period, no matter how dangerous or dumb their tactics, people boasted that they were "right." But the intelligent investor has no interest in being temporarily right. To reach your long-term financial goals, you must be sustainably and reliably right. The techniques that became so trendy in the 1990s—day trading, ignoring diversification, flipping hot mutual funds, following stock-picking "systems"—seemed to work. But they had no chance of prevailing in the long run, because they failed to meet all three of Graham's criteria for investing.

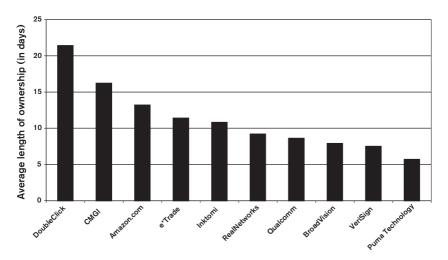
To see why temporarily high returns don't prove anything, imagine that two places are 130 miles apart. If I observe the 65-mph speed limit, I can drive that distance in two hours. But if I drive 130 mph, I can get there in one hour. If I try this and survive, am I "right"? Should you be tempted to try it, too, because you hear me bragging that it "worked"? Flashy gimmicks for beating the market are much the same: In short streaks, so long as your luck holds out, they work. Over time, they will get you killed.

In 1973, when Graham last revised *The Intelligent Investor*, the annual turnover rate on the New York Stock Exchange was 20%, meaning that the typical shareholder held a stock for five years before selling it. By 2002, the turnover rate had hit 105%—a holding period of only 11.4 months. Back in 1973, the average mutual fund held on to a stock for nearly three years; by 2002, that ownership period had shrunk to just 10.9 months. It's as if mutual-fund managers were studying their stocks just long enough to learn they shouldn't have bought them in the first place, then promptly dumping them and starting all over.

Even the most respected money-management firms got antsy. In early 1995, Jeffrey Vinik, manager of Fidelity Magellan (then the world's largest mutual fund), had 42.5% of its assets in technology stocks. Vinik proclaimed that most of his shareholders "have invested in the fund for goals that are years away. . . . I think their objectives are the same as mine, and that they believe, as I do, that a long-term approach is best." But six months after he wrote those high-minded words, Vinik sold off almost all his technology shares, unloading nearly \$19 billion worth in eight frenzied weeks. So much for the "long term"! And by 1999, Fidelity's discount brokerage division was egging on its clients to trade anywhere, anytime, using a Palm handheld computer—which was perfectly in tune with the firm's new slogan, "Every second counts."

FIGURE 1-1





And on the NASDAQ exchange, turnover hit warp speed, as Figure 1-1 shows.⁴

In 1999, shares in Puma Technology, for instance, changed hands an average of once every 5.7 days. Despite NASDAQ's grandiose motto-"The Stock Market for the Next Hundred Years"-many of its customers could barely hold on to a stock for a hundred hours.

THE FINANCIAL VIDEO GAME

Wall Street made online trading sound like an instant way to mint money: Discover Brokerage, the online arm of the venerable firm of

⁴ Source: Steve Galbraith, Sanford C. Bernstein & Co. research report, January 10, 2000. The stocks in this table had an average return of 1196.4% in 1999. They lost an average of 79.1% in 2000, 35.5% in 2001, and 44.5% in 2002–destroying all the gains of 1999, and then some.

Morgan Stanley, ran a TV commercial in which a scruffy tow-truck driver picks up a prosperous-looking executive. Spotting a photo of a tropical beachfront posted on the dashboard, the executive asks, "Vacation?" "Actually," replies the driver, "that's my home." Taken aback, the suit says, "Looks like an island." With quiet triumph, the driver answers, "Technically, it's a country."

The propaganda went further. Online trading would take no work and require no thought. A television ad from Ameritrade, the online broker, showed two housewives just back from jogging; one logs on to her computer, clicks the mouse a few times, and exults, "I think I just made about \$1,700!" In a TV commercial for the Waterhouse brokerage firm, someone asked basketball coach Phil Jackson, "You know anything about the trade?" His answer: "I'm going to make it right now." (How many games would Jackson's NBA teams have won if he had brought that philosophy to courtside? Somehow, knowing nothing about the other team, but saying, "I'm ready to play them right now," doesn't sound like a championship formula.)

By 1999 at least six million people were trading online—and roughly a tenth of them were "day trading," using the Internet to buy and sell stocks at lightning speed. Everyone from showbiz diva Barbra Streisand to Nicholas Birbas, a 25-year-old former waiter in Queens, New York, was flinging stocks around like live coals. "Before," scoffed Birbas, "I was investing for the long term and I found out that it was not smart." Now, Birbas traded stocks up to 10 times a day and expected to earn \$100,000 in a year. "I can't stand to see red in my profit-or-loss column," Streisand shuddered in an interview with *Fortune*. "I'm Taurus the bull, so I react to red. If I see red, I sell my stocks quickly." ⁵

By pouring continuous data about stocks into bars and barbershops, kitchens and cafés, taxicabs and truck stops, financial websites and financial TV turned the stock market into a nonstop national video game. The public felt more knowledgeable about the markets than ever before. Unfortunately, while people were drowning in data, knowledge was nowhere to be found. Stocks became entirely decou-

⁵ Instead of stargazing, Streisand should have been channeling Graham. The intelligent investor never dumps a stock purely because its share price has fallen; she always asks first whether the value of the company's underlying businesses has changed.

pled from the companies that had issued them—pure abstractions, just blips moving across a TV or computer screen. If the blips were moving up, nothing else mattered.

