

CHAPTER 20

"Margin of Safety" as the Central Concept of Investment

*I*n the old legend the wise men finally boiled down the history of mortal affairs into the single phrase, "This too will pass."* Confronted with a like challenge to distill the secret of sound investment into three words, we venture the motto, MARGIN OF SAFETY. This is the thread that runs through all the preceding discussion of investment policy—often explicitly, sometimes in a less direct fashion. Let us try now, briefly, to trace that idea in a connected argument.

All experienced investors recognize that the margin-of-safety concept is essential to the choice of sound bonds and preferred stocks. For example, a railroad should have earned its total fixed charges better than five times (before income tax), taking a period of years, for its bonds to qualify as investment-grade issues. This *past* ability to earn in excess of interest requirements constitutes the margin of safety that is counted on to protect the investor against loss or discomfiture in the event of some *future* decline in net income. (The margin above charges may be stated in other ways—

* "It is said an Eastern monarch once charged his wise men to invent him a sentence, to be ever in view, and which should be true and appropriate in all times and situations. They presented him the words: '*And this, too, shall pass away.*' How much it expresses! How chastening in the hour of pride!—how consoling in the depths of affliction! '*And this, too, shall pass away.*' And yet let us hope it is not *quite* true."—Abraham Lincoln, Address to the Wisconsin State Agricultural Society, Milwaukee, September 30, 1859, in *Abraham Lincoln: Speeches and Writings, 1859–1865* (Library of America, 1985), vol. II, p. 101.

for example, in the percentage by which revenues or profits may decline before the balance after interest disappears—but the underlying idea remains the same.)

The bond investor does not expect future average earnings to work out the same as in the past; if he were sure of that, the margin demanded might be small. Nor does he rely to any controlling extent on his judgment as to whether future earnings will be materially better or poorer than in the past, if he did that, he would have to measure his margin in terms of a carefully *projected* income account, instead of emphasizing the margin shown in the past record. Here the function of the margin of safety is, in essence, that of rendering unnecessary an accurate estimate of the future. If the margin is a large one, then it is enough to assume that future earnings will not fall far below those of the past in order for an investor to feel sufficiently protected against the vicissitudes of time.

The margin of safety for bonds may be calculated, alternatively, by comparing the total value of the enterprise with the amount of debt. (A similar calculation may be made for a preferred-stock issue.) If the business owes \$10 million and is fairly worth \$30 million, there is room for a shrinkage of two-thirds in value—at least theoretically—before the bondholders will suffer loss. The amount of this extra value, or "cushion," above the debt may be approximated by using the average market price of the junior stock issues over a period of years. Since average stock prices are generally related to average earning power, the margin of "enterprise value" over debt and the margin of earnings over charges will in most cases yield similar results.

So much for the margin-of-safety concept as applied to "fixed-value investments." Can it be carried over into the field of common stocks? Yes, but with some necessary modifications.

There are instances where a common stock may be considered sound because it enjoys a margin of safety as large as that of a good bond. This will occur, for example, when a company has outstanding only common stock that under depression conditions is selling for less than the amount of bonds that could safely be issued against its property and earning power.* That was the position of a

* "Earning power" is Graham's term for a company's potential profits or, as he puts it, the amount that a firm "might be expected to earn year after year

host of strongly financed industrial companies at the low price levels of 1932–33. In such instances the investor can obtain the margin of safety associated with a bond, *plus* all the chances of larger income and principal appreciation inherent in a common stock. (The only thing he lacks is the legal power to insist on dividend payments “or else”—but this is a small drawback as compared with his advantages.) Common stocks bought under such circumstances will supply an ideal, though infrequent, combination of safety and profit opportunity. As a quite recent example of this condition, let us mention once more National Presto Industries stock, which sold for a total enterprise value of \$43 million in 1972. With its \$16 millions of recent earnings before taxes the company could easily have supported this amount of bonds.

In the ordinary common stock, bought for investment under normal conditions, the margin of safety lies in an expected earning power considerably above the going rate for bonds. In former editions we elucidated this point with the following figures:

Assume in a typical case that the earning power is 9% on the price and that the bond rate is 4%; then the stockbuyer will have an average annual margin of 5% accruing in his favor. Some of the excess is paid to him in the dividend rate; even though spent by him, it enters into his overall investment result. The undistributed balance is reinvested in the business for his account. In many cases such reinvested earnings fail to add commensurately to the earning power and value of his stock. (That is why the market has a stubborn habit of valuing earnings disbursed in dividends more generously than the portion retained in the business.)* But, if the picture is viewed as a whole, there is a reasonably close connection

if the business conditions prevailing during the period were to continue unchanged” (*Security Analysis*, 1934 ed., p. 354). Some of his lectures make it clear that Graham intended the term to cover periods of five years or more. You can crudely but conveniently approximate a company’s earning power per share by taking the inverse of its price/earnings ratio; a stock with a P/E ratio of 11 can be said to have earning power of 9% (or 1 divided by 11). Today “earning power” is often called “earnings yield.”

