

## CHAPTER 1

# Introduction: Range-Bound Markets Happen

*It is hard to make predictions, especially about the future.*

—Attributed to Yogi Berra

## FASTEN YOUR SEAT BELTS AND LOWER YOUR EXPECTATIONS

For the next dozen years or so the U.S. broad stock markets will be a wild roller-coaster ride. The Dow Jones Industrial Average and the S&P 500 index will go up and down (and in the process will set all-time highs and multiyear lows), stagnate, and trade in a tight range. They'll do all that, and at the end of this wild ride, when the excitement subsides and the dust settles, index investors and buy-and-hold stock collectors will find themselves not far from where they started in the first decade of this new century. And these at best minuscule returns are unacceptable!

The length, the angles, and the twists of the ride are yet to be written by history, but the ultimate long-term flat trajectory of the ride has been set by the 18-year bull market that ended in 2000. If history is any guide, until about 2020, give or take a few years, the U.S. stock market will continue to dance the range-bound foxtrot it has been dancing since the end of 2000. Welcome to the range-bound markets!

What a gloomy, unexciting way to start a book, you may say. But the cold shower of reality is needed to snap investors into a different mode of investing—not the mode that they have been conditioned to by the 1982–2000 bull market, but the state that we will discuss in depth throughout this book. I use the word *different* cautiously since it is a part of a dangerous phrase: “This time is different.” This time is *not* different!

There has been nothing different taking place in the U.S. broad market indexes since 2000 (or is likely to be taking place for another good dozen years) from what took place in the past. One just has to look back far enough, past the last secular bull 1982–2000 market, to notice it, and we will do just that.

The performance of U.S. stocks during the twentieth century overwhelmingly supports this rather bold (at first look) prediction; as demonstrated in Exhibit 1.1, every long-lasting bull market in the twentieth century has led to a stagnating, long-lasting range-bound market (the Great Depression that followed a prolonged bull market was the only exception).

### **LET'S IDENTIFY THE ANIMAL**

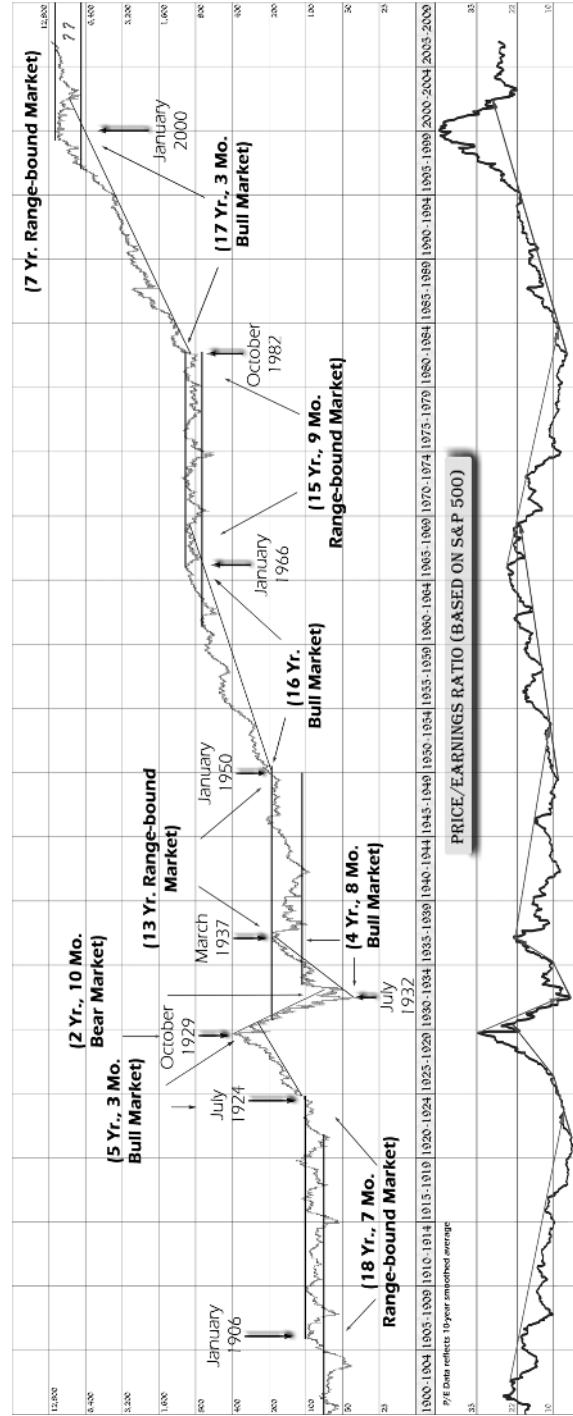
According to Wikipedia, “A bull [upward-sloped] market is a prolonged period of time when prices are rising in a financial market faster than their historical average, in contrast to a bear [downward-sloped] market, which is a prolonged period of time when prices are falling.” What about markets that have a flat, horizontal trajectory? They are known to professionals as range-bound or trendless markets, and they look different from bear markets, although investors often lump them together. We'll talk about their differences in the next chapter.

Since investors are so used to associating animals with the slope of the market, I have some suggestions for range-bound market names—chicken, or sheep perhaps. Or my personal favorite, cowardly lion, whose bursts of occasional bravery lead to stock appreciation, but are ultimately overrun by fear that leads to a subsequent descent.

For those who are used to thinking of markets in the bull and bear terms and are indifferent to cowardly lions (amazingly, I've been told, some people are), may I suggest adding another type of species to their bear vocabulary—the range-bound market bear. Thus declining bear markets you may call the grizzly bear market, whereas the market that is more or less flat you may call a range-bound bear market.