On December 20, 1999, Juno Online Services unveiled a trailblazing business plan: to lose as much money as possible, on purpose. Juno announced that it would henceforth offer all its retail services for free—no charge for e-mail, no charge for Internet access—and that it would spend millions of dollars more on advertising over the next year. On this declaration of corporate hara-kiri, Juno's stock roared up from \$16.375 to \$66.75 in two days.⁶

Why bother learning whether a business was profitable, or what goods or services a company produced, or who its management was, or even what the company's name was? All you needed to know about stocks was the catchy code of their ticker symbols: CBLT, INKT, PCLN, TGLO, VRSN, WBVN.7 That way you could buy them even faster, without the pesky two-second delay of looking them up on an Internet search engine. In late 1998, the stock of a tiny, rarely traded building-maintenance company, Temco Services, nearly tripled in a matter of minutes on record-high volume. Why? In a bizarre form of financial dyslexia, thousands of traders bought Temco after mistaking its ticker symbol, TMCO, for that of Ticketmaster Online (TMCS), an Internet darling whose stock began trading publicly for the first time that day.8

Oscar Wilde joked that a cynic "knows the price of everything, and the value of nothing." Under that definition, the stock market is always cynical, but by the late 1990s it would have shocked Oscar himself. A single half-baked opinion on *price* could double a company's stock even as its *value* went entirely unexamined. In late 1998, Henry Blodget, an analyst at CIBC Oppenheimer, warned that "as with all Internet stocks, a valuation is clearly more art than science." Then, citing only the possibility of future growth, he jacked up his "price target" on

⁶ Just 12 months later, Juno's shares had shriveled to \$1.093.

⁷ A ticker symbol is an abbreviation, usually one to four letters long, of a company's name used as shorthand to identify a stock for trading purposes.

⁸ This was not an isolated incident; on at least three other occasions in the late 1990s, day traders sent the wrong stock soaring when they mistook its ticker symbol for that of a newly minted Internet company.

Amazon.com from \$150 to \$400 in one fell swoop. Amazon.com shot up 19% that day and-despite Blodget's protest that his price target was a one-year forecast-soared past \$400 in just three weeks. A year later, PaineWebber analyst Walter Piecyk predicted that Qualcomm stock would hit \$1,000 a share over the next 12 months. The stock-already up 1,842% that year-soared another 31% that day, hitting \$659 a share.

FROM FORMULA TO FIASCO

But trading as if your underpants are on fire is not the only form of speculation. Throughout the past decade or so, one speculative formula after another was promoted, popularized, and then thrown aside. All of them shared a few traits—This is quick! This is easy! And it won't hurt a bit!—and all of them violated at least one of Graham's distinctions between investing and speculating. Here are a few of the trendy formulas that fell flat:

• Cash in on the calendar. The "January effect"—the tendency of small stocks to produce big gains around the turn of the year—was widely promoted in scholarly articles and popular books published in the 1980s. These studies showed that if you piled into small stocks in the second half of December and held them into January, you would beat the market by five to 10 percentage points. That amazed many experts. After all, if it were this easy, surely everyone would hear about it, lots of people would do it, and the opportunity would wither away.

What caused the January jolt? First of all, many investors sell their crummiest stocks late in the year to lock in losses that can cut their tax bills. Second, professional money managers grow more cautious as the year draws to a close, seeking to preserve their outperformance (or minimize their underperformance). That makes them reluctant to buy (or even hang on to) a falling stock. And if an underperforming stock is also small and obscure, a money manager will be even less eager to show it in his year-end

⁹ In 2000 and 2001, Amazon.com and Qualcomm lost a cumulative total of 85.8% and 71.3% of their value, respectively.

list of holdings. All these factors turn small stocks into momentary bargains; when the tax-driven selling ceases in January, they typically bounce back, producing a robust and rapid gain.

The January effect has not withered away, but it has weakened. According to finance professor William Schwert of the University of Rochester, if you had bought small stocks in late December and sold them in early January, you would have beaten the market by 8.5 percentage points from 1962 through 1979, by 4.4 points from 1980 through 1989, and by 5.8 points from 1990 through 2001.¹⁰

As more people learned about the January effect, more traders bought small stocks in December, making them less of a bargain and thus reducing their returns. Also, the January effect is biggest among the smallest stocks—but according to Plexus Group, the leading authority on brokerage expenses, the total cost of buying and selling such tiny stocks can run up to 8% of your investment. Sadly, by the time you're done paying your broker, all your gains on the January effect will melt away.

Just do "what works." In 1996, an obscure money manager named James O'Shaughnessy published a book called What Works on Wall Street. In it, he argued that "investors can do much better than the market." O'Shaughnessy made a stunning claim: From 1954 through 1994, you could have turned \$10,000 into \$8,074,504, beating the market by more than 10-fold—a towering 18.2% average annual return. How? By buying a basket of 50 stocks with the highest one-year returns, five straight years of rising earnings, and share prices less than 1.5 times their corporate revenues. As if he were the Edison of Wall Street, O'Shaughnessy obtained U.S. Patent No. 5,978,778 for his "automated strategies" and launched a group of four mutual funds based on his findings. By late 1999 the funds had sucked in more than \$175 million from the public—and, in his annual letter to shareholders, O'Shaughnessy stated grandly: "As always, I hope

¹⁰ Schwert discusses these findings in a brilliant research paper, "Anomalies and Market Efficiency," available at http://schwert.ssb.rochester.edu/papers.htm.