* This problem is discussed extensively in the commentary on Chapter 19.

between the growth of corporate surpluses through reinvested earnings and the growth of corporate values.

Over a ten-year period the typical excess of stock earning power over bond interest may aggregate 50% of the price paid. This figure is sufficient to provide a very real margin of safety—which, under favorable conditions, will prevent or minimize a loss. If such a margin is present in each of a diversified list of twenty or more stocks, the probability of a favorable result under "fairly normal conditions" becomes very large. That is why the policy of investing in representative common stocks does not require high qualities of insight and foresight to work out successfully. If the purchases are made at the average level of the market over a span of years, the prices paid should carry with them assurance of an adequate margin of safety. The danger to investors lies in concentrating their purchases in the upper levels of the market, or in buying nonrepresentative common stocks that carry more than average risk of diminished earning power.

As we see it, the whole problem of common-stock investment under 1972 conditions lies in the fact that "in a typical case" the earning power is now much less than 9% on the price paid.* Let us assume that by concentrating somewhat on the low-multiplier issues among the large companies a defensive investor may now

* Graham elegantly summarized the discussion that follows in a lecture he gave in 1972: "The margin of safety is the difference between the percentage rate of the earnings on the stock at the price you pay for it and the rate of interest on bonds, and that margin of safety is the difference which would absorb unsatisfactory developments. At the time the 1965 edition of *The Intelligent Investor* was written the typical stock was selling at 11 times earnings, giving about 9% return as against 4% on bonds. In that case you had a margin of safety of over 100 per cent. Now [in 1972] there is no difference between the earnings rate on stocks and the interest rate on stocks, and I say there is no margin of safety . . . you have a negative margin of safety on stocks . . ." See "Benjamin Graham: Thoughts on Security Analysis" [transcript of lecture at the Northeast Missouri State University business school, March, 1972], *Financial History*, no. 42, March, 1991, p. 9.

acquire equities at 12 times recent earnings—i.e., with an earnings return of 8.33% on cost. He may obtain a dividend yield of about 4%, and he will have 4.33% of his cost reinvested in the business for his account. On this basis, the excess of stock earning power over bond interest over a ten-year basis would still be too small to constitute an adequate margin of safety. For that reason we feel that there are real risks now even in a diversified list of sound common stocks. The risks may be fully offset by the profit possibilities of the list; and indeed the investor may have no choice but to incur them—for otherwise he may run an even greater risk of holding only fixed claims payable in steadily depreciating dollars. Nonetheless the investor would do well to recognize, and to accept as philosophically as he can, that the old package of *good profit possibilities combined with small ultimate risk* is no longer available to him.*

However, the risk of paying too high a price for good-quality stocks—while a real one—is not the chief hazard confronting the average buyer of securities. Observation over many years has taught us that the chief losses to investors come from the purchase of *low-quality* securities at times of favorable business conditions. The purchasers view the current good earnings as equivalent to “earning power” and assume that prosperity is synonymous with safety. It is in those years that bonds and preferred stocks of inferior grade can be sold to the public at a price around par, because they carry a little higher income return or a deceptively attractive conversion privilege. It is then, also, that common stocks of obscure companies can be floated at prices far above the tangible investment, on the strength of two or three years of excellent growth.

These securities do not offer an adequate margin of safety in any admissible sense of the term. Coverage of interest charges and preferred dividends must be tested over a number of years, including preferably a period of subnormal business such as in 1970–71. The same is ordinarily true of common-stock earnings if they are to

* This paragraph—which Graham wrote in early 1972—is an uncannily precise description of market conditions in early 2003. (For more detail, see the commentary on Chapter 3.)

qualify as indicators of earning power. Thus it follows that most of the fair-weather investments, acquired at fair-weather prices, are destined to suffer disturbing price declines when the horizon clouds over—and often sooner than that. Nor can the investor count with confidence on an eventual recovery—although this does come about in some proportion of the cases—for he has never had a real safety margin to tide him through adversity.

The philosophy of investment in growth stocks parallels in part and in part contravenes the margin-of-safety principle. The growth-stock buyer relies on an expected earning power that is greater than the average shown in the past. Thus he may be said to substitute these expected earnings for the past record in calculating his margin of safety. In investment theory there is no reason why carefully estimated future earnings should be a less reliable guide than the bare record of the past; in fact, security analysis is coming more and more to prefer a competently executed evaluation of the future. Thus the growth-stock approach may supply as dependable a margin of safety as is found in the ordinary investment—provided the calculation of the future is conservatively made, and provided it shows a satisfactory margin in relation to the price paid.