### **SECULAR VERSUS CYCLICAL**

Let's get some more definitions out of the way. We'll be using the terms *secular* and *cyclical* to describe market conditions. A secular market describes a long-lasting (more than five years) condition that takes place once in a generation or so. Cyclical conditions, in contrast, are significantly shorter market cycles that may last months or a few years.



**EXHIBIT 1.1** Dow Jones Industrial Average, 1900–2006

Copyright 2007, Kevin A. Tuttle, Tuttle Asset Management, LLC ([www.tuttleassetmanagement.com](http://www.tuttleassetmanagement.com)). P/E data from Dr. Robert J. Shiller.

Investment is not an exact science like mathematics or physics, where definitions are precisely crafted. It is like economics (a dismal science) and thus definitions are often subjective and open to different interpretations. For instance, the market decline that was caused by (or some argue caused) the Great Depression, which precipitated one of the greatest drops in stock prices in U.S. history, doesn't qualify as a secular bear market according to the definition, as it lasted only two years and 10 months, less than five years as required. However, the Great Depression really was a secular bear market. (See Chapter 2 for additional information about the Great Depression.)

The long-lasting decline of the Japanese Nikkei fits well into the definition of a secular bear market, as it lasted for 13 years, starting in January 1990 and bottoming (or so it appears) in April 2003.

Since this book is focused on secular markets, when I discuss secular bull, bear, or range-bound markets, I'll refer to them just as bull, bear, and range-bound markets. I'll make sure to use the word *cyclical* when referencing cyclical markets.

### **DISTINCTION BETWEEN SECULAR BULL, BEAR, AND RANGE-BOUND MARKETS**

Range-bound and bear markets are different in nature; the distinction is rarely made but important. Range-bound markets present unique investing opportunities and were a lot more common in the preceding century than bear markets, as Exhibit 1.1 clearly shows. Over the 100 years from 1900 to 2000, range-bound markets were occurring over half the time.

Range-bound markets are the bear markets of price-earnings (P/E) ratios (they decline), whereas bear markets are the bear markets of P/E's *and* earnings (they both decline).

Range-bound markets are so-called payback markets—investors are paying back in declining P/E's for the excess returns of the preceding bull market.

Bear markets, such as the one in Japan, are caused by a combination of excess valuation (a predominant feature of range-bound markets as well) and prolonged economic distress. High P/E's and economic distress at the same time are a lethal combination. High P/E's reflect high investor expectations from the economy. Economic blues (runaway inflation, severe deflation, subpar or negative economic or earnings growth) disappoint investors' optimistic expectations. They anticipate that the economy (and stocks) will keep performing far above average, but instead the performance is not average, but below average. The bear market has started.

Economic growth is the wild card that differentiates between range-bound and bear markets. But economic growth is not the vital factor in creating a bull or a range-bound market—market valuation is.

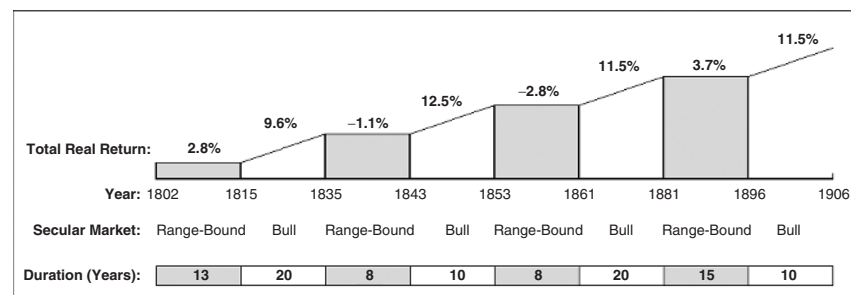
On a shorter-term basis, economic growth has its ups and downs during both bull and range-bound markets, adding to the intermediate volatility of stock prices, and is often responsible for relatively short-term (cyclical) bull, bear, and range-bound markets. However, long-term economic growth during both range-bound and bull markets is fairly stable.

As shown in Exhibit 1.1, the bull markets of the twentieth century started at the end of exhausting range-bound markets or sharp bear markets (the Great Depression). In all cases, they started when P/Es were much below average and economic growth was normal, not earth-shattering and not much better or worse than during range-bound markets.

### IS 100 YEARS LONG ENOUGH?

In the first part of the book I'll be making a number of observations based on U.S. stock market data from the twentieth century. Is 100 years long enough? Can we arrive at a statistically significant result by looking at only three range-bound markets, one bear market, and three bull markets (counting the bull market started after 1929 crash)? No, we cannot.

So let's throw in another 100 years. In his book *Stock Cycles* (iUniverse, 2000), Michael A. Alexander analyzes stock market cycles from 1802 to 2000. Since I already showed performance of the stock market from 1900 to 2006 in Exhibit 1.1, in Exhibit 1.2 I show only real (after inflation) returns from U.S. stocks by market cycle from 1802 to 1906, using data compiled by Mr. Alexander. Now we have price data going back another



**EXHIBIT 1.2** Stock Market Performance, 1802–1906

Data Source: Michael A. Alexander, *Stock Cycles* (iUniverse, 2000).

100 years. Again, bull markets are followed by range-bound (or bear) markets, time after time, in the nineteenth century as well.

One little technicality: Mr. Alexander did not differentiate in his book between range-bound and bear markets, but I'll stick to my range-bound definition, as none of the returns look drastically bear market-like (remember, they are real after-inflation returns).