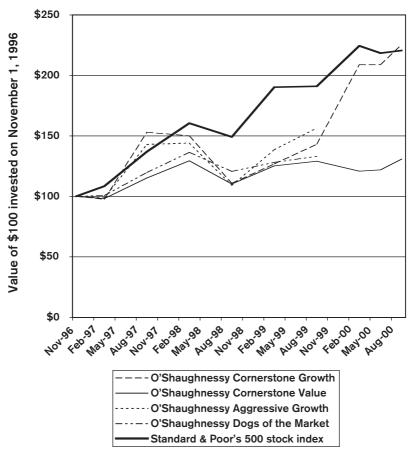
¹¹ See Plexus Group Commentary 54, "The Official Icebergs of Transaction Costs," January, 1998, at www.plexusgroup.com/fs_research.html.

¹² James O'Shaughnessy, *What Works on Wall Street* (McGraw-Hill, 1996), pp. xvi, 273–295.

that together, we can reach our long-term goals by staying the course and sticking with our time-tested investment strategies."

But "what works on Wall Street" stopped working right after O'Shaughnessy publicized it. As Figure 1-2 shows, two of his funds stank so badly that they shut down in early 2000, and the

What Used to Work on Wall Street . . .



Source: Morningstar, Inc.

overall stock market (as measured by the S & P 500 index) walloped every O'Shaughnessy fund almost nonstop for nearly four years running.

In June 2000, O'Shaughnessy moved closer to his own "long-term goals" by turning the funds over to a new manager, leaving his customers to fend for themselves with those "time-tested investment strategies." ¹³ O'Shaughnessy's shareholders might have been less upset if he had given his book a more precise title—for instance, *What Used to Work on Wall Street... Until I Wrote This Book.*

- Follow "The Foolish Four." In the mid-1990s, the Motley Fool website (and several books) hyped the daylights out of a technique called "The Foolish Four." According to the Motley Fool, you would have "trashed the market averages over the last 25 years" and could "crush your mutual funds" by spending "only 15 minutes a year" on planning your investments. Best of all, this technique had "minimal risk." All you needed to do was this:
 - 1. Take the five stocks in the Dow Jones Industrial Average with the lowest stock prices and highest dividend yields.
 - 2. Discard the one with the lowest price.
 - 3. Put 40% of your money in the stock with the second-lowest price.
 - 4. Put 20% in each of the three remaining stocks.
 - 5. One year later, sort the Dow the same way and reset the portfolio according to steps 1 through 4.
 - 6. Repeat until wealthy.

Over a 25-year period, the Motley Fool claimed, this technique would have beaten the market by a remarkable 10.1 percentage

¹³ In a remarkable irony, the surviving two O'Shaughnessy funds (now known as the Hennessy funds) began performing quite well just as O'Shaughnessy announced that he was turning over the management to another company. The funds' shareholders were furious. In a chat room at www.morningstar.com, one fumed: "I guess 'long term' for O'S is 3 years. . . . I feel your pain. I, too, had faith in O'S's method. . . . I had told several friends and relatives about this fund, and now am glad they didn't act on my advice"

points annually. Over the next two decades, they suggested, \$20,000 invested in The Foolish Four should flower into \$1,791,000. (And, they claimed, you could do still better by picking the five Dow stocks with the highest ratio of dividend yield to the square root of stock price, dropping the one that scored the highest, and buying the next four.)

Let's consider whether this "strategy" could meet Graham's definitions of an investment:

- What kind of "thorough analysis" could justify discarding the stock with the single most attractive price and dividend—but keeping the four that score lower for those desirable qualities?
- How could putting 40% of your money into only one stock be a "minimal risk"?
- And how could a portfolio of only four stocks be diversified enough to provide "safety of principal"?

The Foolish Four, in short, was one of the most cockamamie stock-picking formulas ever concocted. The Fools made the same mistake as O'Shaughnessy: If you look at a large quantity of data long enough, a huge number of patterns will emerge—if only by chance. By random luck alone, the companies that produce above-average stock returns will have plenty of things in common. But unless those factors *cause* the stocks to outperform, they can't be used to predict future returns.

None of the factors that the Motley Fools "discovered" with such fanfare—dropping the stock with the best score, doubling up on the one with the second-highest score, dividing the dividend yield by the square root of stock price—could possibly cause or explain the future performance of a stock. *Money* Magazine found that a portfolio made up of stocks whose names contained no repeating letters would have performed nearly as well as The Foolish Four—and for the same reason: luck alone. As Graham never stops reminding us, stocks do well or poorly in the future because the businesses behind them do well or poorly—nothing more, and nothing less.

¹⁴ See Jason Zweig, "False Profits," *Money*, August, 1999, pp. 55–57. A thorough discussion of The Foolish Four can also be found at www.investor home.com/fool.htm.

Sure enough, instead of crushing the market, The Foolish Four crushed the thousands of people who were fooled into believing that it was a form of investing. In 2000 alone, the four Foolish stocks—Caterpillar, Eastman Kodak, SBC, and General Motors—lost 14% while the Dow dropped by just 4.7%.

