Later

The Paradox of Investing

As the decade ending in 2009 comes to a close, it is hard to escape the conclusion that the faith of investors has been betrayed. The returns generated by our corporate stewards have too often been illusory, created by so-called financial engineering, and produced only by the assumption of massive risks. The deepest recession of the post-1933 era has brought a stop to U.S. economic growth. After two crashes—in 2000–2002 and again in 2007–2009—the stock market returned to the level it reached way back in 1996 (excluding dividends): 13 years of net stagnation of investor wealth.

What's more, far too many professional managers of our mutual funds have failed to act as vigilant stewards of the assets that we entrusted to them. The record is rife with practices that serve fund managers at the expense of shareholders, from charging excessive fees, to "pay-to-play" (arrangements with brokers who sell fund shares), to a focus on short-term speculation rather than long-term investment. In one of the largest violations of fiduciary duty (as New York attorney general Eliot Spitzer revealed in 2002), nearly a score of major fund managers allowed select groups of preferred investors (often hedge funds) to engage in sophisticated short-term market-timing techniques, at the direct expense of the funds' long-term individual shareholders.

In any event, 10 years after the turn of the millennium, investor confidence in equities seems to be approaching the vanishing point. My earlier concern that our faith in investing had been excessively enhanced by the long bull market of

1982–1999 now seems almost prescient. But when confidence is high, so are market valuations. We can now hope—and, I think, expect—the other side of that coin. When confidence is low, market valuations are likely to be attractive. We might fairly call that parallelism "the paradox of investing."

Chance, the Garden, and Long-Term Investing

Might some unforeseeable economic shock trigger another depression so severe that it would destroy our faith in the promise of investing? Perhaps. Excessive confidence in smooth seas can blind us to the risk of storms. History is replete with episodes in which the enthusiasm of investors has driven equity prices to—and even beyond—the point at which they are swept into a whirlwind of speculation, leading to unexpected losses. There is little certainty in investing. As long-term investors, however, we cannot afford to let the apocalyptic possibilities frighten us away from the markets. For without risk there is no return.

Another word for "risk" is "chance." And in today's high-flying, fast-changing, complex world, the story of Chance the gardener contains an inspirational message for long-term investors. The seasons of his garden find a parallel in the cycles of the economy and the financial markets, and we can emulate his faith that their patterns of the past will define their course in the future.

Chance is a man who has grown to middle age living in a solitary room in a rich man's mansion, bereft of contact with other human beings. He has two all-consuming interests: watching television and tending the garden outside his room. When the mansion's owner dies, Chance wanders out on his first foray into the world. He is hit by the limousine of a powerful industrialist who is an adviser to the President. When he is rushed to the industrialist's estate for medical care, he identifies himself only as "Chance the gardener." In the confusion, his name quickly becomes "Chauncey Gardiner."

When the President visits the industrialist, the recuperating Chance sits in on the meeting. The economy is slumping; America's

blue-chip corporations are under stress; the stock market is crashing. Unexpectedly, Chance is asked for his advice:

> Chance shrank. He felt the roots of his thoughts had been suddenly yanked out of their wet earth and thrust, tangled, into the unfriendly air. He stared at the carpet. Finally, he spoke: "In a garden," he said, "growth has its season. There are spring and summer, but there are also fall and winter. And then spring and summer again. As long as the roots are not severed, all is well and all will be well."

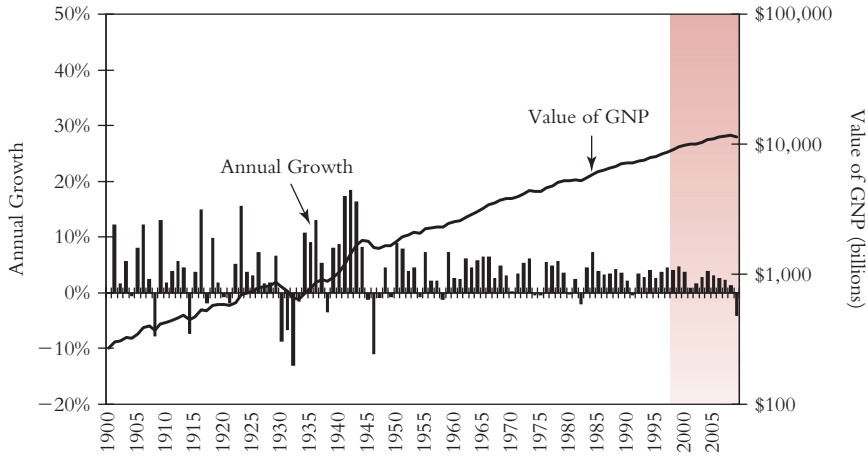
He slowly raises his eyes, and sees that the President seems quietly pleased—indeed, delighted—by his response.

> "I must admit, Mr. Gardiner, that is one of the most refreshing and optimistic statements I've heard in a very, very long time. Many of us forget that nature and society are one. Like nature, our economic system remains, in the long run, stable and rational, and that's why we must not fear to be at its mercy. . . . We welcome the inevitable seasons of nature, yet we are upset by the seasons of our economy! How foolish of us."[1]

This story is not of my making. It is a brief summary of the early chapters of Jerzy Kosinski's novel *Being There*, which was made into a memorable film starring the late Peter Sellers. Like Chance, I am basically an optimist. I see our economy as healthy and stable. It is still marked by seasons of growth and seasons of decline, but its roots have remained strong. Despite the changing seasons, our economy has persisted in an upward course, rebounding from the blackest calamities.

Figure 1.1 chronicles our economy's growth in the twentieth century. Even in the darkest days of the Great Depression, faith in the future has been rewarded. From 1929 to 1933, the nation's economic output declined by a cumulative 27 percent. Recovery followed, however, and our economy expanded by a cumulative 50 percent through the rest of the 1930s. From 1944 to 1947, when the economic infrastructure designed for the Second World War had to be adapted to the peace-time production of goods and services, the U.S. economy tumbled into a short but sharp period of contraction, with output shrinking by

FIGURE 1.1 Real Gross National Product, 2000 Dollars (1900–2009)



13 percent. But we then entered a season of growth, and within four years had recovered all of the lost output. In the next five decades, our economy evolved from a capital-intensive industrial economy, keenly sensitive to the rhythms of the business cycle, to an enormous service economy, less susceptible to extremes of boom and bust.

Long-term growth, at least in the United States, seems to have defined the course of economic events. Our real gross national product (GNP) has risen, on average, 3½ percent annually during the twentieth century, and 2.9 percent annually in the half-century following the end of World War II—what might be called the modern economic era. We will inevitably continue to experience seasons of decline, but we can be confident that they will be succeeded by the reappearance of the long-term pattern of growth.

Within the repeated cycle of colorful autumns, barren winters, verdant springs, and warm summers, the stock market has also traced a rising secular trajectory. In this chapter, I review the long-term returns and risks of the most important investment assets: stocks and bonds. The historical record contains lessons that form the basis of successful investment strategy. I hope to show that the historical data support one conclusion with unusual force: *To invest with success, you must be a long-term investor.* The stock and bond markets are unpredictable on a short-term basis,

but their long-term patterns of risk and return have proved durable enough to serve as the basis for a long-term strategy that leads to investment success. Although there is no guarantee that these patterns of the past, no matter how deeply ingrained in the historical record, will prevail in the future, a study of the past, accompanied by a self-administered dose of common sense, is the intelligent investor's best recourse.

The alternative to long-term investing is a short-term approach to the stock and bond markets. Countless examples from the financial media and the actual practices of professional and individual investors demonstrate that short-term investment strategies are inherently dangerous. In these current ebullient times, large numbers of investors are subordinating the principles of sound long-term investing to the frenetic short-term action that pervades our financial markets. Their counterproductive attempts to trade stocks and funds for short-term advantage, and to time the market (jumping aboard when the market is expected to rise, bailing out in anticipation of a decline), are resulting in the rapid turnover of investment portfolios that ought to be designed to seek long-term goals. We are not able to control our investment returns, but a long-term investment program, fortified by faith in the future, benefits from careful attention to those elements of investing that *are* within our power to control: risk, cost, and time.

Ten Years Later

The Winter of Our Discontent

Despite the woes encountered by the stock market over the past decade, our economy continued to grow solidly, at a real (inflation-adjusted) rate of 1.7 percent, exactly half the 3.4 percent growth rate of the modern economic era. Despite the onset of recession in 2008, the gross national product (GNP) actually rose by skinny 1.3 percent for the full year, although a decline (the first since 1991) of about 4 percent is projected for 2009.