Is a 200-year period long enough? It is better than 100 years, but again it is not long enough to be statistically significant. Academics would argue that we'd need thousands of years' worth of stock market data to come to a statistically significant conclusion—a luxury that we don't have. In this book I am not making a case that range-bound markets follow bull markets because of statistical significance—I simply don't have enough data to make this case.

However, no matter how much things change, they remain the same. Whether a trade is submitted through a Western Union telegram, as was often done at the turn of nineteenth century, or through the video game look-alike screen of an online broker, as often happens today, it still has a human originating it. And all humans come with standard emotional equipment that is, to some degree, predictable.

Human emotions and thus long-term market trends are here to stay. Over the years we've become more educated, with access to fancier, faster, and better financial tools. A myriad of information is accessible at our fingertips, with speed and abundance that just a decade ago were available to only a privileged few. But despite all that, we are no less human than we were 10, 20, 50, or 100 years ago. Unless technology and innovations strip away our emotions, we'll behave like humans no matter how sophisticated we become. Unless we completely outsource all of our investment decision making to computers, markets will still be impacted by human emotions. Emotions are the price—and joy—of being human.

## **STOCKS CARRIED THE TORCH IN THE LONG-RUN MARATHON**

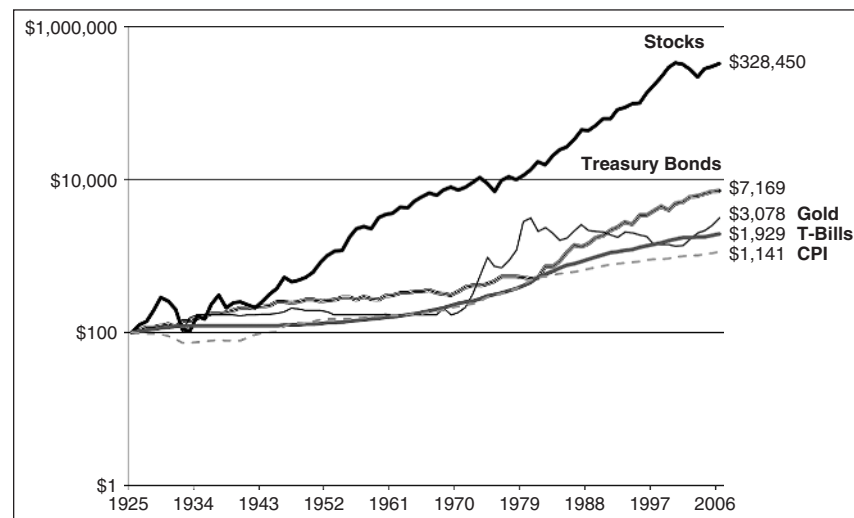
In the 100-year investment marathon that took place in the twentieth century, U.S. stocks came out as a clear winner, leaving the returns of gold and bonds in the dust. The race was not without obstacles. Stocks overcame World War I, a worldwide influenza epidemic that killed over half a million Americans and over 20 million people worldwide, the Great Depression, the shock of Pearl Harbor and subsequent U.S. involvement in World War II, the Korean War, the Cuban Missile Crisis (which brought the United States to the brink of nuclear war with Russia), the assassination of John

F. Kennedy, the Vietnam War, a presidential impeachment, an oil crisis, one Cold War, two Gulf Wars (okay, to be factually correct the second Gulf War took place starting in 2003—the twenty-first century), terrorist attacks, numerous natural disasters, and much more.

As shown in Exhibit 1.3, though stocks lost some sprints to gold and bonds, their long-term dominance over them is indisputable. \$100 invested in stocks at the end of 1925 would turn into \$328,450 by the end of 2006, far exceeding the \$7,169 invested in Treasury bonds and the \$3,078 resulting from investment in gold, which barely kept up with inflation as measured by the consumer price index (CPI) and with Treasury bills (T-bills).

Bonds, though left behind by a huge margin, were the runner-up to stocks. Unlike stocks, whose upside return potential is unlimited, bonds' cash flows, and to a large degree their upsides, are predetermined by contractual agreement and have a maximum monetary value. Unless a company defaults on interest and debt principal payments, cash flows from bonds don't vary with the company's profitability. A company's increased profitability may send the stock price to the stratosphere, but bondholders will receive the same return, regardless.

From a default risk perspective, bonds are less risky than stocks. Bondholders are first in line to receive disbursements of a company's assets



**EXHIBIT 1.3** Total Return: Stocks, Bonds, Gold, Inflation, 1925–2006

*Data Sources:* Robert J. Shiller—Stocks (S&P 500), CPI; Ibbotson Associates—Treasury bonds and bills.

in case of bankruptcy, whereas stock investors may lose all their invested capital. Bond investors may recoup all or a portion of their investments, depending on the seniority (place in the bond line) of the bonds and the severity of the bankruptcy.

In his book *Stocks for the Long Run* Jeremy Siegel did a terrific job of examining the returns of stocks and bonds from 1802 to 2001, and he wrote the following:

*In every 5-year period since 1802, ... the worst performance in stocks, at -11 percent a year, has been slightly worse than the worst performance in bonds or bills. Moreover, for 10-year holding periods, the worst stock performance actually has been better than that for bonds or bills. ... It is significant that stocks, in contrast to bonds or bills, have never offered investors a negative real holding period return yield over periods of 17 years or more. ... The safest long-term investment for the preservation of purchasing power clearly has been a diversified portfolio of equities. ... For 10-year horizons, stocks beat bonds and bills over 80 percent of the time; and for 30-year horizons, it is virtually 100 percent of the time.<sup>1</sup>*

## **INTERNATIONAL STOCKS WERE BRIGHT LIGHTS, TOO**

Stocks' resilience and superior performance in the twentieth century were not limited to just the United States. The real returns for stocks from 1926 to 2001 compiled by Jeremy Siegel in *Stocks for the Long Run* were fairly consistent, ranging between 6 and 7 percent for the United States, the United Kingdom, and Germany. Stocks in other developed nations won their respective marathons, overcoming incredible obstacles in the process. German stocks suffered real declines of over 90 percent when World War II started; however, investors who held on to their stocks were made whole by 1958.