The danger in a growth-stock program lies precisely here. For such favored issues the market has a tendency to set prices that will not be adequately protected by a *conservative* projection of future earnings. (It is a basic rule of prudent investment that all estimates, when they differ from past performance, must err at least slightly on the side of understatement.) The margin of safety is always dependent on the price paid. It will be large at one price, small at some higher price, nonexistent at some still higher price. If, as we suggest, the average market level of most growth stocks is too high to provide an adequate margin of safety for the buyer, then a simple technique of diversified buying in this field may not work out satisfactorily. A special degree of foresight and judgment will be needed, in order that wise individual selections may overcome the hazards inherent in the customary market level of such issues as a whole.

The margin-of-safety idea becomes much more evident when we apply it to the field of undervalued or bargain securities. We have here, by definition, a favorable difference between price on

the one hand and indicated or appraised value on the other. That difference is the safety margin. It is available for absorbing the effect of miscalculations or worse than average luck. The buyer of bargain issues places particular emphasis on the ability of the investment to withstand adverse developments. For in most such cases he has no real enthusiasm about the company's prospects. True, if the prospects are definitely bad the investor will prefer to avoid the security no matter how low the price. But the field of undervalued issues is drawn from the many concerns—perhaps a majority of the total—for which the future appears neither distinctly promising nor distinctly unpromising. If these are bought on a bargain basis, even a moderate decline in the earning power need not prevent the investment from showing satisfactory results. The margin of safety will then have served its proper purpose.

Theory of Diversification

There is a close logical connection between the concept of a safety margin and the principle of diversification. One is correlative with the other. Even with a margin in the investor's favor, an individual security may work out badly. For the margin guarantees only that he has a better chance for profit than for loss—not that loss is impossible. But as the number of such commitments is increased the more certain does it become that the aggregate of the profits will exceed the aggregate of the losses. That is the simple basis of the insurance-underwriting business.

Diversification is an established tenet of conservative investment. By accepting it so universally, investors are really demonstrating their acceptance of the margin-of-safety principle, to which diversification is the companion. This point may be made more colorful by a reference to the arithmetic of roulette. If a man bets \$1 on a single number, he is paid \$35 profit when he wins—but the chances are 37 to 1 that he will lose. He has a "negative margin of safety." In his case diversification is foolish. The more numbers he bets on, the smaller his chance of ending with a profit. If he regularly bets \$1 on every number (including 0 and 00), he is certain to lose \$2 on each turn of the wheel. But suppose the winner received \$39 profit instead of \$35. Then he would have a small but important margin of safety. Therefore, the more numbers he wagers on,

the better his chance of gain. And he could be certain of winning \$2 on every spin by simply betting \$1 each on all the numbers. (Incidentally, the two examples given actually describe the respective positions of the player and proprietor of a wheel with 0 and 00.)*

A Criterion of Investment versus Speculation

Since there is no single definition of investment in general acceptance, authorities have the right to define it pretty much as they please. Many of them deny that there is any useful or dependable difference between the concepts of investment and of speculation. We think this skepticism is unnecessary and harmful. It is injurious because it lends encouragement to the innate leaning of many people toward the excitement and hazards of stock-market speculation. We suggest that the margin-of-safety concept may be used to advantage as the touchstone to distinguish an investment operation from a speculative one.

Probably most speculators believe they have the odds in their favor when they take their chances, and therefore they may lay claim to a safety margin in their proceedings. Each one has the feeling that the time is propitious for his purchase, or that his skill is superior to the crowd's, or that his adviser or system is trustworthy. But such claims are unconvincing. They rest on subjective judgment, unsupported by any body of favorable evidence or any

* In "American" roulette, most wheels include 0 and 00 along with numbers 1 through 36, for a total of 38 slots. The casino offers a maximum payout of 35 to 1. What if you bet \$1 on every number? Since only one slot can be the one into which the ball drops, you would win \$35 on that slot, but lose \$1 on each of your other 37 slots, for a net loss of \$2. That \$2 difference (or a 5.26% spread on your total \$38 bet) is the casino's "house advantage," ensuring that, *on average*, roulette players will always lose more than they win. Just as it is in the roulette player's interest to bet as seldom as possible, it is in the casino's interest to keep the roulette wheel spinning. Likewise, the intelligent investor should seek to maximize the number of holdings that offer "a better chance for profit than for loss." For most investors, diversification is the simplest and cheapest way to widen your margin of safety.

conclusive line of reasoning. We greatly doubt whether the man who stakes money on his view that the market is heading up or down can ever be said to be protected by a margin of safety in any useful sense of the phrase.

By contrast, the investor's concept of the margin of safety—as developed earlier in this chapter—rests upon simple and definite arithmetical reasoning from statistical data. We believe, also, that it is well supported by practical investment experience. There is no guarantee that this fundamental quantitative approach will continue to show favorable results under the unknown conditions of the future. But, equally, there is no valid reason for pessimism on this score.

Thus, in sum, we say that to have a true investment there must be present a true margin of safety. And a true margin of safety is one that can be demonstrated by figures, by persuasive reasoning, and by reference to a body of actual experience.