As these examples show, there's only one thing that never suffers a bear market on Wall Street: dopey ideas. Each of these so-called investing approaches fell prey to Graham's Law. All mechanical formulas for earning higher stock performance are "a kind of self-destructive process—akin to the law of diminishing returns." There are two reasons the returns fade away. If the formula was just based on random statistical flukes (like The Foolish Four), the mere passage of time will expose that it made no sense in the first place. On the other hand, if the formula actually did work in the past (like the January effect), then by publicizing it, market pundits always erode—and usually eliminate—its ability to do so in the future.

All this reinforces Graham's warning that you must treat speculation as veteran gamblers treat their trips to the casino:

- You must never delude yourself into thinking that you're investing when you're speculating.
- Speculating becomes mortally dangerous the moment you begin to take it seriously.
- You must put strict limits on the amount you are willing to wager.

Just as sensible gamblers take, say, \$100 down to the casino floor and leave the rest of their money locked in the safe in their hotel room, the intelligent investor designates a tiny portion of her total portfolio as a "mad money" account. For most of us, 10% of our overall wealth is the maximum permissible amount to put at speculative risk. *Never* mingle the money in your speculative account with what's in your investment accounts; *never* allow your speculative thinking to spill over into your investing activities; and *never* put more than 10% of your assets into your mad money account, no matter what happens.

For better or worse, the gambling instinct is part of human nature—so it's futile for most people even to try suppressing it. But you must confine and restrain it. That's the single best way to make sure you will never fool yourself into confusing speculation with investment.

CHAPTER 2

The Investor and Inflation

Inflation, and the fight against it, has been very much in the public's mind in recent years. The shrinkage in the purchasing power of the dollar in the past, and particularly the fear (or hope by speculators) of a serious further decline in the future, has greatly influenced the thinking of Wall Street. It is clear that those with a fixed dollar income will suffer when the cost of living advances, and the same applies to a fixed amount of dollar principal. Holders of stocks, on the other hand, have the possibility that a loss of the dollar's purchasing power may be offset by advances in their dividends and the prices of their shares.

On the basis of these undeniable facts many financial authorities have concluded that (1) bonds are an inherently undesirable form of investment, and (2) consequently, common stocks are by their very nature more desirable investments than bonds. We have heard of charitable institutions being advised that their portfolios should consist 100% of stocks and zero percent of bonds.* This is quite a reversal from the earlier days when trust investments were

^{*} By the late 1990s, this advice—which can be appropriate for a foundation or endowment with an infinitely long investment horizon—had spread to individual investors, whose life spans are finite. In the 1994 edition of his influential book, *Stocks for the Long Run*, finance professor Jeremy Siegel of the Wharton School recommended that "risk-taking" investors should buy on margin, borrowing more than a third of their net worth to sink 135% of their assets into stocks. Even government officials got in on the act: In February 1999, the Honorable Richard Dixon, state treasurer of Maryland, told the audience at an investment conference: "It doesn't make any sense for anyone to have any money in a bond fund."

restricted by law to high-grade bonds (and a few choice preferred stocks).

Our readers must have enough intelligence to recognize that even high-quality stocks cannot be a better purchase than bonds under all conditions—i.e., regardless of how high the stock market may be and how low the current dividend return compared with the rates available on bonds. A statement of this kind would be as absurd as was the contrary one—too often heard years ago—that any bond is safer than any stock. In this chapter we shall try to apply various measurements to the inflation factor, in order to reach some conclusions as to the extent to which the investor may wisely be influenced by expectations regarding future rises in the price level.

In this matter, as in so many others in finance, we must base our views of future policy on a knowledge of past experience. Is inflation something new for this country, at least in the serious form it has taken since 1965? If we have seen comparable (or worse) inflations in living experience, what lessons can be learned from them in confronting the inflation of today? Let us start with Table 2-1, a condensed historical tabulation that contains much information about changes in the general price level and concomitant changes in the earnings and market value of common stocks. Our figures will begin with 1915, and thus cover 55 years, presented at five-year intervals. (We use 1946 instead of 1945 to avoid the last year of wartime price controls.)

The first thing we notice is that we have had inflation in the past—lots of it. The largest five-year dose was between 1915 and 1920, when the cost of living nearly doubled. This compares with the advance of 15% between 1965 and 1970. In between, we have had three periods of declining prices and then six of advances at varying rates, some rather small. On this showing, the investor should clearly allow for the probability of continuing or recurrent inflation to come.

Can we tell what the rate of inflation is likely to be? No clear answer is suggested by our table; it shows variations of all sorts. It would seem sensible, however, to take our cue from the rather consistent record of the past 20 years. The average annual rise in the consumer price level for this period has been 2.5%; that for 1965–1970 was 4.5%; that for 1970 alone was 5.4%. Official govern-