Germany's World War II ally Japan staged an incredible recovery as well. During and after the war, Japanese stocks lost 98 percent of real value. However, despite two of its major cities being obliterated by atomic bombs, and the hyperinflation that followed, Japanese stocks made a great recovery, approaching predecline levels by the early 1960s. Japan's real returns of 2.39 percent during the same time frame, expressed in U.S. dollars, were substantially understated, as the Japanese yen was in gradual decline against the U.S. dollar throughout the twentieth century. If the real stock returns were to be measured in yen, they would have exceeded the returns of U.S. stocks.<sup>2</sup>

Bond investors were not so lucky. According to Siegel, neither Japanese nor German bond investors recouped the real value of their original



investments. German bonds didn't recover even a meaningful fraction of their real value lost to hyperinflation. The problems were initiated soon after World War I in 1919, when the Treaty of Versailles forced Germany to pay substantial reparations to the nations that won the war. The German economy was weak at the time: The country had no money. In order to pay for reparations and rebuild the economy, the German government printed money. However, the German public had no faith in this money, and hyperinflation began. Prices rose several million percent per month (prices doubled every 49 hours).<sup>3</sup>

Japanese inflation began in 1939, when the government, severed from its main sources of income in Japanese-occupied eastern China, printed more money to support the mounting costs of wartime operations. Japanese bond investors were luckier than their German counterparts, but not by much. They recovered some of the real bond value that was lost due to hyperinflation that started during World War II.<sup>4</sup>

Why did stocks outperform bonds? Will this outperformance continue into the future? The asymmetrical nature of the risk-return profile is likely to keep the marathon torch with stocks. The well-defined downside risk of stocks (investors can lose only 100 percent of their investment, similar to bonds and gold, assuming no leverage is used) and unlimited capital appreciation potential, mixed with human ingenuity and a healthy dose of greed, are likely to keep stocks dominating other asset classes in the twenty-first century as well. Remember what Gordon Gekko said in the movie *Wall Street*: "Greed is good."

## **WILL GOLD SHINE AGAIN?**

Gold is an important but very different asset class that competes with stocks and bonds, and although it falls in the commodities asset class I'd like to briefly touch upon it in the following discussion. Unlike stocks and bonds, its main attractions are scarcity, durability, and resistance to oxidation—it simply never stops shining. In fact, most of the gold ever mined is still around today. It is exhibited in museums, worn as jewelry, and buried deep in the vaults of the central banks. Peter Bernstein, in his *The Power of Gold*, wrote the following:

*Despite the complex obsession it created, gold is wonderfully simple in essence. Its chemical symbol AU derives from aurora, which means "shining dawn," but despite the glamorous suggestion of AU, gold is chemically inert. That explains why the radiance is forever. In Cairo, you'll find a tooth bridge made of gold for an*

*Egyptian 4500 years ago; its condition is good enough to go into your mouth today. . . . Stubborn resistance to oxidation, unusual density, and ready malleability—these simple natural attributes explain all there is to the romance of gold.*<sup>5</sup>

Despite its unique properties, gold has not been a good investment. Over the past 100 and 200 years its returns have barely kept up with inflation. Its value has a low correlation with stocks (prices of gold and stocks move independently of each other most of the time), which is a big positive from the portfolio construction perspective, as diversifying with gold can reduce a portfolio's fluctuations (volatility). However, the diversification benefit comes at a large cost: Once added to the portfolio, gold substantially reduces that portfolio's risk-adjusted returns—its dismal returns negate any benefit the portfolio receives from reduced volatility.<sup>6</sup>

One thing about gold, however—it is real! You can hold it and touch it, and see its shine. This tangibility makes it seem impervious to the whims of politics, nature, and time, as opposed to paper assets such as stocks and bonds. Gold's physical attributes attract investors during times of economic uncertainty, and so it serves a purpose in the markets and society—it is a stabilizing influence. It feels safe.

The thinking of the so-called gold bug (a believer in gold's supremacy, a gold aficionado) often takes on a variation of this form: While in the bunker (or any other variance of the "world falling apart" scenario), you cannot pay for food with paper—a stock or bond certificate (the overwhelming majority of the time they are actually electronic bytes and bits, anyway). You may do so with real tangible assets, however, such as gold. If this scenario played out (God forbid), it is conceivable that gold could become the de facto currency. In that event, you need to have real gold in a safe or buried in your backyard. The wise gold bug would have managed portfolio risk by also investing in a good arsenal of guns, as the demise of government bonds would likely lead to the end of the rule of law as well. Gold held by your broker or through ownership of gold stocks or exchange-traded funds (ETFs) will not come to the rescue; these bytes and bits are not superior to default-free bytes and bits (i.e., U.S. Treasuries). Canned food may actually be a better store of value in this "world coming to an end" scenario.

The ever-increasing complexity and globalization of the financial system, rapid spread of international trade, and the availability of risk-free investment instruments that were not available to investors in previous economic crises may have changed investor behavior during economic doomsday times. Financial instruments such as Federal Deposit Insurance Corporation (FDIC)-insured checking and savings accounts, U.S. Treasury

bills, and Treasury inflation-protected securities (TIPS) may challenge gold's status as the safest haven in times of inflationary crisis.