Extension of the Concept of Investment

To complete our discussion of the margin-of-safety principle we must now make a further distinction between conventional and unconventional investments. Conventional investments are appropriate for the typical portfolio. Under this heading have always come United States government issues and high-grade, dividend-paying common stocks. We have added state and municipal bonds for those who will benefit sufficiently by their tax-exempt features. Also included are first-quality corporate bonds when, as now, they can be bought to yield sufficiently more than United States savings bonds.

Unconventional investments are those that are suitable only for the enterprising investor. They cover a wide range. The broadest category is that of undervalued common stocks of secondary companies, which we recommend for purchase when they can be bought at two-thirds or less of their indicated value. Besides these, there is often a wide choice of medium-grade corporate bonds and preferred stocks when they are selling at such depressed prices as to be obtainable also at a considerable discount from their apparent value. In these cases the average investor would be inclined to call the securities speculative, because in his mind their lack of a first-quality rating is synonymous with a lack of investment merit.

It is our argument that a sufficiently low price can turn a security of mediocre quality into a sound investment opportunity—provided that the buyer is informed and experienced and that he practices adequate diversification. For, if the price is low enough to create a substantial margin of safety, the security thereby meets our criterion of investment. Our favorite supporting illustration is taken from the field of real-estate bonds. In the 1920s, billions of dollars' worth of these issues were sold at par and widely recommended as sound investments. A large proportion had so little margin of value over debt as to be in fact highly speculative in character. In the depression of the 1930s an enormous quantity of these bonds defaulted their interest, and their price collapsed—in some cases below 10 cents on the dollar. At that stage the same advisers who had recommended them at par as safe investments were rejecting them as paper of the most speculative and unattractive type. But as a matter of fact the price depreciation of about 90% made many of these securities exceedingly attractive and reasonably safe—for the true values behind them were four or five times the market quotation.*

The fact that the purchase of these bonds actually resulted in what is generally called "a large speculative profit" did not prevent them from having true investment qualities at their low prices. The "speculative" profit was the purchaser's reward for having made an unusually shrewd investment. They could properly be called *investment* opportunities, since a careful analysis would have shown that the excess of value over price provided a large margin of safety. Thus the very class of "fair-weather investments" which we stated above is a chief source of serious loss to naïve security buyers is likely to afford many sound profit opportunities to the sophisticated operator who may buy them later at pretty much his own price.†

* Graham is saying that there is no such thing as a good or bad stock; there are only cheap stocks and expensive stocks. Even the best company becomes a "sell" when its stock price goes too high, while the worst company is worth buying if its stock goes low enough.

† The very people who considered technology and telecommunications stocks a "sure thing" in late 1999 and early 2000, when they were hellishly overpriced, shunned them as "too risky" in 2002—even (*cont'd on p. 522*)

The whole field of “special situations” would come under our definition of investment operations, because the purchase is always predicated on a thoroughgoing analysis that promises a larger realization than the price paid. Again there are risk factors in each individual case, but these are allowed for in the calculations and absorbed in the overall results of a diversified operation.

To carry this discussion to a logical extreme, we might suggest that a defensible investment operation could be set up by buying such intangible values as are represented by a group of “common-stock option warrants” selling at historically low prices. (This example is intended as somewhat of a shocker.)* The entire value of these warrants rests on the possibility that the related stocks may some day advance above the option price. At the moment they have no exercisable value. Yet, since all investment rests on reasonable future expectations, it is proper to view these warrants in terms of the mathematical chances that some future bull market will create a large increase in their indicated value and in their price. Such a study might well yield the conclusion that there is much more to be gained in such an operation than to be lost and that the chances of an ultimate profit are much better than those of an ultimate loss. If that is so, there is a safety margin present even

(*cont'd from p. 521*) though, in Graham's exact words from an earlier period, “the price depreciation of about 90% made many of these securities exceedingly attractive and reasonably safe.” Similarly, Wall Street's analysts have always tended to call a stock a “strong buy” when its price is high, and to label it a “sell” after its price has fallen—the exact opposite of what Graham (and simple common sense) would dictate. As he does throughout the book, Graham is distinguishing speculation—or buying on the hope that a stock's price will keep going up—from investing, or buying on the basis of what the underlying business is worth.

* Graham uses “common-stock option warrant” as a synonym for “warrant,” a security issued directly by a corporation giving the holder a right to purchase the company's stock at a predetermined price. Warrants have been almost entirely superseded by stock options. Graham quips that he intends the example as a “shocker” because, even in his day, warrants were regarded as one of the market's seediest backwaters. (See the commentary on Chapter 16.)

in this unprepossessing security form. A sufficiently enterprising investor could then include an option-warrant operation in his miscellany of unconventional investments.¹

To Sum Up

Investment is most intelligent when it is most *businesslike*. It is amazing to see how many capable businessmen try to operate in Wall Street with complete disregard of all the sound principles through which they have gained success in their own undertakings. Yet every corporate security may best be viewed, in the first instance, as an ownership interest in, or a claim against, a specific business enterprise. And if a person sets out to make profits from security purchases and sales, he is embarking on a business venture of his own, which must be run in accordance with accepted business principles if it is to have a chance of success.

