

course been difficult as well, but that has not been confined to railroads.) Automobiles, buses, and airlines have drawn off most of their passenger business and left the rest highly unprofitable; the trucks have taken a good deal of their freight traffic. More than half of the railroad mileage of the country has been in bankruptcy (or "trusteeship") at various times during the past 50 years.

But this half-century has not been all downhill for the carriers. There have been prosperous periods for the industry, especially the war years. Some of the lines have managed to maintain their earning power and their dividends despite the general difficulties.

The Standard & Poor's index advanced sevenfold from the low of 1942 to the high of 1968, not much below the percentage gain in the public-utility index. The bankruptcy of the Penn Central Transportation Co., our most important railroad, in 1970 shocked the financial world. Only a year and two years previously the stock sold at close to the highest price level in its long history, and it had paid continuous dividends for more than 120 years! (On p. 423 below we present a brief analysis of this railroad to illustrate how a competent student could have detected the developing weaknesses in the company's picture and counseled against ownership of its securities.) The market level of railroad shares as a whole was seriously affected by this financial disaster.

It is usually unsound to make blanket recommendations of whole classes of securities, and there are equal objections to broad condemnations. The record of railroad share prices in Table 14-6 shows that the group as a whole has often offered chances for a large profit. (But in our view the great advances were in themselves largely unwarranted.) Let us confine our suggestion to this: There is no compelling reason for the investor to own railroad shares; before he buys any he should make sure that he is getting so much value for his money that it would be unreasonable to look for something else instead.*

* Only a few major rail stocks now remain, including Burlington Northern, CSX, Norfolk Southern, and Union Pacific. The advice in this section is at least as relevant to airline stocks today—with their massive current losses and a half-century of almost incessantly poor results—as it was to railroads in Graham's day.

Selectivity for the Defensive Investor

Every investor would like his list to be better or more promising than the average. Hence the reader will ask whether, if he gets himself a competent adviser or security analyst, he should not be able to count on being supplied with an investment package of really superior merits. "After all," he may say, "the rules you have outlined are pretty simple and easygoing. A highly trained analyst ought to be able to use all his skill and techniques to improve substantially on something as obvious as the Dow Jones list. If not, what good are all his statistics, calculations, and pontifical judgments?"

Suppose, as a practical test, we had asked a hundred security analysts to choose the "best" five stocks in the Dow Jones Average, to be bought at the end of 1970. Few would have come up with identical choices and many of the lists would have differed completely from each other.

This is not so surprising as it may at first appear. The underlying reason is that the current price of each prominent stock pretty well reflects the salient factors in its financial record plus the general opinion as to its future prospects. Hence the view of any analyst that one stock is a better buy than the rest must arise to a great extent from his personal partialities and expectations, or from the placing of his emphasis on one set of factors rather than on another in his work of evaluation. If all analysts were agreed that one particular stock was better than all the rest, that issue would quickly advance to a price which would offset all of its previous advantages.*

* Graham is summarizing the "efficient markets hypothesis," or EMH, an academic theory claiming that the price of each stock incorporates all publicly available information about the company. With millions of investors scouring the market every day, it is unlikely that severe mispricings can persist for long. An old joke has two finance professors walking along the sidewalk; when one spots a \$20 bill and bends over to pick it up, the other grabs his arm and says, "Don't bother. If it was really a \$20 bill, someone would have taken it already." While the market is not perfectly efficient, it is pretty close most of the time—so the intelligent investor will stoop to pick up the stock market's \$20 bills only after researching them thoroughly and minimizing the costs of trading and taxes.