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Year	Wholesale	Consumer	Earnings	Price	Prices	Prices	Earnings	Prices
1915	38.0	35.4		8.31				
1920	84.5	8.69		7.98	+96.0%	+96.8%		- 4.0%
1925	56.6	61.1	1.24	11.15	-33.4	-12.4		+ 41.5
1930	47.3	58.2	26.	21.63	-16.5	- 4.7	- 21.9%	+ 88.0
1935	43.8	47.8	.76	15.47	- 7.4	-18.0	- 21.6	- 26.0
1940	43.0	48.8	1.05	11.02	- 0.2	+ 2.1	+ 33.1	- 28.8
1946°	66.1	0.89	1.06	17.08	+53.7	+40.0	+ 1.0	+ 55.0
1950	8.98	83.8	2.84	18.40	+31.5	+23.1	+168.0	+ 21.4
1955	97.2	93.3	3.62	40.49	+ 6.2	+11.4	+ 27.4	+121.0
1960	100.7	103.1	3.27	55.85	+ 9.2	+10.5	- 9.7	+ 38.0
1965	102.5	109.9	5.19	88.17	+ 1.8	+ 6.6	+ 58.8	+ 57.0
1970	117.5	134.0	5.36	92.15	+14.6	+21.9	+ 3.3	+ 4.4

^a Annual averages. For price level 1957 = 100 in table; but using new base, 1967 = 100, the average for 1970 is 116.3 for consumers' prices and 110.4 for wholesale prices for the stock index.

 b 1941–1943 average = 10.

^{° 1946} used, to avoid price controls.

ment policy has been strongly against large-scale inflation, and there are some reasons to believe that Federal policies will be more effective in the future than in recent years.* We think it would be reasonable for an investor at this point to base his thinking and decisions on a *probable* (far from certain) rate of future inflation of, say, 3% per annum. (This would compare with an annual rate of about 2½% for the entire period 1915–1970.)¹

What would be the implications of such an advance? It would eat up, in higher living costs, about one-half the income now obtainable on good medium-term tax-free bonds (or our assumed after-tax equivalent from high-grade corporate bonds). This would be a serious shrinkage, but it should not be exaggerated. It would not mean that the true value, or the purchasing power, of the investor's fortune need be reduced over the years. If he spent half his interest income after taxes he would maintain this buying power intact, even against a 3% annual inflation.

But the next question, naturally, is, "Can the investor be reasonably sure of doing better by buying and holding other things than high-grade bonds, even at the unprecedented rate of return offered in 1970–1971?" Would not, for example, an all-stock program be preferable to a part-bond, part-stock program? Do not common stocks have a built-in protection against inflation, and are they not almost certain to give a better return over the years than will bonds? Have not in fact stocks treated the investor far better than have bonds over the 55-year period of our study?

The answer to these questions is somewhat complicated. Common stocks have indeed done better than bonds over a long period of time in the past. The rise of the DJIA from an average of 77 in 1915 to an average of 753 in 1970 works out at an annual compounded rate of just about 4%, to which we may add another 4% for average dividend return. (The corresponding figures for the S & P composite are about the same.) These combined figures of 8%

^{*} This is one of Graham's rare misjudgments. In 1973, just two years after President Richard Nixon imposed wage and price controls, inflation hit 8.7%, its highest level since the end of World War II. The decade from 1973 through 1982 was the most inflationary in modern American history, as the cost of living more than doubled.

per year are of course much better than the return enjoyed from bonds over the same 55-year period. But they do not exceed that *now* offered by high-grade bonds. This brings us to the next logical question: Is there a persuasive reason to believe that common stocks are likely to do much better in future years than they have in the last five and one-half decades?

Our answer to this crucial question must be a flat *no*. Common stocks *may* do better in the future than in the past, but they are far from certain to do so. We must deal here with two different time elements in investment results. The first covers what is likely to occur over the long-term future—say, the next 25 years. The second applies to what is likely to happen to the investor—both financially and psychologically—over short or intermediate periods, say five years or less. His frame of mind, his hopes and apprehensions, his satisfaction or discontent with what he has done, above all his decisions what to do next, are all determined not in the retrospect of a lifetime of investment but rather by his experience from year to year.

On this point we can be categorical. There is no close time connection between inflationary (or deflationary) conditions and the movement of common-stock earnings and prices. The obvious example is the recent period, 1966–1970. The rise in the cost of living was 22%, the largest in a five-year period since 1946–1950. But both stock earnings and stock prices as a whole have declined since 1965. There are similar contradictions in both directions in the record of previous five-year periods.

Inflation and Corporate Earnings

Another and highly important approach to the subject is by a study of the earnings rate on capital shown by American business. This has fluctuated, of course, with the general rate of economic activity, but it has shown no general tendency to advance with wholesale prices or the cost of living. Actually this rate has fallen rather markedly in the past twenty years in spite of the inflation of the period. (To some degree the decline was due to the charging of more liberal depreciation rates. See Table 2-2.) Our extended studies have led to the conclusion that the investor cannot count on much above the recent five-year rate earned on the DJIA group—

about 10% on net tangible assets (book value) behind the shares.² Since the market value of these issues is well above their book value—say, 900 market vs. 560 book in mid-1971—the earnings on current market price work out only at some 6½%. (This relationship is generally expressed in the reverse, or "times earnings," manner—e.g., that the DJIA price of 900 equals 18 times the actual earnings for the 12 months ended June 1971.)

Our figures gear in directly with the suggestion in the previous chapter* that the investor may assume an average dividend return of about 3.5% on the market value of his stocks, plus an appreciation of, say, 4% annually resulting from reinvested profits. (Note that each dollar added to book value is here assumed to increase the market price by about \$1.60.)