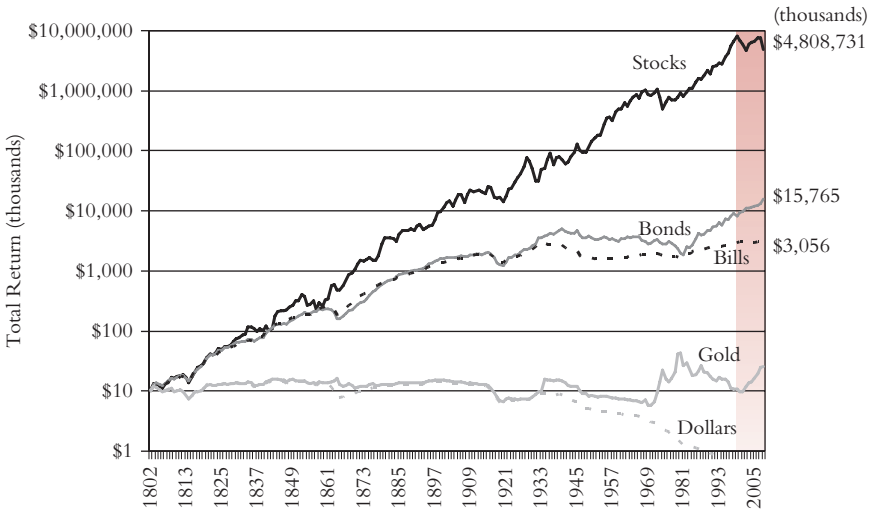
But after this winter of our discontent—from mid-2008, through the winter of 2009—we have enjoyed a spring and summer of recovery. For what it's worth, the stock market provides far more value relative to our economy than was the case a decade ago. Then, the aggregate market value of U.S. stocks was 1.8 times the nation's GNP, an all-time high; by mid-2009, with the value of the market at $10 trillion and the GNP at $14 trillion, the ratio has tumbled to 0.7 times, 60 percent below the earlier peak, and roughly the same ratio as the historical average.

On this basis, stock valuations appear realistic, and, quite likely, attractive *for the long term*. The disdain of Chance the gardener for our foolish tendency to be upset by the inevitable seasons of economic growth provides a timely reminder that we must rely not on our emotions but on our reason to give us the perspective that we need to understand how our productive and innovative U.S. economy grows over the long term.

How Has Our Garden Grown?

In reviewing the long-term history of stock and bond returns, I rely heavily on the work of Professor Jeremy J. Siegel, of the Wharton School of the University of Pennsylvania. This material is somewhat detailed, but it deserves careful study, for it provides a powerful case for long-term investing. As Chance might say, the garden represented by our financial markets offers many opportunities for investments to flower. Figure 1.2, based on a chart created by Professor Siegel for his fine book *Stocks for the Long Run*,[2] demonstrates that stocks have provided the highest rate of return among the major categories of financial assets: stocks, bonds, U.S. Treasury bills, and gold. This graph covers the entire history of the American stock market, from 1802 to 2008. An initial investment of $10,000 in stocks, from 1802 on, with all dividends reinvested (and ignoring taxes) would have resulted in a terminal value of $5.6 *billion* in real dollars (after adjustment for inflation). The same initial

FIGURE 1.2 Total Real Return on $10,000 Initial Investment (1802–2008)



investment in long-term U.S. government bonds, again reinvesting all interest income, would have yielded a little more than $8 *million*. Stocks grew at a real rate of 7 percent annually; bonds, at a rate of 3.5 percent. The significant advantage in annual return (compounded over the entire period) exhibited by stocks results in an extraordinary difference in terminal value, at least for an investor with a time horizon of 196 years—long-term investing approaching Methuselan proportions.*

Since the early days of our securities markets, returns on stocks have proved to be consistent in each of three extended periods studied by Professor Siegel. The first period was from 1802 to 1870 when, Siegel notes, "the U.S. made a transition from an agrarian to an industrialized economy."[3] In the second period, from 1871 to 1925, the United States became an important global economic and political power. And

*Methuselah, a biblical forebear of Noah, reputedly lived for 969 years—time enough, no doubt, to develop a unique perspective on the seasons and cycles of the economy and its financial markets.

the third period, from 1926 to the present, is generally regarded as the history of the modern stock market.*

These long-term data cover solely the financial markets of the United States. (Most studies show that stocks in other nations have provided lower returns and far higher risks.) In the early years, the data are based on fragmentary evidence of returns, subject to considerable bias through their focus on large corporations that survived, and derived from equity markets that were far different from today's in character and size (with, for example, no solid evidence of corporate earnings comparable to those reported under today's rigorous and transparent accounting standards). The returns reported for the early 1800s were based largely on bank stocks; for the post–Civil War era, on railroad stocks; and, as recently as the beginning of the twentieth century, on commodity stocks, including several major firms in the rope, twine, and leather businesses. Of the 12 stocks originally listed in the Dow Jones Industrial Average, General Electric alone has survived. But equity markets do have certain persistent characteristics. In each of the three periods examined by Professor Siegel, the U.S. stock market demonstrated a tendency to provide real (after-inflation) returns that surrounded a norm of about 7 percent, somewhat lower from 1871 to 1925, and somewhat higher in the modern era.

In the bond market, Professor Siegel examined the returns of long-term U.S. government bonds, which still serve as a benchmark for the performance of fixed-income investments. The long-term real return on bonds averaged 3.5 percent. But, in contrast with the remarkably stable long-term real returns provided by the stock market, bond market real returns were quite variable from period to period, averaging 4.8 percent during the first two periods, but falling to 2.0 percent during the third. Bond returns were especially volatile and unpredictable during the latter half of the twentieth century.

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*The data for the first period are somewhat anecdotal. For the second period, they are based on a 1938 study by the Cowles Commission, a respected independent study group. The third period covers the entire history of the highly respected Standard & Poor's indexes.

Ten Years Later

Total Returns, 1999–2009

At the end of 1997, the cumulative real return on that original investment of $10,000 in 1802 had reached $5.6 million. It would grow to a year-end high of $8.1 million in 1999, only to tumble to some $4.8 million in mid-2009, barely above its level at the close of 1996. As a result, the historical real return on stocks over the past two-plus centuries has tumbled from an annual rate of 7.0 percent through 1999 to 6.5 percent through mid-2009, doubtless a more reasonable expectation for the future, to say nothing of a warning to beware of extrapolating returns in the stock market and of relying on projections of past returns to tell us what the future holds. The stock market is not, and never has been, an actuarial table.

Neither has the bond market. While the real return on U.S. Treasury long-term bonds averaged 3.5 percent annually through 1997, it leaped to 6.2 percent in the following decade. (With rising interest rates in 2009, the annualized return fell to 4.5 percent through mid-year.) That increase was easily predictable, largely because the yield on long-term Treasurys was a healthy 5.25 percent in mid-1998. But as that yield compounded over the next decade-plus, and as rates moved much lower (raising bond prices), the value of that initial $10,000 investment in bonds rose more than 50 percent, from a real value of $8.1 million in 1997 to $13.5 million in mid-2009, a stark contrast with the steep drop in the cumulative value of the stock portfolio. This contrast provides yet one more testament, if such be needed, to the importance of balancing an investment program between stocks and bonds.

During the recent period, Treasury bills produced a real return of just under 1.0 percent, reflecting, consistent with their long past history, a hedge against inflation, but without the

extra premium required to produce a substantially positive real return. Gold is often sought as a refuge during times of financial travail. True to form, the price of the precious metal more than tripled in the 1999–2009 decade. But gold is largely a rank speculation, for its price is based solely on market expectations. Gold provides no internal rate of return. Unlike stocks and bonds, gold provides none of the intrinsic value that is created for stocks by earnings growth and dividend yields, and for bonds by interest payments. So in the two centuries plus shown in the chart, the initial $10,000 investment in gold grew to barely $26,000 in *real* terms. In fact, since the peak reached during its earlier boom in 1980, the price of gold has lost nearly 40 percent of its real value.

Stock Market Returns

Let's look first at the stock market. Table 1.1 contains two columns of stock market returns: nominal returns and real returns. The higher figures are nominal returns. Nominal returns are unadjusted for inflation. Real returns are corrected for inflation and are thus a more accurate

TABLE 1.1 Average Annual Stock Market Returns (1802–2008)

	Total Nominal Return %	Consumer Price Inflation	Total Real Return %
1802–1870	7.5%	−0.7%	8.3%
1871–1925	7.2	0.6	6.6
1926–1997	10.6	3.1	7.2
1802–1997	8.4	1.3	7.3
1982–1997	16.7	3.4	12.8
1998–2008	1.3	2.5	−1.2
1982–2008	10.1	3.1	6.8
1802–2008	8.0	1.4	6.5
1926–2008	9.3	3.0	6.1

reflection of the growth in an investor's purchasing power. Because the goal of investing is to accumulate real wealth—an enhanced ability to pay for goods and services—the ultimate focus of the long-term investor must be on real, not nominal, returns.