Our statement that the current price reflects both known facts and future expectations was intended to emphasize the double basis for market valuations. Corresponding with these two kinds of value elements are two basically different approaches to security analysis. To be sure, every competent analyst looks forward to the future rather than backward to the past, and he realizes that his work will prove good or bad depending on what *will* happen and not on what *has* happened. Nevertheless, the future itself can be approached in two different ways, which may be called the way of *prediction* (or projection) and the way of *protection*.*

Those who emphasize prediction will endeavor to anticipate fairly accurately just what the company will accomplish in future years—in particular whether earnings will show pronounced and persistent growth. These conclusions may be based on a very careful study of such factors as supply and demand in the industry—or volume, price, and costs—or else they may be derived from a rather naïve projection of the line of past growth into the future. If these authorities are convinced that the fairly long-term prospects are unusually favorable, they will almost always recommend the stock for purchase without paying too much regard to the level at which it is selling. Such, for example, was the general attitude with respect to the air-transport stocks—an attitude that persisted for many years despite the distressingly bad results often shown after 1946. In the Introduction we have commented on the disparity between the strong price action and the relatively disappointing earnings record of this industry.

* This is one of the central points of Graham's book. All investors labor under a cruel irony: We invest *in* the present, but we invest *for* the future. And, unfortunately, the future is almost entirely uncertain. Inflation and interest rates are undependable; economic recessions come and go at random; geopolitical upheavals like war, commodity shortages, and terrorism arrive without warning; and the fate of individual companies and their industries often turns out to be the opposite of what most investors expect. Therefore, investing on the basis of *projection* is a fool's errand; even the forecasts of the so-called experts are less reliable than the flip of a coin. For most people, investing on the basis of *protection*—from overpaying for a stock and from overconfidence in the quality of their own judgment—is the best solution. Graham expands on this concept in Chapter 20.

By contrast, those who emphasize protection are always especially concerned with the price of the issue at the time of study. Their main effort is to assure themselves of a substantial margin of indicated present value above the market price—which margin could absorb unfavorable developments in the future. Generally speaking, therefore, it is not so necessary for them to be enthusiastic over the company's long-run prospects as it is to be reasonably confident that the enterprise will get along.

The first, or predictive, approach could also be called the qualitative approach, since it emphasizes prospects, management, and other nonmeasurable, albeit highly important, factors that go under the heading of quality. The second, or protective, approach may be called the quantitative or statistical approach, since it emphasizes the measurable relationships between selling price and earnings, assets, dividends, and so forth. Incidentally, the quantitative method is really an extension—into the field of common stocks—of the viewpoint that security analysis has found to be sound in the selection of bonds and preferred stocks for investment.

In our own attitude and professional work we were always committed to the quantitative approach. From the first we wanted to make sure that we were getting ample value for our money in concrete, demonstrable terms. We were not willing to accept the prospects and promises of the future as compensation for a lack of sufficient value in hand. This has by no means been the standard viewpoint among investment authorities; in fact, the majority would probably subscribe to the view that prospects, quality of management, other intangibles, and "the human factor" far outweigh the indications supplied by any study of the past record, the balance sheet, and all the other cold figures.

Thus this matter of choosing the "best" stocks is at bottom a highly controversial one. Our advice to the defensive investor is that he let it alone. Let him emphasize diversification more than individual selection. Incidentally, the universally accepted idea of diversification is, in part at least, the negation of the ambitious pretensions of selectivity. If one *could* select the best stocks unerringly, one would only lose by diversifying. Yet within the limits of the four most general rules of common-stock selection suggested for the defensive investor (on pp. 114–115) there is room for a rather considerable freedom of preference. At the worst the indulgence of

such preferences should do no harm; beyond that, it may add something worthwhile to the results. With the increasing impact of technological developments on long-term corporate results, the investor cannot leave them out of his calculations. Here, as elsewhere, he must seek a mean between neglect and overemphasis.

COMMENTARY ON CHAPTER 14

He that resteth upon gains certain, shall hardly grow to great riches; and he that puts all upon adventures, doth oftentimes break and come to poverty: it is good therefore to guard adventures with certainties that may uphold losses.