## **GOLD'S RECENTLY EMERGED COMPETITION**

TIPS may turn out to be the key challenger to gold's store-of-value supremacy status in the future. Aside from being issued by the U.S. Treasury and therefore backed by the full faith of the U.S. government, they also protect investors from inflation—one of gold's most valued qualities. TIPS' principal is tied to the CPI: The principal value increases with inflation and falls with deflation. When the security matures, the original or adjusted principal is repaid, whichever is greater.

Though TIPS appear to have superior financial properties to gold, they still lack one of gold's main attractions—tangibility. After all, they are still just bytes and bits on a brokerage firm's or bank's mainframe, or pieces of flammable paper stored in a safe. In addition, the inflation component that goes into TIPS pricing is calculated based on the CPI, which is calculated by the U.S. government. Many investors argue that the CPI calculation is outdated and that it chronically understates inflation.

Any cash-flow-generating asset, like a stock or a bond, can be valued on the future cash flows that it is expected to generate. Predicting gold prices is extremely difficult, as gold is not a cash-generating asset. In fact, it is important to note that gold actually has a negative yield (cost of carry). Gold is a cash-consuming asset (its safekeeping and transportation cost money), whereas TIPS as well as any bonds and dividend-paying stocks have a positive yield—they pay investors for holding them.

Gold is also considered a good currency hedge, especially for the U.S. investors who are concerned about the declining dollar. Again, our financial ingenuity is stealing gold's long-held exclusivity on that trade, providing options that were not available a few decades ago. To protect themselves against the declining dollar, U.S. investors can use currency futures and options, foreign-currency-denominated mutual funds, and certificates of deposit (CDs); they can buy foreign stocks on foreign exchanges or through American depositary receipts (ADRs); and of course there is a most recent development—currency exchange-traded funds (ETFs).

In both the long run and the short run, gold prices are driven by fear of the world coming to an end and investors' expectations of future inflation. Although gold has some industrial applications (in jewelry, dentistry, computers, jet engines, electronics, as a superconductor, etc.), linking its intrinsic value directly to its price is difficult. Perception of its ability to store and preserve real value (especially in an inflationary environment) is the key

driver of gold's price. As long as investors perceive gold to be a refuge in times of uncertainty, gold will act as such.

It is important to note that gold's monopoly as an instrument of choice at the time of fear and uncertainty has been undermined by other very capable and often superior financial instruments.

### THE DECEPTION OF THE LONG RUN (MARATHON)

*Soar into space, and the earth loses its distinctive features: the Himalayas flatten; the Grand Canyon appears no deeper than a ditch. . . . [The view from space] gives few, if any, clues to the harsh geographical and financial realities that you should face walking across the earth's surface. . . . If you take a long-term view on the stock market, perhaps fifty or seventy-five years, it becomes a beautiful blue chip market. But the long-term rise in the market obscures the realities that affect almost every investor.*

—Ed Easterling, *Unexpected Returns* (Cypress House, 2005)

Looking at stocks' phenomenal performance in the twentieth century, it is hard not to get a warm and fuzzy sense of security over their future long-term performance. They were clearly the champions of the twentieth-century marathon. However, akin to looking at Earth from space, looking at history only over the long run may inadvertently distort one's perspective, sending you onto the wrong investment path, as the often harsh realities of stock investing appear smoothed and distorted.

In the nineteenth and twentieth centuries, average real (after inflation) stock returns were consistently at about 7 percent, with about 3 to 4 percent inflation (nominal returns, including inflation, were about 10 to 11 percent a year). Investors have been trained by finance textbooks, Ivy League and not so Ivy League college professors, and a parade of investment experts to expect the long-term average return from any market, at any valuation, over any investment time horizon, and at any time. As we are about to discover, it is not that simple.

The U.S. economy may (or may not) be facing the golden years of prosperity. However, investors expecting the average returns observed over the past century are likely to be disappointed, as average happens a lot less frequently than we've been told. And contrary to common perception, strong economic growth doesn't always lead to positive stock market returns.

Stock market returns to a significant degree are a function of starting valuation (P/E) at the time of investing.

Protracted periods of above-average returns—bull markets—are usually followed by below-average returns—range-bound markets—of similar duration. This is how the average is created.

This is important to understand because if you are planning for the future using God-given (or so you've been told by experts) 7 percent real or 10 to 11 percent nominal long-term rates of return for your passive buy-and-hold stock portfolio, you may be disappointed by the cold reality of range-bound markets.