In the stock market's early years, there was little difference between nominal returns and real returns. In the first period (with its more dubious provenance), from 1802 to 1870, inflation appears to have been 0.1 percent annually, so the real return was only one-tenth of a percentage point lower than the nominal stock market return of 7.1 percent.

Inflation remained at an extremely low level through most of the nineteenth century. In the stock market's second major period, 1871 to 1925, returns were almost identical to those in the first period, although the rate of inflation accelerated sharply in the later years. Nominal stock market returns compounded at an annual rate of 7.2 percent, while the real rate of return was 6.6 percent. The difference was accounted for by annual inflation averaging 0.6 percent.

In the modern era, the rate of inflation has accelerated dramatically, averaging 3.1 percent annually, and the gap between real and nominal returns has widened accordingly. Since 1926, the stock market has provided a nominal annual return of 10.6 percent and an inflation-adjusted return of 7.2 percent. Since the Second World War, inflation has been especially high. From 1966 to 1981, for example, inflation surged to an annual rate of 7.0 percent. Nominal stock market returns of 6.6 percent annually were in fact negative real returns of –0.4 percent. More recently, inflation has subsided. From 1982 to 1997, during substantially all of the long-running bull market, real returns averaged 12.8 percent, approaching the highest return for any period of comparable length in U.S. history (14.2 percent in 1865–1880).

The high rate of inflation in our modern era is in large part the result of our nation's switch from a gold-based monetary system to a paper-based system. Under the gold standard, each dollar in circulation was convertible into a fixed amount of gold. Under our modern paper-based system, in which the dollar is backed by nothing more (or less) than the public's collective confidence in its value, there are far fewer constraints on the U.S. government's ability to create new dollars.

On occasion, rapid growth in the money supply has unleashed bouts of rapid price inflation. The effect on real long-term stock returns has nonetheless proved neutral. Even as nominal returns have risen in line with inflation, the rate of real return has remained steady at about 7.0 percent, much as it did through the nineteenth century.

Stock Market Risk

Although the stock market's real rate of return has apparently been remarkably steady over long periods, the rate has been subject to considerable variation from year to year. To measure the volatility of these returns, we use the standard deviation of annual returns. Table 1.2 presents the year-to-year volatility of returns in each of the three major periods of stock market history and since 1982. It also presents the all-time high and low annual returns in each period. From 1802 to 1870, returns varied from the 7 percent average by a standard deviation of 16.9 percent; in other words, real returns fell within a range of –9.9 percent to +23.9 percent about two-thirds of the time. From 1871 to 1925, the standard deviation of returns was 16.8 percent, almost unchanged from the first period. In the modern era, 1926 to the present, the standard deviation of returns has risen to 20.4 percent. As

TABLE 1.2 Annual Stock Market Volatility (1802–2008)

	Standard Deviation of Real Annual Return	Highest Annual Real Return %	Lowest Annual Real Return %
1802–1870	16.9%	66.6%	−29.9%
1871–1925	16.8	56.1	−31.2
1926–1997	20.4	57.1	−38.6
1802–1997	18.1	66.6	−38.6
1982–1997	13.2	31	−11.5
1998–2008	20.8	29.2	−37.3
1982–2008	17.4	32.5	−37.3
1802–2008	18.3	66.6	−38.6
1926–2008	20.5	57.1	–38.6

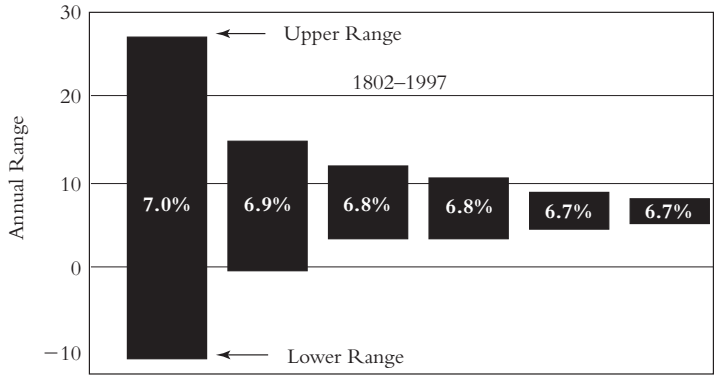
Table 1.2 indicates, annual stock returns can, of course, fall beyond the ranges described by their standard deviations. The stock market's all-time high, reached in 1862, was a real return of 66.6 percent. The all-time low, recorded in 1931, was a real return of –38.6 percent. Plainly, the tidy patterns that are evident in a sweeping history of the stock market's real returns tell little about the return an investor can expect to earn in any given year.

Nonetheless, these wide variations tend to decline sharply over time. Figure 1.3 shows that the one-year standard deviation of 18.1 percent *drops by more than half*, to 7.5 percent, over just five years. It is cut nearly in half *again,* to 4.4 percent, over 10 years. Though most of the sting of volatility has been eliminated after a decade, it continues to decline as the period lengthens, until it reaches just 1.0 percent over an investment lifetime of 50 years, with an upper range of return of 7.7 percent and a lower range of 5.7 percent. *The longer the time horizon, the less the variability in average annual returns.* Investors should not underestimate their time horizons. An investor who begins contributing to a retirement plan at age 25, and then, in retirement, draws on the accumulated capital until age 75 and beyond, would have an investment lifetime of 50 years or more. Our colleges, universities, and many other durable institutions have essentially unlimited time horizons.

Standard Deviation: What Is It?

Standard deviation is the accepted academic measure of variability; it expresses the range of an investment's returns over a given time period. For example, if an investment has earned an average annual return of 10 percent, and two-thirds of its annual returns have ranged between −5 percent and +25 percent—a range of 15 percentage points in either direction—one standard deviation is defined as 15. Two standard deviations would be the range that includes 95 percent of the annual returns.

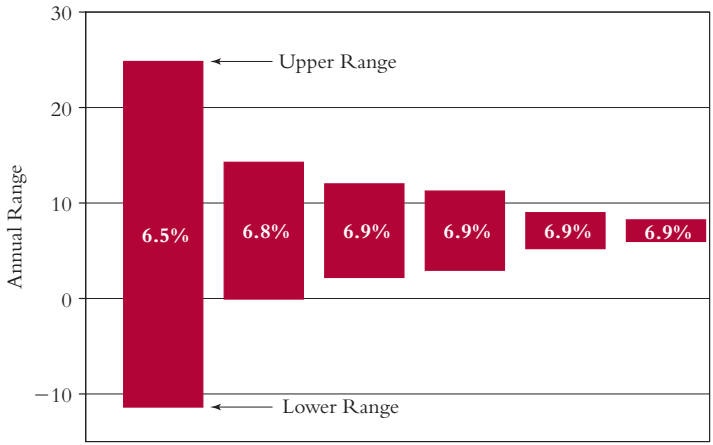
FIGURE 1.3 Range of Stock Market Annual Returns



	1 Year	5 Years	10 Years	15 Years	25 Years	50 Years
	Standard Deviation of Returns (%)					
Upper Range	25.1	14.4	11.2	10.3	8.7	7.7
Lower Range	−11.1	−0.6	2.4	3.4	4.7	5.7
Standard Deviation	18.1	7.5	4.4	3.3	2.0	1.0

TEN YEARS LATER

FIGURE 1.3 Range of Stock Market Annual Returns*



	1 Year	5 Years	10 Years	15 Years	25 Years	50 Years
	Standard Deviation of Returns (%)					
Upper Range	24.8	14.2	11.5	10.9	8.3	7.9
Lower Range	−11.7	−0.6	2.3	2.9	5.5	5.8
Standard Deviation	18.3	7.4	4.6	4.0	1.4	1.0

*The relationship between long-term standard deviations and wealth accumulation is discussed on page 417.

Ten Years Later

Stock Returns and Risks

During the period from 1982 to 1997, U.S. stocks provided one of the highest annual rates of return for any 15-year period in their entire history (16.7 percent nominal; 12.8 percent real). Only two years would pass before those gains began to melt away. Annualized returns since 1997 were barely positive (1.3 percent per year), and actually a negative –1.2 percent in real terms. Disappointing as such a period may be, that outcome now seems almost inevitable. Combining the early rise with the reversion that followed, returns for the full period from 1982 to 2009—first favoring the bulls, then favoring the bears—averaged 6.8 percent annually in real terms, almost precisely what the earlier historical eras provided.