The first and most obvious of these principles is, "Know what you are doing—know your business." For the investor this means: Do not try to make "business profits" out of securities—that is, returns in excess of normal interest and dividend income—unless you know as much about security values as you would need to know about the value of merchandise that you proposed to manufacture or deal in.

A second business principle: "Do not let anyone else run your business, unless (1) you can supervise his performance with adequate care and comprehension or (2) you have unusually strong reasons for placing implicit confidence in his integrity and ability." For the investor this rule should determine the conditions under which he will permit someone else to decide what is done with his money.

A third business principle: "Do not enter upon an operation—that is, manufacturing or trading in an item—unless a reliable calculation shows that it has a fair chance to yield a reasonable profit. In particular, keep away from ventures in which you have little to gain and much to lose." For the enterprising investor this means that his operations for profit should be based not on optimism but on arithmetic. For every investor it means that when he limits his return to a small figure—as formerly, at least, in a conventional bond or preferred stock—he must demand convincing evidence that he is not risking a substantial part of his principal.

A fourth business rule is more positive: "Have the courage of your knowledge and experience. If you have formed a conclusion from the facts and if you know your judgment is sound, act on it—even though others may hesitate or differ." (You are neither right nor wrong because the crowd disagrees with you. You are right because your data and reasoning are right.) Similarly, in the world of securities, courage becomes the supreme virtue *after* adequate knowledge and a tested judgment are at hand.

Fortunately for the typical investor, it is by no means necessary for his success that he bring these qualities to bear upon his program—*provided* he limits his ambition to his capacity and confines his activities within the safe and narrow path of standard, defensive investment. To achieve *satisfactory* investment results is easier than most people realize; to achieve *superior* results is harder than it looks.

COMMENTARY ON CHAPTER 20

If we fail to anticipate the unforeseen or expect the unexpected in a universe of infinite possibilities, we may find ourselves at the mercy of anyone or anything that cannot be programmed, categorized, or easily referenced.

—Agent Fox Mulder, *The X-Files*

FIRST, DON'T LOSE

What is risk?

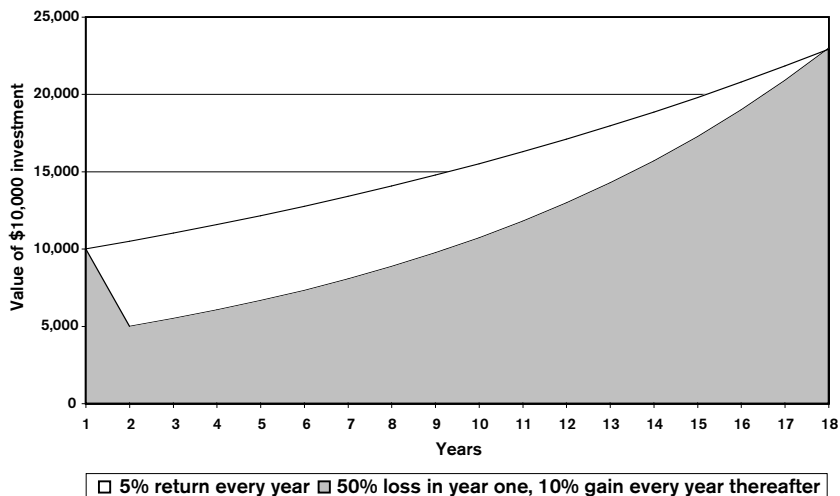
You'll get different answers depending on whom, and when, you ask. In 1999, risk didn't mean losing money; it meant making less money than someone else. What many people feared was bumping into somebody at a barbecue who was getting even richer even quicker by day trading dot-com stocks than they were. Then, quite suddenly, by 2003 risk had come to mean that the stock market might keep dropping until it wiped out whatever traces of wealth you still had left.

While its meaning may seem nearly as fickle and fluctuating as the financial markets themselves, risk has some profound and permanent attributes. The people who take the biggest gambles and make the biggest gains in a bull market are almost always the ones who get hurt the worst in the bear market that inevitably follows. (Being "right" makes speculators even more eager to take extra risk, as their confidence catches fire.) And once you lose big money, you then have to gamble even harder just to get back to where you were, like a race-track or casino gambler who desperately doubles up after every bad bet. Unless you are phenomenally lucky, that's a recipe for disaster. No wonder, when he was asked to sum up everything he had learned in his long career about how to get rich, the legendary financier J. K.