The reader will object that in the end our calculations make no allowance for an increase in common-stock earnings and values to result from our projected 3% annual inflation. Our justification is the absence of any sign that the inflation of a comparable amount in the past has had any *direct* effect on reported per-share earnings. The cold figures demonstrate that *all* the large gain in the earnings of the DJIA unit in the past 20 years was due to a proportionately large growth of invested capital coming from reinvested profits. If inflation had operated as a separate favorable factor, its effect would have been to increase the "value" of previously existing capital; this in turn should increase the rate of earnings on such old capital and therefore on the old and new capital combined. But nothing of the kind actually happened in the past 20 years, during which the wholesale price level has advanced nearly 40%. (Business earnings should be influenced more by wholesale prices than by "consumer prices.") The only way that inflation can add to common stock values is by raising the rate of earnings on capital investment. On the basis of the past record this has not been the case.

In the economic cycles of the past, good business was accompanied by a rising price level and poor business by falling prices. It was generally felt that "a little inflation" was helpful to business profits. This view is not contradicted by the history of 1950–1970,

^{*} See p. 25.

which reveals a combination of generally continued prosperity and generally rising prices. But the figures indicate that the effect of all this on the *earning power* of common-stock capital ("equity capital") has been quite limited; in fact it has not even served to maintain the rate of earnings on the investment. Clearly there have been important offsetting influences which have prevented any increase in the real profitability of American corporations as a whole. Perhaps the most important of these have been (1) a rise in wage rates exceeding the gains in productivity, and (2) the need for huge amounts of new capital, thus holding down the ratio of sales to capital employed.

Our figures in Table 2-2 indicate that so far from inflation having benefited our corporations and their shareholders, its effect has been quite the opposite. The most striking figures in our table are those for the growth of corporate debt between 1950 and 1969. It is surprising how little attention has been paid by economists and by Wall Street to this development. The debt of corporations has expanded nearly fivefold while their profits before taxes a little more than doubled. With the great rise in interest rates during this period, it is evident that the aggregate corporate debt is now an

TABLE 2-2 Corporate Debt, Profits, and Earnings on Capital, 1950–1969

	Corporate Profits							
	Net Corporate	Before	After	Percent Earn	ed on Capital			
	Debt	Income Tax	Tax	S & P	Other			
Year	(billions)	(millions)	(millions)	Dataª	Data ^b			
1950	\$140.2	\$42.6	\$178	18.3%	15.0%			
1955	212.1	48.6	27.0	18.3	12.9			
1960	302.8	49.7	26.7	10.4	9.1			
1965	453.3	77.8	46.5	10.8	11.8			
1969	692.9	91.2	48.5	11.8	11.3			

^a Earnings of Standard & Poor's industrial index divided by average book value for year.

^b Figures for 1950 and 1955 from Cottle and Whitman; those for 1960–1969 from *Fortune*.

adverse economic factor of some magnitude and a real problem for many individual enterprises. (Note that in 1950 net earnings after interest but before income tax were about 30% of corporate debt, while in 1969 they were only 13.2% of debt. The 1970 ratio must have been even less satisfactory.) In sum it appears that a significant part of the 11% being earned on corporate equities as a whole is accomplished by the use of a large amount of new debt costing 4% or less after tax credit. If our corporations had maintained the debt ratio of 1950, their earnings rate on stock capital would have fallen still lower, in spite of the inflation.

The stock market has considered that the public-utility enterprises have been a chief victim of inflation, being caught between a great advance in the cost of borrowed money and the difficulty of raising the rates charged under the regulatory process. But this may be the place to remark that the very fact that the unit costs of electricity, gas, and telephone services have advanced so much less than the general price index puts these companies in a strong strategic position for the future.³ They are entitled by law to charge rates sufficient for an adequate return on their invested capital, and this will probably protect their shareholders in the future as it has in the inflations of the past.

All of the above brings us back to our conclusion that the investor has no sound basis for expecting more than an average overall return of, say, 8% on a portfolio of DJIA-type common stocks purchased at the late 1971 price level. But even if these expectations should prove to be understated by a substantial amount, the case would not be made for an all-stock investment program. If there is one thing guaranteed for the future, it is that the earnings and average annual market value of a stock portfolio will *not* grow at the uniform rate of 4%, or any other figure. In the memorable words of the elder J. P. Morgan, "They will fluctuate."* This means, first, that the common-stock buyer at today's prices—

^{*} John Pierpont Morgan was the most powerful financier of the late nine-teenth and early twentieth centuries. Because of his vast influence, he was constantly asked what the stock market would do next. Morgan developed a mercifully short and unfailingly accurate answer: "It will fluctuate." See Jean Strouse, *Morgan: American Financier* (Random House, 1999), p. 11.

or tomorrow's—will be running a real risk of having unsatisfactory results therefrom over a period of years. It took 25 years for General Electric (and the DJIA itself) to recover the ground lost in the 1929–1932 debacle. Besides that, if the investor concentrates his portfolio on common stocks he is very likely to be led astray either by exhilarating advances or by distressing declines. This is particularly true if his reasoning is geared closely to expectations of further inflation. For then, if another bull market comes along, he will take the big rise not as a danger signal of an inevitable fall, not as a chance to cash in on his handsome profits, but rather as a vindication of the inflation hypothesis and as a reason to keep on buying common stocks no matter how high the market level nor how low the dividend return. That way lies sorrow.