Risks, in contrast, remained fairly steady during the past decade. Measured by standard deviation, annual stock volatility of 20.8 percent during the period from 1998 to 2009 was not remarkably different, albeit a tiny bit higher, than the prior figure of 20.5 percent in the modern era (1926 to date). The message is that stocks have always been volatile. There seems little reason to expect that such volatility will soon abate.

Bond Market Returns

In the bond market, perhaps surprisingly, historical returns are far less consistent than stock returns. Since 1802, long-term U.S. Treasury bonds have generated real returns of 3.5 percent per year. During that time, however, as shown in Table 1.3, returns have been subject to considerable variability. From 1802 to 1870, average annual real returns on long-term U.S. Treasury bonds amounted to 4.8 percent. From 1871 to 1925,

the average was 3.7 percent. But from 1926 forward, long-term Treasury bonds earned a real return of only 2.0 percent. In the shorter periods that make up the post–World War II era, real bond returns have been especially inconsistent. From 1966 to 1981, annual real returns were negative: –4.2 percent. The picture was then completely reversed from 1982 to 1997, when the bond market generated annual real returns of 9.6 percent, an exceptionally generous return, albeit one that pales somewhat in comparison to the stock market's powerful real return of 12.8 percent during the same period.

TABLE 1.3 Average Annual Bond Market Returns—Long-Term U.S. Treasury Bonds (1802–2008)

	Total Nominal Return %	Consumer Price Inflation	Total Real Return %
1802–1870	4.9%	0.1%	4.8%
1871–1925	4.3	0.6	3.7
1926–1997	5.2	3.1	2.0
1802–1997	4.8	1.3	3.5
1982–1997	13.4	3.4	9.6
1998–2008	8.8	2.5	6.2
1982–2008	11.6	3.1	8.3
1802–2008	5.1	1.4	3.6
1926–2008	5.7	3.0	2.6

A Caution about Long-Term Historical Returns

This discussion about long-term investing relies heavily on the *average* long-term returns achieved by stocks and bonds. But investors should be mindful that the use of averages tends to minimize the wide variations that have inevitably existed throughout history. As Stephen Jay Gould put it in *Full House: The Spread of Excellence from Plato to Darwin*: "Variation stands as the fundamental reality and calculated averages become

(Continued)

abstractions." Gould's quotation was cited in a recent report by economist-author Peter Bernstein,[4] who added this marvelous reminder:

> Long-run averages gleam like beacons, or perhaps like sirens, continually luring the investor to a long-run future that is expected to resemble these average returns, more or less. [The wide variations in returns that take place in the interim] tend to diminish over the long run, and so average returns define our expectations.
>
> But these variations are not a pool of inconsequential happenstances, nor are the individual episodes a set of accidents. Each episode is equally telling and significant in helping us understand how markets function. Each episode is also the consequence of the preceding episode—and you can define "episode" as everything from what happened yesterday to what happened last quarter to what happened seventy or a hundred years ago.

Bernstein then cites these blunt comments from an article in the *Journal of Portfolio Management* by Laurence Siegel, treasurer of the Ford Foundation:

> Risk is not short-term volatility, for the long-term investor can afford to ignore that. Rather, because there is no predestined rate of return, only an expected one that may not be realized, *the risk is the possibility that, in the long run, stock returns will be terrible.*

These comments provide a healthy reminder of the uncertainty of future returns in the financial markets. But they hardly vitiate my central message: Focusing on the long term is far superior to focusing on the short term. It is a lesson too few investors have learned.

Bond Market Risk

Hand in hand with their lower returns, bonds have generally come with less risk than stocks. Table 1.4 presents the standard deviation of

TABLE 1.4 Annual Bond Market Volatility—Long-Term Government Bonds (1802–2008)

	Standard Deviation of Real Annual Return	Highest Annual Real Return %	Lowest Annual Real Return %
1802–1870	7.2%	20.9%	−21.9%
1871–1925	6.4	17.8	−16.9
1926–1997	10.6	35.1	−15.5
1802–1997	8.8	35.1	−21.9
1982–1997	13.6	35.1	−21.9
1998–2008	8.9	19.4	−11.3
1982–2008	11.8	28.6	−11.3
1802–2008	8.8	35.1	−21.9
1926–2008	10.4	35.1	−15.5

bond returns and the annual high and low returns in the three major investment periods and in the long-term market since 1982. Since 1802, the average annual standard deviation of bond returns has been 8.8 percent—less than half the standard deviation for stocks. From 1802 to 1870, the standard deviation of bond returns was a modest 8.3 percent. In the second major period, 1871 to 1925, volatility declined slightly; the annual standard deviation was 6.4 percent. Since 1926, by contrast, the annual standard deviation of returns on bonds has risen to 10.6 percent. And from 1982 to 1997, it reached 13.6 percent, and in contrast to the historical pattern, surpassed the 13.2 percent standard deviation for returns on stocks during the same period. This departure from the historical pattern might be the result of rapid and dramatic changes in the inflation rate in the years that preceded and then punctuated this period.

Although changes in the rate of inflation from period to period have done little to alter the real rate of returns in the stock market, they have had a profound impact on the real returns provided by bonds. A bond's interest payment is fixed for the number of years specified until it matures and is repaid. In times of rapidly rising prices, the real value of this fixed interest payment declines sharply, diminishing the real return provided by the bond. If investors expect rapid inflation, they demand that the bond issuer pay a commensurately higher

rate of interest, compensating for the anticipated inflation and securing an acceptable rate of real return. But the historical record indicates that investors have often failed to anticipate rapid inflation. For example, they were willing to ignore inflation during the 35 years following the Second World War, only then demanding compensation for it in the early 1980s. But by 1982 it had been substantially conquered. ("Generals fighting the last war" comes to mind.) Real bond returns have varied widely. As a basis for future expectations, in any realistic time frame, past returns on bonds have been of little assistance in looking ahead.

That said, recent years have witnessed the introduction of new types of U.S. Treasury bonds that obviate two of the traditional risks of bonds. Zero coupon bonds guarantee a fixed rate of compound return over periods as long as 25 years or more, enabling investors to lock in a specific long-term return (typically, at the current interest rate for regular coupon-bearing bonds of the same maturity). Also available are inflation-hedge bonds, which offer a lower interest rate but guarantee full protection against the risk of increases in the consumer price index (CPI). In neither case, however, is there any guarantee that the nominal or real returns of these instruments will exceed the returns of the traditional bond structure—only that their returns will be more predictable.

Ten Years Later

Bond Returns and Risks

Soaring interest rates during the period from 1978 to 1981 set the stage for remarkable 13.4 percent annual returns for long-term bonds during the 1982–1997 period. But as rates stabilized and then retreated, bond returns have averaged a lower, but still historically exceptional, average of 8.8 percent since then. This impressive increase succeeded in raising the long-term historical rate of returns on bonds from 4.8 percent through 1997 to 5.1 percent through 2008. Because of higher-than-average

inflation in the recent period, the real returns remained virtually identical, at 3.5 percent and 3.6 percent, respectively.

Since 1997, real returns on long-term U.S. Treasury bonds have averaged 6.2 percent, well below the historic real return of 9.6 percent during the 1982–1997 period, an era that began with interest rates close to all-time peaks. Calculating returns from 1982 through mid-2009, the average real return remained a healthy 8.3 percent. But with long-term Treasurys rates closing this period with an interest rate (yield) of about 4.5 percent, it is virtually impossible that this historic return will be repeated. Far more likely, future returns on long-term Treasurys will fall in the range of 4 percent to 5 percent.

The volatility of bond returns remained at about half the level of stock volatility over the past two centuries. The historical standard deviation of bonds was 8.8 percent, only about one-half of the 18.3 percent volatility of stocks. However, because of their remarkable volatility during the early 1980s and in 2008–2009, the 11.8 percent standard deviation of bonds for the period was far closer to the comparable figure of 17.4 percent for stocks.

Planting Seeds for Growth

The long-term risks and returns of stocks and bonds suggest the outlines of a commonsense investment strategy for the long-term investor. First, the long-term investor should make a significant commitment to stocks. Since 1802, and in each of the extended periods examined by Professor Siegel, stocks have earned higher returns than bonds, providing the best long-term opportunity for growth, as well as for protection against the threat of inflation. The data make clear that, if risk is the chance of failing to earn a real return over the long term, bonds have carried a higher risk than stocks. If you have faith that our economic garden is basically healthy and fertile, the best way to reap long-term rewards is to plant seeds with prospects for growth, as investing

in common stocks clearly allows. But you must also be well provisioned for the onset of unexpectedly cold winters, and that is where bonds play a vital role.