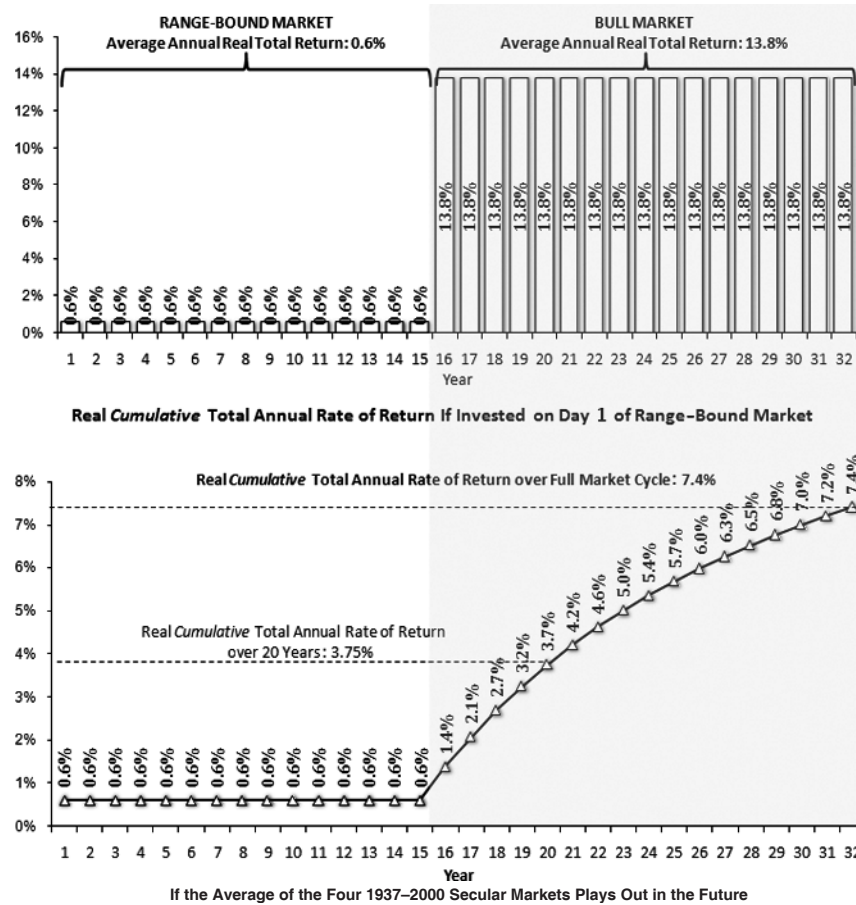
Let's take a peek at the four market cycles that took place from 1937 to 2000: two bull markets and two range-bound markets. We will exclude the time period surrounding the Great Depression, as it had a tremendous impact on the investment habits of the generation that lived through it—a psyche of a small minority of investors in today's market. The average range-bound market lasted about 15 years and brought total annual nominal and total real returns of 5.5 percent and 0.6 percent, respectively. The average bull market lasted a bit longer—about 17 years—and brought astounding total nominal and total real returns for faithful investors of 16.3 percent and 13.8 percent, respectively.

As shown in Exhibit 1.4, if the average of what happened from 1937 to 2000 (two range-bound and two bull markets) played out in the future, the investor faithfully buying an equity index fund or holding a broad market portfolio of stocks from the beginning of the average secular range-bound market would have to wait 32 years to receive a long-term average real return. If the same investor had a shorter time horizon, say 15 or 20 years, the cumulative annual rate of return would fall below the average expectation dramatically, producing 0.6 percent and 3.75 percent total real returns, respectively.

A similar pattern took place during the 1966–2000 full market cycle (see Exhibit 1.5), which comprised a 1966–1982 range-bound market and a 1982–2000 bull market. However, there was a lot more volatility in the interim than in the average (Exhibit 1.4) example. Investors who bought the Dow Jones Industrial Average in 1966 expecting to receive the long-term average returns during this period over 15- or even 20-year time horizons would have been disappointed, as real returns turned out to be far below the expected long-term average returns. In fact, a broad market portfolio invested in 1966 would have received no real returns for 16 years, until the start of the bull market in late 1982 and early 1983. It took 34 years (the full market cycle) for investors who bought a broad market index in 1966 to receive a 6.8 percent annual real rate of return.

## **RANGE-BOUND MARKETS ERODE BULL MARKET RETURNS**

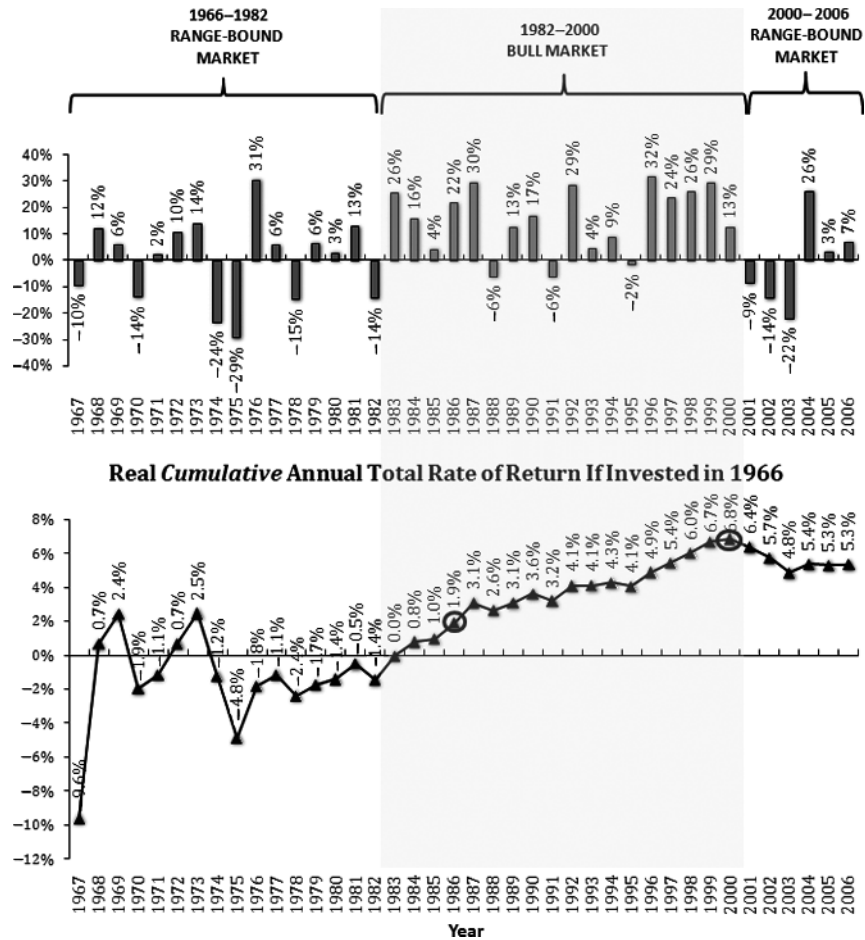
Above-average returns from the bull markets gradually were eroded by the meager returns of the secular range-bound markets that followed. If the



**EXHIBIT 1.4** Total Annual Real Rate of Return from Average Range-Bound to Average Bull Market

average of what took place from 1937 to 2000 plays out in the future as demonstrated in Exhibit 1.6, investors holding a broad market index at the end of the bull market (as investors did in 2000) will painfully watch their returns from the bull market era be eroded by the range-bound market's below-average returns.