Alternatives to Common Stocks as Inflation Hedges

The standard policy of people all over the world who mistrust their currency has been to buy and hold gold. This has been against the law for American citizens since 1935—luckily for them. In the past 35 years the price of gold in the open market has advanced from \$35 per ounce to \$48 in early 1972—a rise of only 35%. But during all this time the holder of gold has received no income return on his capital, and instead has incurred some annual expense for storage. Obviously, he would have done much better with his money at interest in a savings bank, in spite of the rise in the general price level.

The near-complete failure of gold to protect against a loss in the purchasing power of the dollar must cast grave doubt on the ability of the ordinary investor to protect himself against inflation by putting his money in "things."* Quite a few categories of valuable

^{*} The investment philosopher Peter L. Bernstein feels that Graham was "dead wrong" about precious metals, particularly gold, which (at least in the years after Graham wrote this chapter) has shown a robust ability to outpace inflation. Financial adviser William Bernstein agrees, pointing out that a tiny allocation to a precious-metals fund (say, 2% of your total assets) is too small to hurt your overall returns when gold does poorly. But, when gold does well, its returns are often so spectacular–sometimes exceeding 100%

objects have had striking advances in market value over the years—such as diamonds, paintings by masters, first editions of books, rare stamps and coins, etc. But in many, perhaps most, of these cases there seems to be an element of the artificial or the precarious or even the unreal about the quoted prices. Somehow it is hard to think of paying \$67,500 for a U.S. silver dollar dated 1804 (but not even minted that year) as an "investment operation." We acknowledge we are out of our depth in this area. Very few of our readers will find the swimming safe and easy there.

The outright ownership of real estate has long been considered as a sound long-term investment, carrying with it a goodly amount of protection against inflation. Unfortunately, real-estate values are also subject to wide fluctuations; serious errors can be made in location, price paid, etc.; there are pitfalls in salesmen's wiles. Finally, diversification is not practical for the investor of moderate means, except by various types of participations with others and with the special hazards that attach to new flotations—not too different from common-stock ownership. This too is not our field. All we should say to the investor is, "Be sure it's yours before you go into it."

Conclusion

Naturally, we return to the policy recommended in our previous chapter. Just because of the uncertainties of the future the investor cannot afford to put all his funds into one basket—neither in the bond basket, despite the unprecedentedly high returns that bonds have recently offered; nor in the stock basket, despite the prospect of continuing inflation.

The more the investor depends on his portfolio and the income therefrom, the more necessary it is for him to guard against the

in a year—that it can, all by itself, set an otherwise lackluster portfolio glittering. However, the intelligent investor avoids investing in gold directly, with its high storage and insurance costs; instead, seek out a well-diversified mutual fund specializing in the stocks of precious-metal companies and charging below 1% in annual expenses. Limit your stake to 2% of your total financial assets (or perhaps 5% if you are over the age of 65).

unexpected and the disconcerting in this part of his life. It is axiomatic that the conservative investor should seek to minimize his risks. We think strongly that the risks involved in buying, say, a telephone-company bond at yields of nearly 7½% are much less than those involved in buying the DJIA at 900 (or any stock list equivalent thereto). But the possibility of *large-scale* inflation remains, and the investor must carry some insurance against it. There is no certainty that a stock component will insure adequately against such inflation, but it should carry more protection than the bond component.

This is what we said on the subject in our 1965 edition (p. 97), and we would write the same today:

It must be evident to the reader that we have no enthusiasm for common stocks at these levels (892 for the DJIA). For reasons already given we feel that the defensive investor cannot afford to be without an appreciable proportion of common stocks in his portfolio, even if we regard them as the lesser of two evils—the greater being the risks in an all-bond holding.

COMMENTARY ON CHAPTER 2

Americans are getting stronger. Twenty years ago, it took two people to carry ten dollars' worth of groceries. Today, a fiveyear-old can do it.

-Henny Youngman

nflation? Who cares about that?

After all, the annual rise in the cost of goods and services averaged less than 2.2% between 1997 and 2002-and economists believe that even that rock-bottom rate may be overstated.¹ (Think, for instance, of how the prices of computers and home electronics have plummeted-and how the quality of many goods has risen, meaning that consumers are getting better value for their money.) In recent years, the true rate of inflation in the United States has probably run around 1% annually-an increase so infinitesimal that many pundits have proclaimed that "inflation is dead." ²

¹ The U.S. Bureau of Labor Statistics, which calculates the Consumer Price Index that measures inflation, maintains a comprehensive and helpful website at www.bls.gov/cpi/home.htm.

² For a lively discussion of the "inflation is dead" scenario, see www.pbs. org/newshour/bb/economy/july-dec97/inflation_12-16.html. In 1996, the Boskin Commission, a group of economists asked by the government to investigate whether the official rate of inflation is accurate, estimated that it has been overstated, often by nearly two percentage points per year. For the commission's report, see www.ssa.gov/history/reports/boskinrpt.html. Many investment experts now feel that deflation, or falling prices, is an even greater threat than inflation; the best way to hedge against that risk is by including bonds as a permanent component of your portfolio. (See the commentary on Chapter 4.)