During the long sweep of U.S. history since 1802, the variability of stock returns has been greater than that of bonds. In the short run, stocks are riskier than bonds. Even in the longer run, stocks can—and do—underperform bonds. Indeed, in the 187 rolling 10-year periods since the establishment of our securities markets, bonds have outperformed stocks in 38 periods—one out of every five. In still longer holding periods, however, the instances of bond market outperformance shrink to a statistical anomaly. In the 172 rolling 25-year periods since 1802, bonds have outperformed stocks in eight periods—only one out of every 21. As insurance against the possibility of short-term, or even extended, weakness in stocks, then, long-term investors should also include bonds in their portfolios. The result is a balanced investing program, a strategy discussed at length in Chapter 3. Select a sensible balance of stocks and bonds, hold that portfolio through the market's inevitable seasons of growth and decline, and you will be well positioned both to accumulate profit *and* to withstand adversity.

The Financial Markets Are Not for Sale

The market returns presented here, however useful as a benchmark for determining a long-term investment strategy, have an important drawback. These returns reflect the entirely *theoretical* possibility of cost-free investing. As a group, investors earn less because the market return is inevitably reduced by the costs of investing. In the mutual fund industry, the range of investment costs is extremely wide. In an aggressively managed small-cap equity fund, total asset-related charges, including operating expenses and transaction costs, might be as high as 3 percent. The lowest range is set by a market index fund, a passively managed fund that simply buys and holds the stocks in a particular index. Because it entails no advisory fees or transaction costs and only minimal operating expenses, costs can be held to 0.20 percent of assets, or even less. On average, a common stock mutual fund, managed by a professional adviser who buys and sells securities in an effort to

outperform the market, incurs annual operating expenses equal to about 1.5 percent of assets (known as the expense ratio). With portfolio transaction costs conservatively estimated at 0.5 percent, total costs reduce gross returns by at least two percentage points each year.

When estimating expected levels of future returns, the long-term investor must be aware of the portion of investment return that will be consumed by these expenses. Costs lop the same number of percentage points off both nominal and real returns, but, given persistent inflation, it nearly always consumes a proportionally larger share of real returns. Here is one example, assuming a nominal annual return of 10 percent on stocks. An equity mutual fund incurring annual expenses at the industry average would lop off some two percentage points—fully *one-fifth* of the market's annual return. Now let's say that inflation is 3 percent; then the market's real return is 7 percent, and costs would consume nearly *one-third* of the market's reward. And taxes must be paid—sooner or later—by the investor. Fair or not, taxes are assessed, not on real returns, but on the (higher) nominal returns. If taxes on fund income and capital gains distributions are assumed to reduce pretax returns by, say, another 2 percent to 5 percent (a rather modest assumption), that 2 percent all-in cost of a mutual fund could consume fully *four-tenths* of the market's net real return after taxes. To state the obvious, the long-term investor who pays *least* has the greatest opportunity to earn *most* of the real return provided by the stock market.

The Pie Theory

Let's now consider the real-world effect of costs. Assume that the stock market as a whole provides the nominal rate of return of about 11 percent enjoyed by investors during the modern era of the stock market that began in 1926. (This figure is unadjusted for inflation and includes the truly extraordinary 17 percent annual return from 1982 to 1997.) If you visualize that return as a flat circular surface—a pie, for example—11 percent is, by definition, the entire pie that market participants in the aggregate can divide among themselves. If we aggregate the returns of all investors who do better, those returns *must* be offset by the aggregate returns earned by all of those who do worse, and by precisely the same amount. That is the *gross* pie, if you will, before costs.

Thus, the successful investors' gain—say, a return of 2 percent—will be offset by the returns of their unsuccessful colleagues who fall short by the same 2 percent. One group earns 13 percent; the other earns 9 percent.

Now assume that, for all participants in the market, the costs of investing are 2 percent. The gross pie of 11 percent has shrunk to a net pie of 9 percent to be divided among market participants. It truly is as simple as that. Our winners earn a net return of 11 percent (*the same as the gross return of the market*), and our losers earn a net return of 7 percent (*a 4 percent shortfall*). The fact that our winners, after expenses, merely match the market and our losers lose by four percentage points suggests why garnering market returns is so difficult. The odds against victory are long.

The pie analogy is hardly revolutionary. It entails nothing more than simple second-grade arithmetic:

Gross market return − Cost = Net market return

This syllogism then becomes obvious:

1. All investors own the entire stock market, so both active investors (as a group) and passive investors—holding all stocks at all times—must match the gross return of the stock market.
2. The management fees and transaction costs incurred by active investors in the aggregate are substantially higher than those incurred by passive investors.
3. Therefore, because active and passive investments together must, by definition, earn equal gross returns, passive investors must earn the higher net return. QED.

If there was ever an elementary, self-evident certainty in a financial world permeated by uncertainties, surely this is it. It establishes the principle underlying the growing use of passive investment techniques—most notably, the unmanaged index fund, of which I'll have much more to say during the course of this book. So, while we should applaud the extensive equations and elegant proofs of efficient market theory developed by such Nobel Prize–winning economists and finance specialists as Paul Samuelson, James Tobin, Franco Modigliani, William

Sharpe, Harry Markowitz, and Merton Miller, we should recognize that one need not drive to the farthest reaches of the efficient frontier—the market return that provides the optimal utility relative to the risk incurred—to find simple solutions to complex problems. And as you'll learn in Chapter 4, in the serious game of accumulating financial assets, simplicity trumps complexity.

Practice Departs from Principle

The odds against beating the market, so clearly established by the pie theory, have some rather extreme implications. If the long-term investing ideal is a sensible balance in a diversified portfolio of stocks and bonds, held through the market's changing seasons, and with costs kept to a minimum, then that principle should be honored in practice by mutual fund managers and mutual fund investors alike. But, in both groups, it is honored more in the breach than in the observance. The challenge of the chase for market-beating returns seems to have obscured the simple lessons we should have learned. To paraphrase the late Charles Dudley Warner, editor of the *Hartford Courant*, on the subject of weather: Everybody talks about long-term investing, but nobody does anything about it.

Investors, professional and individual, are not ignorant of the lessons of history; rather, they are unwilling to heed them. Too many portfolio managers, investment advisers, and securities brokers, and too many mavens of the financial press and television (perhaps for obvious reasons) thrive on short-term forecasts, expected market trends, and hot (and, with less frequency, cold) stocks. Thus, today's overheated investment climate seems to demand urgent action, as in, "Act now, before it is too late."

To demonstrate the deficiencies of a short-term approach to long-term investment, I will examine two pervasive short-term strategies and show how mutual fund investors have followed them—to their detriment. The first is market timing—the attempt to shift assets from stocks to bonds or cash in hopes of escaping a stock market dip, then to shift the assets from bonds or cash back to stocks in an attempt to ride the next stock market wave. For most practitioners, market timing is apt to bring the opposite result: they are in the market for the dips, but out of the market for the rallies.

The idea that a bell rings to signal when investors should get into or out of the stock market is simply not credible. After nearly 50 years in this business, I do not know of anybody who has done it successfully and consistently. I don't even know anybody who *knows* anybody who has done it successfully and consistently. Yet market timing appears to be increasingly embraced by mutual fund investors and the professional managers of fund portfolios alike.

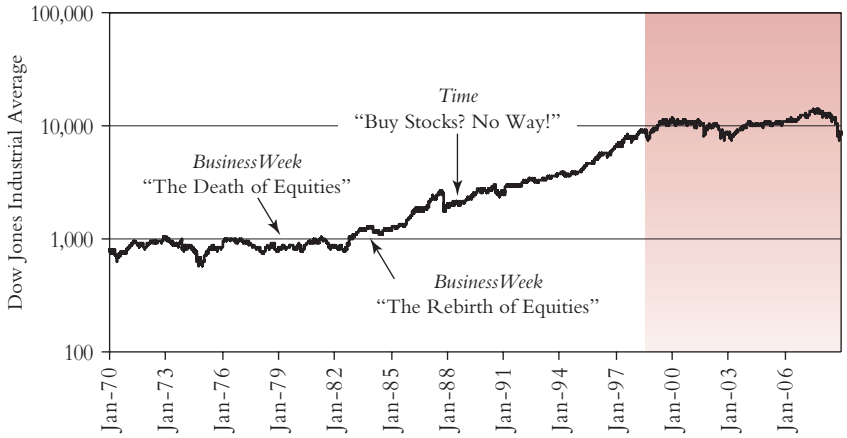
The second short-term strategy is the rapid turnover of long-term investment portfolios. It too is evident in the actions of both mutual fund investors and fund managers. It is a costly practice, predicated, much like market timing, on the belief that investors can invest in a particularly attractive stock or mutual fund, watch it grow, and then eject the investment from their portfolio as it crests. As with market timing, the record provides no evidence that rapid turnover enhances the returns earned by fund investors or by fund managers.