—*Sir Francis Bacon*

GETTING STARTED

How should you tackle the nitty-gritty work of stock selection? Graham suggests that the defensive investor can, “most simply,” buy every stock in the DowJones Industrial Average. Today’s defensive investor can do even better—by buying a total stock-market index fund that holds essentially every stock worth having. A low-cost index fund is the best tool ever created for low-maintenance stock investing—and any effort to improve on it takes more work (and incurs more risk and higher costs) than a truly defensive investor can justify.

Researching and selecting your own stocks is not necessary; for most people, it is not even advisable. However, some defensive investors do enjoy the diversion and intellectual challenge of picking individual stocks—and, if you have survived a bear market and *still* enjoy stock picking, then nothing that Graham or I could say will dissuade you. In that case, instead of making a total stock market index fund your complete portfolio, make it the foundation of your portfolio. Once you have that foundation in place, you can experiment around the edges with your own stock choices. Keep 90% of your stock money in an index fund, leaving 10% with which to try picking your own stocks. Only after you build that solid core should you explore. (To learn why such broad diversification is so important, please see the sidebar on the following page.)

WHY DIVERSIFY?

During the bull market of the 1990s, one of the most common criticisms of diversification was that it lowers your potential for high returns. After all, if you could identify the next Microsoft, wouldn't it make sense for you to put all your eggs into that one basket?

Well, sure. As the humorist Will Rogers once said, "Don't gamble. Take all your savings and buy some good stock and hold it till it goes up, then sell it. If it don't go up, don't buy it."

However, as Rogers knew, 20/20 foresight is not a gift granted to most investors. No matter how confident we feel, there's no way to find out whether a stock will go up until *after* we buy it. Therefore, the stock you think is "the next Microsoft" may well turn out to be the next MicroStrategy instead. (That former market star went from \$3,130 per share in March 2000 to \$15.10 at year-end 2002, an apocalyptic loss of 99.5%).¹ Keeping your money spread across many stocks and industries is the only reliable insurance against the risk of being wrong.

But diversification doesn't just minimize your odds of being wrong. It also maximizes your chances of being right. Over long periods of time, a handful of stocks turn into "superstocks" that go up 10,000% or more. *Money* Magazine identified the 30 best-performing stocks over the 30 years ending in 2002—and, even with 20/20 hindsight, the list is startlingly unpredictable. Rather than lots of technology or health-care stocks, it includes Southwest Airlines, Worthington Steel, Dollar General discount stores, and snuff-tobacco maker UST Inc.² If you think you would have been willing to bet big on any of those stocks back in 1972, you are kidding yourself.

Think of it this way: In the huge market haystack, only a few needles ever go on to generate truly gigantic gains. The more of the haystack you own, the higher the odds go that you will end up finding at least one of those needles. By owning the entire haystack (ideally through an index fund that tracks the total U.S. stock market) you can be sure to find every needle, thus capturing the returns of all the superstocks. Especially if you are a

defensive investor, why look for the needles when you can own the whole haystack?

¹ Adjusted for stock splits. To many people, MicroStrategy really did look like the next Microsoft in early 2000; its stock had gained 566.7% in 1999, and its chairman, Michael Saylor, declared that “our future today is better than it was 18 months ago.” The U.S. Securities and Exchange Commission later accused MicroStrategy of accounting fraud, and Saylor paid an \$8.3 million fine to settle the charges.

² Jon Birger, “The 30 Best Stocks,” *Money*, Fall 2002, pp. 88–95.

TESTING, TESTING

Let’s briefly update Graham’s criteria for stock selection.

Adequate size. Nowadays, “to exclude small companies,” most defensive investors should steer clear of stocks with a total market value of less than \$2 billion. In early 2003, that still left you with 437 of the companies in the Standard & Poor’s 500-stock index to choose from.

However, today’s defensive investors—unlike those in Graham’s day—can conveniently own small companies by buying a mutual fund specializing in small stocks. Again, an index fund like Vanguard Small-Cap Index is the first choice, although active funds are available at reasonable cost from such firms as Ariel, T. Rowe Price, Royce, and Third Avenue.