Let's take a look at the last full bull range-bound market cycle of 1950 to 1982. As shown in Exhibit 1.7, in 1966, at the end of the 1950–1966 bull market, investors' total real rate of return stood at an impressive 14 percent. If, by inertia, investors stayed the course with a buy-and-hold strategy (which worked well in the preceding 16 years), the annual real rate



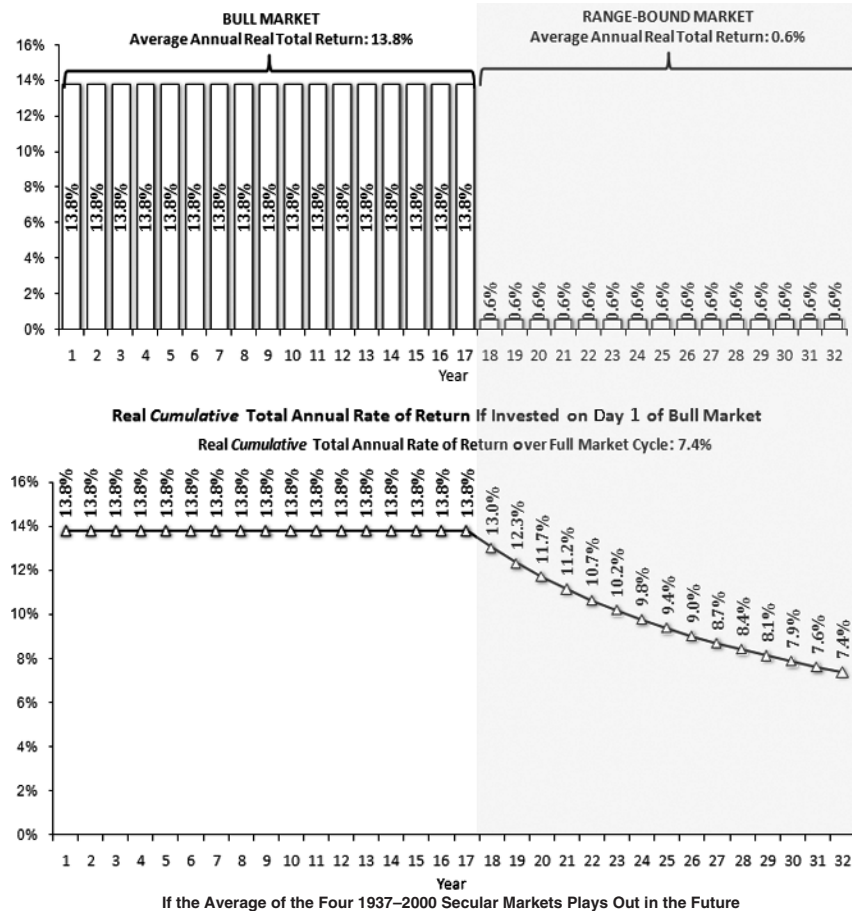
**EXHIBIT 1.5** How Investors Fared in the 1966–2000 Full Market Cycle and Since (January 1967–January 2006)

of return of their portfolios would have declined to 6.5 percent over next 16 years, the end of the 1966–1982 range-bound market.

### THE LONG RUN FOR US MAY BE SHORTER THAN WE THINK

Few of us have the luxury of a 50- or 75-year long-run investment horizon. A 30-year time horizon is trying for many. Investors need to pay for cars,





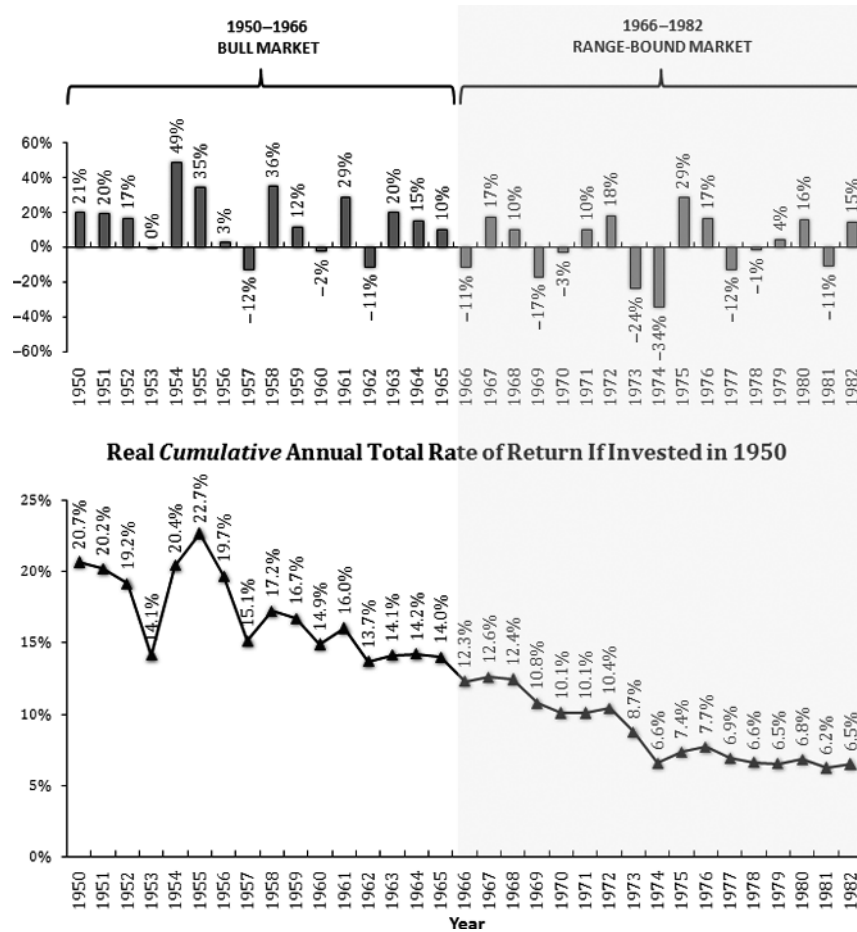
**EXHIBIT 1.6** Total Annual Real Rate of Return from Average Bull to Average Range-Bound Market