Market Timing in the Press—"The Death of Equities"

The financial media provide a good place to begin our review of the eternal search for market-beating returns, whether through market timing or other means. The media reflect the actions of the financial markets, which are determined by the investment decisions made by all investors. The media also magnify the impact of market actions by highlighting—and, in some respects, sensationalizing—them.

Consider two covers from *BusinessWeek,* one of our nation's most respected business periodicals. On August 13, 1979, *BusinessWeek* ran a cover story called "The Death of Equities." As Figure 1.4 reveals, the story's timing could hardly have been more unfortunate. The Dow Jones Industrial Average of stock prices was at 840 when the article was written. It rose to 960 by the end of 1980. In the next two years, the index declined. It scraped 800 in July 1982, but then rebounded to 1,200 by May 1983. *BusinessWeek* then ran another cover story, called "The Rebirth of Equities," on May 9, 1983, *after* the near 50 percent market rise that had ensued since the August 1979 article. After the publication of the 1983 article, I said to one of my colleagues, "Watch out, the fun is over." And the equity market fun *was* sidetracked, if only for a while. *BusinessWeek* said "Sell" when the Dow Jones Industrial

FIGURE 1.4 Investing with the Press—*BusinessWeek* and *Time*



Average was at 840, and "Buy" after it had climbed to 1,200. Yet two years after the buy recommendation, in May 1985, the Dow still languished at about 1,200.

It may be unfair to single out these *BusinessWeek* classics. *Time* gave us an equally poignant example of the hazards of taking strong and unequivocal stands on the future course of the stock market. In its September 26, 1988, issue, *Time* ran a cover story titled "Buy Stocks? No Way!" The cover pictured an enormous bear. The article included these pearls of wisdom about the stock market: "It's a dangerous game . . . it's a vote of confidence that things are getting worse . . . the market has become a crapshoot . . . the small investor has become an endangered species . . . the stock market is one of the sleaziest enterprises in the world." When those words were published, the Dow Jones Industrial Average was at the 2,000 level, down from the peak of 2,700 reached just before the market crash of October 1987. Since then, the Dow has topped 9,000—greater than a fourfold increase. Investors who acted on *Time*'s conclusion would have sat mournfully on the sidelines through one of history's most powerful bull markets.

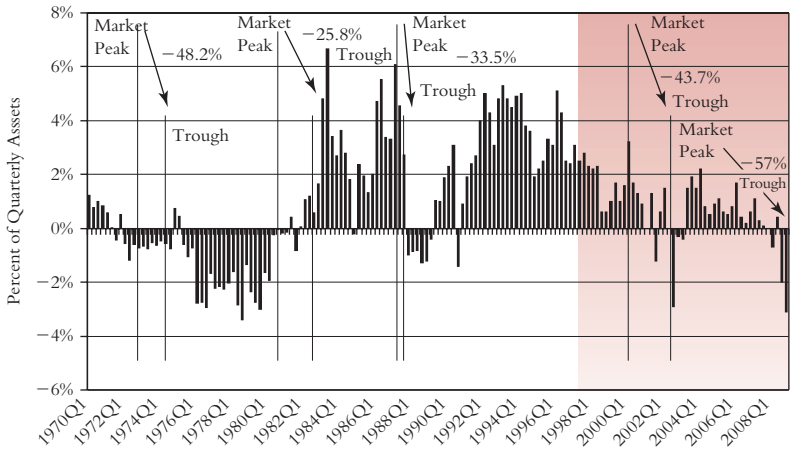
I intend neither to slam *BusinessWeek* and *Time* nor to offer them up as the perfect contrary indicators—those wonderful sources whose advice is so consistently wrong that we can count on profits simply by

doing the opposite. My point is: The market is simply unpredictable on any short-term month-to-month or even year-to-year basis. We should not expect it to be predictable, nor should we base our investment decisions on impulses inspired by the conventional wisdom of the day. Whether they come in large headlines in respected publications or arise from our own daily hopes and fears, these calls to action generally have a short-term focus that muddles our view of the long pull.

Market Timing by Mutual Fund Investors

Unfortunately, the available data suggest that, rather than ignoring the impulses engendered by the press or by emotional responses to market swings, the individual mutual fund shareholder responds to them with alacrity and follows the crowd. Mutual fund investing has proved to be extremely market sensitive, as fund shareholders overreact to fluctuations in stock prices. Consider Figure 1.5, with its jagged peaks and valleys charting cash flows into and out of equity mutual funds as a percentage of fund assets. Following the −48 percent market decline in 1973–1974, investors made withdrawals from their holdings of equity mutual funds during 24 consecutive quarters, from the second quarter of 1975 through the first quarter of 1981. The cumulative total withdrawn was $14 billion, fully 44 percent of the value of the initial holdings.

FIGURE 1.5 Equity Fund Cash Flows (1970–2008)



Then, just before the market began its long-running bull charge in the third quarter of 1982, fund investors finally turned positive again. Fund cash flow totaled $80 billion (122 percent of the initial fund assets) through the third quarter of 1987.

Investors made particularly heavy investments in funds during the first nine months of 1987 ($28 billion of the $80 billion cumulative inflow). For the most part, they bought at what proved to be inflated prices. Then came the October 1987 stock market crash, and out went the investors' dollars. During each quarter over the next year and a half, soaring equity fund redemptions exceeded declining new share purchases, and nearly 5 percent of equity fund assets were liquidated. By then, stocks were at more realistic valuations. Sadly, these exiting investors had given up their market participation just before the market rebound that was soon to come.

The stock market crash of October 1987 caused many otherwise rational investors to abandon the stock market. But as soon as the bull market resumed its rampage, these same investors changed their course again. Cash flows into equity funds resumed in full force and remained positive in each quarter through mid-1998. What began as a tiny trickle became a roaring river. Net purchases of $1 billion in 1983, the first full year of the bull market, multiplied more than 200 times and reached $219 billion in 1997. If massive mutual fund inflows and outflows from investors remain contrary indicators, the industry's recent cash inflows may not be good news. But whatever the future may hold, these figures are one more manifestation of one of the great paradoxes of the stock market: When stock prices are high, investors want to jump on the bandwagon; when stocks are on the bargain counter, it is difficult to give them away.

Ten Years Later

Market Timing by Mutual Fund Investors

Mutual fund investors continued their consistently counterproductive investment patterns during the 1998–2009 period.

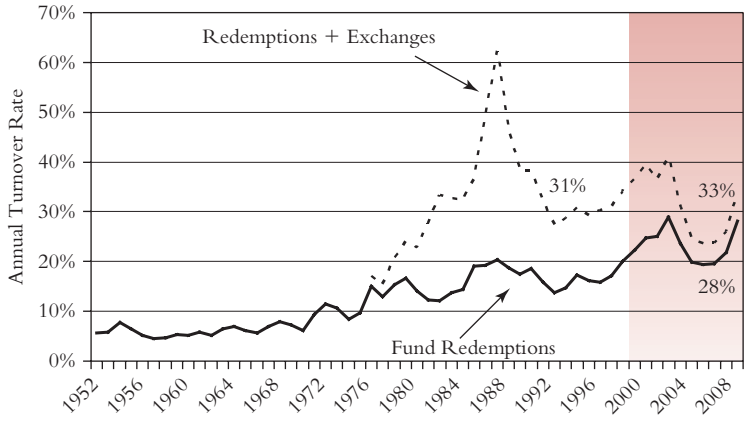
(Continued)

Even as they added $650 billion to their equity holdings during the powerful surge in the bull market that marked the first part of this period through mid-2000, they withdrew $92 billion as stocks approached and recovered from their 2002 lows, only to pour in another $725 billion as the market seemed to recover through the autumn of 2007. Then, with the sharpest decline in stock prices since 1929–1933, the withdrawals began again, with $228 billion pulled out of equity funds through the low point in the market in the spring of 2009. Will investors never learn?

Fund Shareholders Become Short-Term Investors . . .