THE MONEY ILLUSION

There's another reason investors overlook the importance of inflation: what psychologists call the "money illusion." If you receive a 2% raise in a year when inflation runs at 4%, you will almost certainly feel better than you will if you take a 2% pay cut during a year when inflation is zero. Yet both changes in your salary leave you in a virtually identical position-2% worse off after inflation. So long as the nominal (or absolute) change is positive, we view it as a good thing-even if the real (or after-inflation) result is negative. And any change in your own salary is more vivid and specific than the generalized change of prices in the economy as a whole.3 Likewise, investors were delighted to earn 11% on bank certificates of deposit (CDs) in 1980 and are bitterly disappointed to be earning only around 2% in 2003-even though they were losing money after inflation back then but are keeping up with inflation now. The nominal rate we earn is printed in the bank's ads and posted in its window, where a high number makes us feel good. But inflation eats away at that high number in secret. Instead of taking out ads, inflation just takes away our wealth. That's why inflation is so easy to overlook-and why it's so important to measure your investing success not just by what you make, but by how much you keep after inflation.

More basically still, the intelligent investor must always be on guard against whatever is unexpected and underestimated. There are three good reasons to believe that inflation is not dead:

As recently as 1973–1982, the United States went through one
of the most painful bursts of inflation in our history. As measured
by the Consumer Price Index, prices more than doubled over
that period, rising at an annualized rate of nearly 9%. In 1979
alone, inflation raged at 13.3%, paralyzing the economy in what
became known as "stagflation"—and leading many commentators
to question whether America could compete in the global market-

³ For more insights into this behavioral pitfall, see Eldar Shafir, Peter Diamond, and Amos Tversky, "Money Illusion," in Daniel Kahneman and Amos Tversky, eds., *Choices, Values, and Frames* (Cambridge University Press, 2000), pp. 335–355.

- place.⁴ Goods and services priced at \$100 in the beginning of 1973 cost \$230 by the end of 1982, shriveling the value of a dollar to less than 45 cents. No one who lived through it would scoff at such destruction of wealth; no one who is prudent can fail to protect against the risk that it might recur.
- Since 1960, 69% of the world's market-oriented countries have suffered at least one year in which inflation ran at an annualized rate of 25% or more. On average, those inflationary periods destroyed 53% of an investor's purchasing power.⁵ We would be crazy not to hope that America is somehow exempt from such a disaster. But we would be even crazier to conclude that it can never happen here.⁶
- Rising prices allow Uncle Sam to pay off his debts with dollars that have been cheapened by inflation. Completely eradicating inflation runs against the economic self-interest of any government that regularly borrows money.⁷

⁴ That year, President Jimmy Carter gave his famous "malaise" speech, in which he warned of "a crisis in confidence" that "strikes at the very heart and soul and spirit of our national will" and "threatens to destroy the social and the political fabric of America."

⁵ See Stanley Fischer, Ratna Sahay, and Carlos A. Vegh, "Modern Hyperand High Inflations," National Bureau of Economic Research, Working Paper 8930, at www.nber.org/papers/w8930.

⁶ In fact, the United States has had two periods of hyperinflation. During the American Revolution, prices roughly tripled every year from 1777 through 1779, with a pound of butter costing \$12 and a barrel of flour fetching nearly \$1,600 in Revolutionary Massachusetts. During the Civil War, inflation raged at annual rates of 29% (in the North) and nearly 200% (in the Confederacy). As recently as 1946, inflation hit 18.1% in the United States. ⁷ I am indebted to Laurence Siegel of the Ford Foundation for this cynical, but accurate, insight. Conversely, in a time of deflation (or steadily falling prices) it's more advantageous to be a lender than a borrower—which is why most investors should keep at least a small portion of their assets in bonds, as a form of insurance against deflating prices.

HALF A HEDGE

What, then, can the intelligent investor do to guard against inflation? The standard answer is "buy stocks"-but, as common answers so often are, it is not entirely true.

Figure 2-1 shows, for each year from 1926 through 2002, the relationship between inflation and stock prices.

As you can see, in years when the prices of consumer goods and services fell, as on the left side of the graph, stock returns were terrible—with the market losing up to 43% of its value. When inflation shot above 6%, as in the years on the right end of the graph, stocks also stank. The stock market lost money in eight of the 14 years in which inflation exceeded 6%; the average return for those 14 years was a measly 2.6%.

While mild inflation allows companies to pass the increased costs of their own raw materials on to customers, high inflation wreaks havoc-forcing customers to slash their purchases and depressing activity throughout the economy.

The historical evidence is clear: Since the advent of accurate stock-market data in 1926, there have been 64 five-year periods (i.e., 1926–1930, 1927–1931, 1928–1932, and so on through 1998–2002). In 50 of those 64 five-year periods (or 78% of the time), stocks outpaced inflation.⁹ That's impressive, but imperfect; it means that stocks failed to keep up with inflation about one-fifth of the time.

⁸ When inflation is negative, it is technically termed "deflation." Regularly falling prices may at first sound appealing, until you think of the Japanese example. Prices have been deflating in Japan since 1989, with real estate and the stock market dropping in value year after year—a relentless water torture for the world's second-largest economy.

⁹ Ibbotson Associates, *Stocks, Bonds, Bills, and Inflation, 2003 Handbook* (Ibbotson Associates, Chicago, 2003), Table 2-8. The same pattern is evident outside the United States: In Belgium, Italy, and Germany, where inflation was especially high in the twentieth century, "inflation appears to have had a negative impact on both stock and bond markets," note Elroy Dimson, Paul Marsh, and Mike Staunton in *Triumph of the Optimists: 101 Years of Global Investment Returns* (Princeton University Press, 2002), p. 53.