Klingenstein of Wertheim & Co. answered simply: "Don't lose."¹ This graph shows what he meant:

FIGURE 20-1

The Cost of Loss



Imagine that you find a stock that you think can grow at 10% a year even if the market only grows 5% annually. Unfortunately, you are so enthusiastic that you pay too high a price, and the stock loses 50% of its value the first year. Even if the stock then generates double the market's return, it will take you more than 16 years to overtake the market—simply because you paid too much, and lost too much, at the outset.

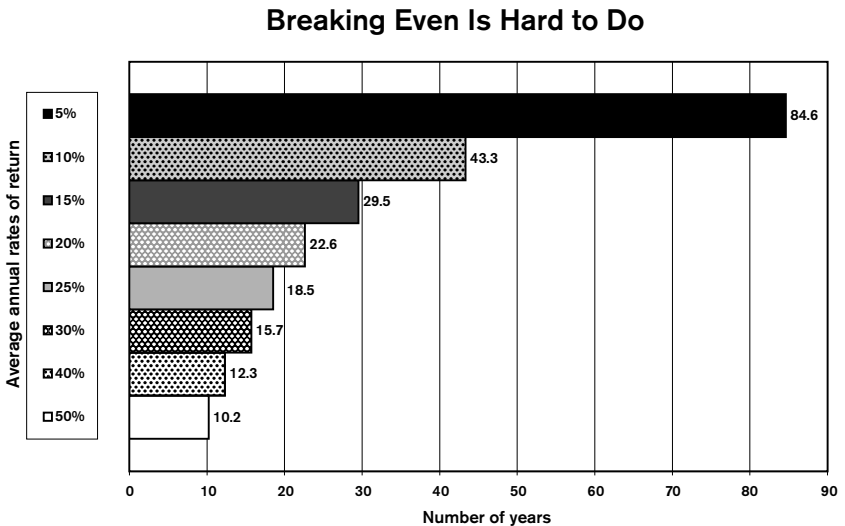
Losing *some* money is an inevitable part of investing, and there's nothing you can do to prevent it. But, to be an intelligent investor, you must take responsibility for ensuring that you never lose *most or all* of your money. The Hindu goddess of wealth, Lakshmi, is often portrayed standing on tiptoe, ready to dart away in the blink of an eye. To keep her sym-

¹ As recounted by investment consultant Charles Ellis in Jason Zweig, "Wall Street's Wisest Man," *Money*, June, 2001, pp. 49–52.

bolically in place, some of Lakshmi's devotees will lash her statue down with strips of fabric or nail its feet to the floor. For the intelligent investor, Graham's "margin of safety" performs the same function: By refusing to pay too much for an investment, you minimize the chances that your wealth will ever disappear or suddenly be destroyed.

Consider this: Over the four quarters ending in December 1999, JDS Uniphase Corp., the fiber-optics company, generated \$673 million in net sales, on which it lost \$313 million. Its tangible assets totaled \$1.5 billion. Yet, on March 7, 2000, JDS Uniphase's stock hit \$153 a share, giving the company a total market value of roughly \$143 billion.² And then, like most "New Era" stocks, it crashed. Anyone who bought it that day and still clung to it at the end of 2002 faced these prospects:

FIGURE 20-2



If you had bought JDS Uniphase at its peak price of \$153.421 on March 7, 2000, and still held it at year-end 2002 (when it closed at \$2.47), how long would it take you to get back to your purchase price at various annual average rates of return?

² JDS Uniphase's share price has been adjusted for later splits.

Even at a robust 10% annual rate of return, it will take more than 43 years to break even on this overpriced purchase!

THE RISK IS NOT IN OUR STOCKS, BUT IN OURSELVES

Risk exists in another dimension: inside you. If you overestimate how well you really understand an investment, or overstate your ability to ride out a temporary plunge in prices, it doesn't matter what you own or how the market does. Ultimately, financial risk resides not in what kinds of investments you have, but in what kind of investor you are. If you want to know what risk really is, go to the nearest bathroom and step up to the mirror. *That's* risk, gazing back at you from the glass.

As you look at yourself in the mirror, what should you watch for? The Nobel-prize-winning psychologist Daniel Kahneman explains two factors that characterize good decisions:

- **“well-calibrated confidence”** (do I understand this investment as well as I think I do?)
- **“correctly-anticipated regret”** (how will I react if my analysis turns out to be wrong?).

To find out whether your confidence is well-calibrated, look in the mirror and ask yourself: “What is the likelihood that my analysis is right?” Think carefully through these questions:

- How much experience do I have? What is my track record with similar decisions in the past?
- What is the typical track record of other people who have tried this in the past?³
- If I am buying, someone else is selling. How likely is it that I know something that this other person (or company) does not know?
- If I am selling, someone else is buying. How likely is it that I know something that this other person (or company) does not know?

³ No one who diligently researched the answer to this question, and honestly accepted the results, would ever have day traded or bought IPOs.

- Have I calculated how much this investment needs to go up for me to break even after my taxes and costs of trading?