It is not only in their love–hate relationship with equity funds that investors reflect their short-term orientation. They have come to adopt another short-term strategy: rapid turnover of their equity fund holdings. The tendency of investors to follow high-turnover policies in their own mutual fund portfolios has reached staggering proportions. As Figure 1.6 shows, during the 1960s and most of the 1970s, annual turnover rates ran in the 8 percent range, suggesting a 12½-year holding period by fund owners. (The estimated holding period is simply the inverse of the turnover ratio.) Currently, turnover of fund shareholdings is running at an annual rate of 31 percent, suggesting that the typical

FIGURE 1.6 Annual Investor Turnover of Equity Fund Shares (1952–2008)



investors in an equity fund hold their shares for barely three years. (This 31 percent rate includes the rate of redemptions of equity funds, averaging about 17 percent of assets per year, plus exchanges out of equity funds—either into other equity funds or into bond or money market funds—of another 14 percent.) This 75 percent reduction in the holding period for mutual funds is counterproductive to a fault, for a holding period of that brevity impinges on the implementation of an intelligent long-term investment strategy.

Of particular note in the chart is the violent upward thrust in share turnover in 1987, not coincidentally the time of the last major market decline. Then, the turnover rate soared to 62 percent (a holding period of only 1.6 years!). It makes one wonder what may be in store for mutual funds if shareholders follow a similar redemption pattern the next time the market turns sharply lower.

Ten Years Later

Fund Shareholders Remain Short-Term Investors

The remarkable surge of short-term holding periods for mutual fund shareholders continued through 2002, when turnover reached 41 percent per year (an estimated average holding period of just two and a half years for the average shareholder). Then, the mutual fund market-timing scandals came to light, with many of the large fund groups allowing privileged investors to earn near-certain profits by trading fund shares when U.S. markets closed, at prices established in European and (especially) Japanese markets that had closed hours before.

These opportunistic investors, often hedge funds, earned their ill-gotten gains at the direct expense of the funds' long-term holders. When the shady dealings between mutual fund

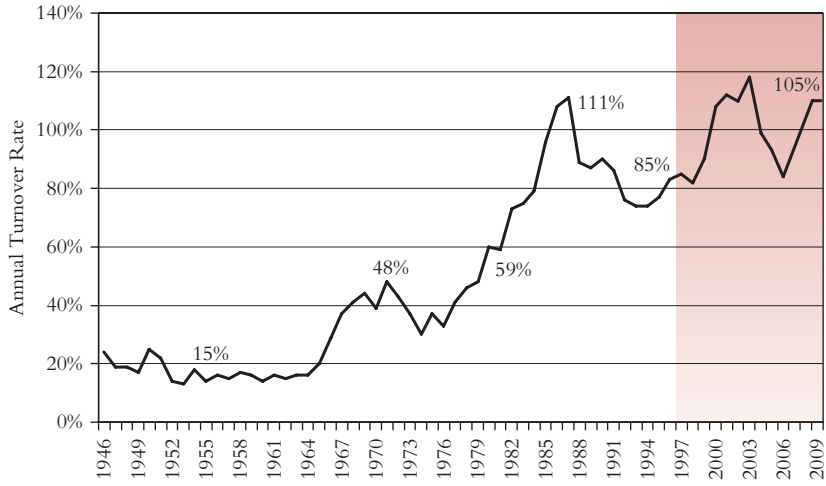
(Continued)

marketers and hedge fund managers were revealed, those illicit practices were abandoned. The hue and cry caused turnover to tumble by almost half, to 24 percent during the years 2004 through 2007. However, during the stock market crash of 2007 to 2009, the redemption rate shot up to 36 percent. This frenzied activity belies the claim that mutual funds generally are bought and held for the long term. Whether legal or illegal, such active trading in fund shares is an industry scandal. It also flies in the face of intelligent investing.

. . . Following the Example of Fund Managers

No doubt fund investors came by this short-term philosophy honestly—they learned it from the portfolio managers who run the funds they own. From the 1940s to the mid-1960s, annual portfolio turnover of the typical general equity fund averaged a modest 17 percent. In 1997, average turnover of U.S. equity funds stood at 85 percent, an amazing fivefold increase. Portfolio managers, on average, were holding the stocks in their portfolios for only slightly longer than one year! It was odd behavior for investment advisers, who are entrusted with a fiduciary responsibility to manage clients' assets prudently. Instead, they were shuffling through their portfolios like short-term speculators. During the past few decades, abetted by the proliferation of sophisticated communications technologies, portfolio managers of other people's money have adopted a new method to try to beat the market: rapid-fire trading, a practice that can burden investors with enormous portfolio transaction costs, as well as staggering tax costs. As Columbia Law School Professor Louis Lowenstein expressed it in a 1998 article, mutual fund managers "exhibit a persistent emphasis on momentary stock prices. The subtleties and nuances of a particular business utterly escape them." Despite the example set by some of what I describe as the "best practice" mutual funds (those that follow relatively steady low-turnover policies), the mutual fund industry in general pursues a far less productive path. The astonishing rise in fund portfolio turnover is charted in Figure 1.7.

FIGURE 1.7 Mutual Fund Portfolio Turnover (1946–2009)



Fund managers also ignore the lesson of long-term investing set by Warren Buffett, without doubt America's most successful investment manager. The turnover in his huge portfolio (limited to a relative handful of stocks) is not only low, it is virtually nonexistent. Here is his philosophy, as described in the 1996 annual report of Berkshire Hathaway, the investment holding company he controls:

> Inactivity strikes us as intelligent behavior. Neither we nor most business managers would dream of feverishly trading highly-profitable subsidiaries because a small move in the Federal Reserve's discount rate was predicted or because some Wall Street pundit had reversed his view on the market. Why, then, should we behave differently with our minority positions in wonderful businesses?

One might well ask: Why should any fiduciary behave differently from the Buffett principles? Mr. Buffett describes his extraordinarily productive investment approach as keeping "most of our major holdings regardless of how they are priced relative to (current) intrinsic business value . . . a 'til death do us part attitude. . . . We are searching for

operations that we believe are virtually certain to possess enormous strengths *ten or twenty years from now* [italics added]. As investors, our reaction to a fermenting industry is much like our attitude toward space exploration. We applaud the endeavor but prefer to skip the ride."

Mr. Buffett doesn't cotton to the high turnover that characterizes mutual funds. "Investment managers are even more kinetic: their behavior makes whirling dervishes appear sedated by comparison. Indeed the term 'institutional investor' is becoming one of those self-contradictions called an oxymoron, comparable to 'jumbo shrimp,' 'lady mud-wrestler,' and 'inexpensive lawyer.'"

Given this situation as it exists in the modern mutual fund industry, Mr. Buffett quickly comes to the correct conclusion. "An investor who does not understand the economics of specific companies but wishes to be a long-term owner of American industry," he says, should "periodically invest in an index fund." In this way, "the know-nothing investor can actually outperform most investment professionals. Paradoxically, when 'dumb' money acknowledges its limitations, it ceases to be dumb." Money invested for the long term, like the proverbial plodding tortoise, wins the race over speculative money, analogous to the fits and starts of the hare. The mutual fund industry is ignoring this truism.

Let's consider whether the fund industry's rapid turnover might possibly be the side effect of well-executed plans for earning superior investment returns. The obvious answer is: *For the industry as a whole*, it cannot be. Now controlling one-third of all stocks, fund managers are largely trading, not with other investors, but with one another. Thus, each trade balances out for fund shareholders as a group. It is a zero-sum game. But, importantly, money is left on the table for the dealers executing the trades, meaning that the activity becomes a negative-sum game. The evidence confirms this conclusion. A recent study by Morningstar found that few managers were able to improve returns significantly through portfolio turnover, but that on balance, the tiny increases in return that turnover may have engendered were gained only by buying riskier stocks. The study hardly serves as an encouraging defense of the industry's high-turnover policies.

Further, my own (admittedly anecdotal) studies over the years suggest that the Morningstar results may be too optimistic. The evidence that I have seen shows that the overwhelming majority of funds would earn higher returns each year if they simply held their

portfolios static at the beginning of the year and took no action whatsoever during the ensuing 12 months. Whatever the cause, professional managers have fallen further behind the market averages with today's high-turnover practices than with the low-turnover practices that were long an industry hallmark. I suggest that the high costs imposed by their manic trading are in part responsible for this growing gap.

Short-Term Speculation Displaces Long-Term Investment

When I wrote my Princeton senior thesis on mutual funds in 1951, I expressed what I fear was callow optimism about the role of mutual fund portfolio transactions in the financial markets. I concluded that the professional analytical capability of fund managers, along with their focus on investment valuation rather than on forecasting swings in a stock's price, would bring to the marketplace "a demand for securities that is steady, sophisticated, enlightened, and analytic, a demand based essentially on the performance of a corporation rather than the public's appraisal of the share prices."

In taking this approach, I was responding to John Maynard Keynes's argument that because the powerful role of speculation in the markets was based on increasing ownership of stocks "by persons who have no special knowledge of their investments . . . and the conventional valuation of stocks based on the mass psychology of a large number of ignorant individuals," professional investors and experts in the securities business would be unable to offset the mass opinion, so they would try to foresee changes in the public valuation.