Strong financial condition. According to market strategists Steve Galbraith and Jay Lasus of Morgan Stanley, at the beginning of 2003 about 120 of the companies in the S & P 500 index met Graham’s test of a 2-to-1 current ratio. With current assets at least twice their current liabilities, these firms had a sizeable cushion of working capital that—on average—should sustain them through hard times.

Wall Street has always abounded in bitter ironies, and the bursting of the growth-stock bubble has created a doozy: In 1999 and 2000, high-tech, bio-tech, and telecommunications stocks were supposed to provide “aggressive growth” and ended up giving most of their investors aggressive shrinkage instead. But, by early 2003, the wheel had come full circle, and many of those aggressive growth stocks had become financially conservative—loaded with working capital, rich in cash, and often debt-free. This table provides a sampler:

FIGURE 14-1 Everything New Is Old Again

Company	Current Assets	Current Liabilities	Ratio of Current Assets to Current Liabilities	Long-Term Debt	Ratio of Long-Term Debt to Working Capital
Applied Micro Circuits	1091.2	61.9	17.6	0	none
Linear Technology	1736.4	148.1	11.7	0	none
QLogic Corp.	713.1	69.6	10.2	0	none
Analog Devices	3711.1	467.3	7.9	1274.5	0.39
Qualcomm Inc.	4368.5	654.9	6.7	156.9	0.04
Maxim Integrated Products	1390.5	212.3	6.5	0	none
Applied Materials	7878.7	1298.4	6.1	573.9	0.09
Tellabs Inc.	1533.6	257.3	6.0	0.5	0.0004
Scientific-Atlanta	1259.8	252.4	5.0	8.8	0.01
Altera Corp.	1176.2	240.5	4.9	0	none
Xilinx Inc.	1108.8	228.1	4.9	0	none
American Power Conversion	1276.3	277.4	4.6	0	none
Chiron Corp.	1393.8	306.7	4.5	414.9	0.38
Biogen Inc.	1194.7	265.4	4.5	39	0.04
Novellus Systems	1633.9	381.6	4.3	0	none
Amgen Inc.	6403.5	1529.2	4.2	3039.7	0.62
LSI Logic Corp.	1626.1	397.8	4.1	1287.1	1.05
Rowan Cos.	469.9	116.0	4.1	494.8	1.40
Biomet Inc.	1000.0	248.6	4.0	0	none
Siebel Systems	2588.4	646.5	4.0	315.6	0.16

All figures in millions of dollars from latest available financial statements as of 12/31/02. Working capital is current assets minus current liabilities.

Long-term debt includes preferred stock, excludes deferred tax liabilities.

Sources: Morgan Stanley; Baseline; EDGAR database at www.sec.gov.

In 1999, most of these companies were among the hottest of the market's darlings, offering the promise of high potential growth. By early 2003, they offered hard evidence of true value.

The lesson here is not that these stocks were “a sure thing,” or that you should rush out and buy everything (or anything) in this table.¹ Instead, you should realize that a defensive investor can always prosper by looking patiently and calmly through the wreckage of a bear market. Graham’s criterion of financial strength still works: If you build a diversified basket of stocks whose current assets are at least double their current liabilities, and whose long-term debt does not exceed working capital, you should end up with a group of conservatively financed companies with plenty of staying power. The best values today are often found in the stocks that were once hot and have since gone cold. Throughout history, such stocks have often provided the margin of safety that a defensive investor demands.

Earnings stability. According to Morgan Stanley, 86% of all the companies in the S & P 500 index have had positive earnings in every year from 1993 through 2002. So Graham’s insistence on “some earnings for the common stock in each of the past ten years” remains a valid test—tough enough to eliminate chronic losers, but not so restrictive as to limit your choices to an unrealistically small sample.