Next, look in the mirror to find out whether you are the kind of person who correctly anticipates your regret. Start by asking: “Do I fully understand the consequences if my analysis turns out to be wrong?” Answer that question by considering these points:

- If I’m right, I could make a lot of money. But what if I’m wrong? Based on the historical performance of similar investments, how much could I lose?
- Do I have other investments that will tide me over if this decision turns out to be wrong? Do I already hold stocks, bonds, or funds with a proven record of going up when the kind of investment I’m considering goes down? Am I putting too much of my capital at risk with this new investment?
- When I tell myself, “You have a high tolerance for risk,” how do I know? Have I ever lost a lot of money on an investment? How did it feel? Did I buy more, or did I bail out?
- Am I relying on my willpower alone to prevent me from panicking at the wrong time? Or have I controlled my own behavior in advance by diversifying, signing an investment contract, and dollar-cost averaging?

You should always remember, in the words of the psychologist Paul Slovic, that “risk is brewed from an equal dose of two ingredients—probabilities and consequences.”⁴ Before you invest, you must ensure that you have realistically assessed your probability of being right *and* how you will react to the consequences of being wrong.

PASCAL’S WAGER

The investment philosopher Peter Bernstein has another way of summing this up. He reaches back to Blaise Pascal, the great French mathematician and theologian (1623–1662), who created a thought

⁴ Paul Slovic, “Informing and Educating the Public about Risk,” *Risk Analysis*, vol. 6, no. 4 (1986), p. 412.

experiment in which an agnostic must gamble on whether or not God exists. The ante this person must put up for the wager is his conduct in this life; the ultimate payoff in the gamble is the fate of his soul in the afterlife. In this wager, Pascal asserts, "reason cannot decide" the probability of God's existence. Either God exists or He does not—and only faith, not reason, can answer that question. But while the probabilities in Pascal's wager are a toss-up, the consequences are perfectly clear and utterly certain. As Bernstein explains:

Suppose you act as though God is and [you] lead a life of virtue and abstinence, when in fact there is no god. You will have passed up some goodies in life, but there will be rewards as well. Now suppose you act as though God is not and spend a life of sin, selfishness, and lust when in fact God is. You may have had fun and thrills during the relatively brief duration of your lifetime, but when the day of judgment rolls around you are in big trouble.⁵

Concludes Bernstein: "In making decisions under conditions of uncertainty, the consequences must dominate the probabilities. We never know the future." Thus, as Graham has reminded you in every chapter of this book, the intelligent investor must focus not just on getting the analysis right. You must also ensure against loss if your analysis turns out to be wrong—as even the best analyses will be at least some of the time. The probability of making at least one mistake at some point in your investing lifetime is virtually 100%, and those odds are entirely out of your control. However, you *do* have control over the consequences of being wrong. Many "investors" put essentially all of their money into dot-com stocks in 1999; an online survey of 1,338 Americans by *Money* Magazine in 1999 found that nearly one-tenth of them had at least 85% of their money in Internet stocks. By ignoring Graham's call for a margin of safety, these people took the wrong side of Pascal's wager. Certain that they knew the probabilities of being

⁵ "The Wager," in Blaise Pascal, *Pensées* (Penguin Books, London and New York, 1995), pp. 122–125; Peter L. Bernstein, *Against the Gods* (John Wiley & Sons, New York, 1996), pp. 68–70; Peter L. Bernstein, "Decision Theory in Iambic Pentameter," *Economics & Portfolio Strategy*, January 1, 2003, p. 2.

right, they did nothing to protect themselves against the consequences of being wrong.

Simply by keeping your holdings permanently diversified, and refusing to fling money at Mr. Market's latest, craziest fashions, you can ensure that the consequences of your mistakes will never be catastrophic. No matter what Mr. Market throws at you, you will always be able to say, with a quiet confidence, "This, too, shall pass away."

Postscript

We know very well two partners who spent a good part of their lives handling their own and other people's funds on Wall Street. Some hard experience taught them it was better to be safe and careful rather than to try to make all the money in the world. They established a rather unique approach to security operations, which combined good profit possibilities with sound values. They avoided anything that appeared overpriced and were rather too quick to dispose of issues that had advanced to levels they deemed no longer attractive. Their portfolio was always well diversified, with more than a hundred different issues represented. In this way they did quite well through many years of ups and downs in the general market; they averaged about 20% per annum on the several millions of capital they had accepted for management, and their clients were well pleased with the results.*

In the year in which the first edition of this book appeared an opportunity was offered to the partners' fund to purchase a half-interest in a growing enterprise. For some reason the industry did not have Wall Street appeal at the time and the deal had been turned down by quite a few important houses. But the pair was impressed by the company's possibilities; what was decisive for them was that the price was moderate in relation to current earnings and asset value. The partners went ahead with the acquisition, amounting in dollars to about one-fifth of their fund. They became closely identified with the new business interest, which prospered.†

* The two partners Graham coyly refers to are Jerome Newman and Benjamin Graham himself.