I based my contrary opinion on the expectation that mutual funds and other financial institutions would grow in importance. I argued that they would rely on their specialized knowledge of investments and value stocks accurately, based on the prospective long-term merits of the stocks, not on the psychology of ignorant individuals (or, in Lord Keynes's words,

(Continued)

not "in discovering what average opinion expects average opinion [of a share's worth] to be"). With fund portfolio turnover then running well below 20 percent per year, I concluded that continued mutual fund growth "will mean that enterprise in investment will cease to be (using Keynes's words) 'a mere bubble in a whirlpool of speculation.'"

Sadly, as the figures on fund portfolio turnover show, my youthful optimism was misplaced. Industry practice today is as close to short-term speculation—and as far from long-term investment—as the law allows.

In this exceedingly creative industry, we will no doubt witness the development of countless new short-term strategies, each with an alluring but ultimately vacant promise that hyperactive short-term management of a long-term investment portfolio can generate better results than a sensible buy-and-hold approach. Market timing has thus far been a singular failure, and the rapid turnover of investment portfolios has been no more effective. As costly and tax-inefficient turnover accelerates—for funds and fund investors alike—this practice seems destined to become ever more damaging.

Ten Years Later

Fund Portfolio Turnover Remains High

Despite the obvious counterproductivity of high portfolio turnover *for mutual funds as a group*, record levels of trading activity continued during the past decade. Indeed, in 2009, the portfolio turnover of the average equity fund was running at an annualized rate of 105 percent, even larger than the 85 percent level of 1997.

The dimensions of that turnover are astonishing. With average assets of some $3.5 trillion for the year ended in mid-2009, equity fund managers bought some $2.9 trillion of stocks, and sold $3 trillion (partly to cover net liquidations of fund shares), a total transaction volume of $5.9 trillion that was not far from *double* the market value of those portfolios.

A simple glance at Figure 1.7 makes this sad point clear: Annual portfolio turnover has risen from a reasonable plateau of less than 20 percent during the 1946–1965 era to a new (and indefensible) plateau in the 100 percent range during the past quarter-century. In total, the industry has abandoned the wisdom of long-term investing in favor of the folly of short-term speculation.

Understanding the Economics of Investing

In my view, market timing and rapid turnover—both by and for mutual fund investors—betray both a lack of understanding of the *economics* of investing and an infatuation with the *process* of investing. As I shall make clear in Chapter 2, the source of long-term financial market returns is easily explained: for the stock market, corporate earnings and dividends; for the bond market, interest payments. Market returns, however, are calculated *before* the deduction of the costs of investing, and are most assuredly *not* based on speculation and rapid trading, which do nothing but shift returns from one investor to another. For the long-term investor, returns have everything to do with the underlying economics of corporate America and very little to do with the mechanical process of buying and selling pieces of paper. The art of investing in mutual funds, I would argue, rests on simplicity and common sense.

If individual stocks derive their values from the businesses that issue them, then the broad stock market obviously represents not a mere collection of paper stock certificates but the tangible and intangible net assets of American business in the aggregate. Before taking costs into account, investors will inevitably earn long-term returns that approximate the earnings and dividends produced by corporate America.

Rapid turnover can ultimately produce no value for investors as a group, for it does nothing to increase the level of corporate earnings and dividends. Nor can market timing have any effect on the intrinsic value of corporate America. The ideal for the long-term investor remains a sensible balance of stocks and bonds held through the market's seasons of growth and decline.

Simple Principles for Long-Term Success

Although most investors have yet to embrace the ideal of long-term investing, it is surprisingly easy to achieve. In the real world of mutual funds, intelligent investors must pay attention to the elements of long-term investing that are within their power to control. No matter how difficult or how much easier said than done, they must focus not on the market's short-term direction, nor on finding the next hot fund, but on intelligent fund selection. The key to fund selection is to focus not on future return—which the investor cannot control—but on risk, cost, and time—all of which the investor *can* control.

Just as the garden's fledgling shoots develop slowly and blossom over the course of a season, with their roots strengthening over years, investment success takes time. Give yourself all the time you can. Begin to invest in your 20s, even if you invest only a small amount. Nourished by the miracle of compound interest, your portfolio should flourish with the market's passing cycles. Over a 10-year period, for example, if market returns average a nominal 10 percent annually, an initial investment of $10,000 will grow to almost $26,000, more than two and a half times the initial investment. (Assuming a real return of 7 percent, the terminal value would represent a near doubling of your initial purchasing power.) In 50 years, assuming the same 10 percent return, $10,000 would grow to almost $1.2 million, or 120 times the initial investment.

To exploit the full power of compounding in real markets, pay particular attention to the negative implications of cost—the cost of investment advice, portfolio management and administration, buying and selling investments, and taxes. By the end of the period over which you accumulate your retirement nest egg, the returns earned in individual

diversified portfolios are almost sure to lag behind those of the markets in which they invest in direct proportion to the expenses and taxes they incur. Superficially small differences in annual returns, extended over long periods of time, will make a dramatic difference in how much capital you finally accumulate. Give your portfolio plenty of time to benefit from the magic of compounding, and minimize the costs you incur. Never forget that costs, like weeds, impede the garden's growth.

These simple principles are the basis of a long-term investment strategy that should reward investors' faith in the promise of investing. Most mutual fund investors who deviate from the long-term investing ideal are rewarded only with dashed expectations. The relentless pursuit of unrealistic performance, practiced through costly short-term strategies, distracts them from one of the most important secrets of investment success: *simplicity.* As they complicate the process, they increase the likelihood of stumbling down an ill-lit path to disappointment. Follow a simple plan, and let the cycles of the market take their course. *The secret of investing is, finally, that there is no secret.*

So I return to the wisdom of Chance the gardener. We have had a long spring and summer—the longest sustained equity bull market in history. But "there are also fall and winter." Don't be surprised when the season changes, for change it will. Indeed, that time may be now in prospect. In the long run, however, your investments will survive and prosper if you rely on a few simple rules:

- **Invest you *must*.** The biggest risk is the long-term risk of not putting your money to work at a generous return, not the short-term—but nonetheless real—risk of price volatility.
- **Time is your friend.** Give yourself all the time you can. Begin to invest in your 20s, even if it's only a small amount, and never stop. Even modest investments in tough times will help you sustain the pace and will become a habit. Compound interest is a miracle.
- **Impulse is your enemy.** Eliminate emotion from your investment program. Have rational expectations about future returns, and avoid changing those expectations as the seasons change. Cold, dark winters will give way to bright, bountiful springs.

- **Basic arithmetic works.** Keep your investment expenses under control. Your net return is simply the gross return of your investment portfolio, less the costs you incur (sales commissions, advisory fees, transaction costs). Low costs make your task easier.
- **Stick to simplicity.** Don't complicate the process. Basic investing is simple—a sensible asset allocation to stocks, bonds, and cash reserves; a selection of middle-of-the-road funds that emphasize high-grade securities; a careful balancing of risk, return, and (lest we forget) cost.
- **Stay the course.** No matter what happens, stick to your program. I've said "Stay the course" a thousand times, and I meant it every time. It is the most important single piece of investment wisdom I can give to you.

Let the brief and uncertain years roll by, and face the future with faith. Perhaps a future winter will be longer and colder than usual, or a summer will be drier and hotter. In the long run, however, our economy and our financial markets are stable and rational. Don't let short-run fluctuations, market psychology, false hope, fear, and greed get in the way of good investment judgment. Success will be yours if you remember Chance's lesson:

> I know the garden very well. I have worked in it all of my life. . . . Everything in it will grow strong in due course. And there is plenty of room in it for new trees and new flowers of all kinds. If you love your garden, you don't mind working in it, and waiting. Then in the proper season you will surely see it flourish.[5]

Ten Years Later

Change the Rules of Investing?

Never! Nothing that has happened in the past decade—not in the stock market nor in the bond market, nor in the behavior

of fund shareholders or money managers—persuades me to change a single one of those six rules of intelligent investing. Yes, the winter from which we have emerged was longer and colder than usual. But commonsense investing, along with Chance's appraisal of the eternal seasons and his growing garden, reminds us once again of the timelessness of these rules of investing.

But what about the rules of engagement of investors with our money managers, our corporate executives, and our financial markets? Those are the rules that *must* be changed. Now! We need to reestablish traditional standards of fiduciary duty so that the stewards of our corporations and our money managers will act solely in the interests of us investors who put our capital to work. Only then can investing again become an act of faith.