homes, second homes, kids' college tuition, weddings (cannot forget those), and finally retirement.

Furthermore, even those who have 30 years to wait to receive average returns find that it is extremely difficult to remain committed to an asset class for a long period of time, while receiving plenty of volatility and meager or no real returns in return for their loyalty.

Few of us have the patience to wait a couple of months to save money for the latest and greatest gadget; we just charge it to our credit card. We want instant gratification. Our behavior is not that much different when it





**EXHIBIT 1.7** How Investors Fared in the 1950–1982 Full Market Cycle (December 1950–December 1982)

comes to investing. According to Dalbar, Inc., a research and ratings firm, a study covering 1984 to 2002 showed that:

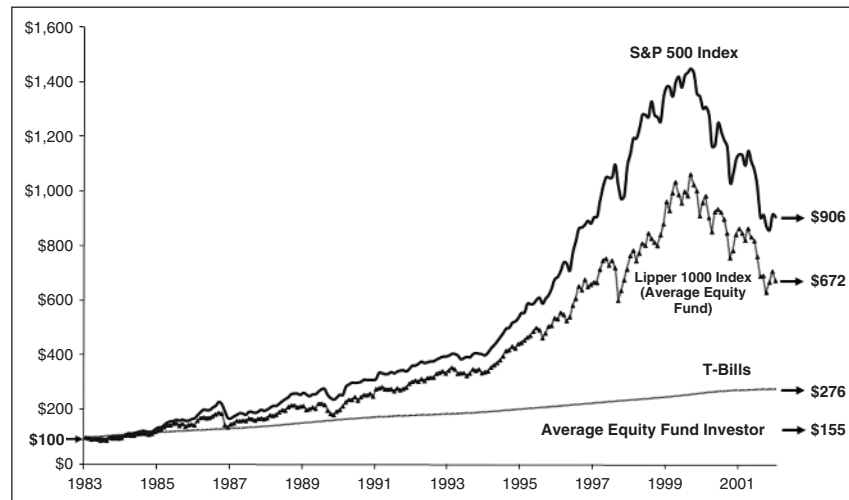
*Motivated by fear and greed, investors pour money into equity funds on market upswings and are quick to sell on downturns. The average equity [mutual fund] investor earned a paltry 2.57% annually, compared to inflation of 3.14% and the 12.22% the S&P 500 index earned annually for the last 19 years. The average fixed*

*income investor earned 4.24% annually, compared to the long-term government bond index of 11.70%.<sup>7</sup>*

From January 1984 to December 2002, the time period used in the Dalbar study, investors *substantially* underperformed the broad market indexes. The average mutual fund, after fees and expenses, lagged the performance of the S&P 500 by almost 2 percent if measured by the Lipper 1000 index (capturing the performance of the 1,000 largest equity funds in the United States), which was up 10.6 percent during that time frame. What is shocking is that equity mutual fund investors (not the mutual funds they invested in—an important distinction) even lagged returns of T-bills, which earned investors 5.5 percent during the same time frame.

As shown in Exhibit 1.8, from January 1984 to December 2002 an investor who put \$100 in the S&P 500, an equity mutual fund (tracked by the Lipper 1000 index), or even T-bills on December 31, 1983, would have had \$906, \$672, or \$276, respectively, on December 31, 2002, compared to only \$155 if the same \$100 were placed by an average equity mutual fund investor.

Impatience and the insatiable desire for instant gratification resulted in this substantial underperformance against market indexes and the mutual



**EXHIBIT 1.8** Performance of Average Equity Fund Investor, 1984–2002, versus S&P 500 versus Average Equity Fund versus T-Bills

*Data Sources:* Lipper 1000 Index—Lipper Inc.; Stocks (S&P 500)—Robert J. Shiller; Average Equity Fund Investor—Dalbar; Treasury bills—Ibbotson Associates.

funds they invested in. Amazingly, this study covered one of the greatest secular bull markets in the twentieth century. Investors' returns are likely to be a lot worse during a secular range-bound market, as these markets have a flat trajectory and high volatility that is evenly distributed to the upside and downside (described in the next chapter).

Even if investors have very long-term time horizons, most don't have the patience to match those time horizons. Investors, on average, need to see consistent returns from their portfolios to stay the course over the long term, and this is what we'll try to help you accomplish in this book.