† Graham is describing the Government Employees Insurance Co., or GEICO, in which he and Newman purchased a 50% interest in 1948, right

In fact it did so well that the price of its shares advanced to two hundred times or more the price paid for the half-interest. The advance far outstripped the actual growth in profits, and almost from the start the quotation appeared much too high in terms of the partners' own investment standards. But since they regarded the company as a sort of "family business," they continued to maintain a substantial ownership of the shares despite the spectacular price rise. A large number of participants in their funds did the same, and they became millionaires through their holding in this one enterprise, plus later-organized affiliates.*

Ironically enough, the aggregate of profits accruing from this single investment decision far exceeded the sum of all the others realized through 20 years of wide-ranging operations in the partners' specialized fields, involving much investigation, endless pondering, and countless individual decisions.

Are there morals to this story of value to the intelligent investor? An obvious one is that there are several different ways to make and keep money in Wall Street. Another, not so obvious, is that one lucky break, or one supremely shrewd decision—can we tell them apart?—may count for more than a lifetime of journeyman efforts.¹ But behind the luck, or the crucial decision, there must usually exist a background of preparation and disciplined capacity. One needs to be sufficiently established and recognized so that these opportunities will knock at his particular door. One must

around the time he finished writing *The Intelligent Investor*. The \$712,500 that Graham and Newman put into GEICO was roughly 25% of their fund's assets at the time. Graham was a member of GEICO's board of directors for many years. In a nice twist of fate, Graham's greatest student, Warren Buffett, made an immense bet of his own on GEICO in 1976, by which time the big insurer had slid to the brink of bankruptcy. It turned out to be one of Buffett's best investments as well.

* Because of a legal technicality, Graham and Newman were directed by the U.S. Securities & Exchange Commission to "spin off," or distribute, Graham-Newman Corp.'s GEICO stake to the fund's shareholders. An investor who owned 100 shares of Graham-Newman at the beginning of 1948 (worth \$11,413) and who then held on to the GEICO distribution would have had \$1.66 million by 1972. GEICO's "later-organized affiliates" included Government Employees Financial Corp. and Criterion Insurance Co.

have the means, the judgment, and the courage to take advantage of them.

Of course, we cannot promise a like spectacular experience to all intelligent investors who remain both prudent and alert through the years. We are not going to end with J. J. Raskob's slogan that we made fun of at the beginning: "Everybody can be rich." But interesting possibilities abound on the financial scene, and the intelligent and enterprising investor should be able to find both enjoyment and profit in this three-ring circus. Excitement is guaranteed.

COMMENTARY ON POSTSCRIPT

Successful investing is about managing risk, not avoiding it. At first glance, when you realize that Graham put 25% of his fund into a single stock, you might think he was gambling rashly with his investors' money. But then, when you discover that Graham had painstakingly established that he could liquidate GEICO for at least what he paid for it, it becomes clear that Graham was taking very little financial risk. But he needed enormous courage to take the psychological risk of such a big bet on so unknown a stock.¹

And today's headlines are full of fearful facts and unresolved risks: the death of the 1990s bull market, sluggish economic growth, corporate fraud, the specters of terrorism and war. "Investors don't like uncertainty," a market strategist is intoning right now on financial TV or in today's newspaper. But investors have never liked uncertainty—and yet it is the most fundamental and enduring condition of the investing world. It always has been, and it always will be. At heart, "uncertainty" and "investing" are synonyms. In the real world, no one has ever been given the ability to see that any particular time is the best time to buy stocks. Without a saving faith in the future, no one would ever invest at all. To be an investor, you must be a believer in a better tomorrow.

The most literate of investors, Graham loved the story of Ulysses, told through the poetry of Homer, Alfred Tennyson, and Dante. Late in his life, Graham relished the scene in Dante's *Inferno* when Ulysses describes inspiring his crew to sail westward into the unknown waters beyond the gates of Hercules:

¹ Graham's anecdote is also a powerful reminder that those of us who are not as brilliant as he was must always diversify to protect against the risk of putting too much money into a single investment. When Graham himself admits that GEICO was a "lucky break," that's a signal that most of us cannot count on being able to find such a great opportunity. To keep investing from decaying into gambling, you must diversify.

"O brothers," I said, "who after a hundred thousand
perils have reached the west,
in this little waking vigil
that still remains to our senses,
let us not choose to avoid the experience
of the unpeopled world that lies behind the sun.
Consider the seeds from which you sprang:
You were made not to live like beasts,
but to seek virtue and understanding."
With this little oration I made my shipmates
so eager for the voyage
that it would have hurt to hold them back.
And we swung our stern toward the morning
and turned our oars into wings for the wild flight.²

Investing, too, is an adventure; the financial future is always an uncharted world. With Graham as your guide, your lifelong investing voyage should be as safe and confident as it is adventurous.

² Dante Alighieri, *The Inferno*, Canto XXVI, lines 112–125, translated by Jason Zweig.