Dividend record. As of early 2003, according to Standard & Poor’s, 354 companies in the S & P 500 (or 71% of the total) paid a dividend. No fewer than 255 companies have paid a dividend for at least 20 years in a row. And, according to S & P, 57 companies in the index have *raised* their dividends for at least 25 consecutive years. That’s no guarantee that they will do so forever, but it’s a comforting sign.

Earnings growth. How many companies in the S & P 500 increased their earnings per share by “at least one third,” as Graham requires, over the 10 years ending in 2002? (We’ll average each company’s earnings from 1991 through 1993, and then determine whether the average earnings from 2000 through 2002 were at least 33% higher.) According to Morgan Stanley, 264 companies in the S & P 500 met that test. But here, it seems, Graham set a very low hurdle; 33% cumulative growth over a decade is less than a 3% average annual increase. Cumulative growth in earnings per share of at least 50%—or a 4% average annual rise—is a bit less conservative. No

¹ By the time you read this, much will already have changed since year-end 2002.

FIGURE 14-2 Steady Eddies

These companies have paid higher dividends with each passing year with no exception.

Company	Sector	Cash dividends paid each year since . . .	Number of annual dividend increases in the past 40 years
3M Co	Industrials	1916	40
Abbott Laboratories	Health Care	1926	35
ALLTEL Corp	Telecomm. Services	1961	37
Altria Group (formerly Philip Morris)	Consumer Staples	1928	36
AmSouth Bancorp	Financials	1943	34
Anheuser-Busch Cos	Consumer Staples	1932	39
Archer-Daniels-Midland	Consumer Staples	1927	32
Automatic Data Proc	Industrials	1974	29
Avery Dennison Corp	Industrials	1964	36
Bank of America	Financials	1903	36
Bard (C. R.)	Health Care	1960	36
Becton, Dickinson	Health Care	1926	38
CenturyTel Inc	Telecomm. Services	1974	29
Chubb Corp	Financials	1902	28
Clorox Co	Consumer Staples	1968	30
Coca-Cola Co	Consumer Staples	1893	40
Comerica Inc	Financials	1936	39
ConAgra Foods	Consumer Staples	1976	32
Consolidated Edison	Utilities	1885	31
Donnelley(R. R.) & Sons	Industrials	1911	36
Dover Corp	Industrials	1947	37
Emerson Electric	Industrials	1947	40
Family Dollar Stores	Consumer Discretionary	1976	27
First Tenn Natl	Financials	1895	31
Gannett Co	Consumer Discretionary	1929	35
General Electric	Industrials	1899	35
Grainger (W. W.)	Industrials	1965	33
Heinz (H. J.)	Consumer Staples	1911	38

Household Intl.	Financials	1926	40
Jefferson-Pilot	Financials	1913	36
Johnson & Johnson	Health Care	1944	40
Johnson Controls	Consumer Discretionary	1887	29
KeyCorp	Financials	1963	36
Kimberly-Clark	Consumer Staples	1935	34
Leggett & Platt	Consumer Discretionary	1939	33
Lilly (Eli)	Health Care	1885	38
Lowe's Cos.	Consumer Discretionary	1961	40
May Dept Stores	Consumer Discretionary	1911	31
McDonald's Corp.	Consumer Discretionary	1976	27
McGraw-Hill Cos.	Consumer Discretionary	1937	35
Merck & Co	Health Care	1935	38
Nucor Corp.	Materials	1973	30
PepsiCo Inc.	Consumer Staples	1952	35
Pfizer, Inc.	Health Care	1901	39
PPG Indus.	Materials	1899	37
Procter & Gamble	Consumer Staples	1891	40
Regions Financial	Financials	1968	32
Rohm & Haas	Materials	1927	38
Sigma-Aldrich	Materials	1970	28
Stanley Works	Consumer Discretionary	1877	37
Supervalu Inc.	Consumer Staples	1936	36
Target Corp.	Consumer Discretionary	1965	34
TECO Energy	Utilities	1900	40
U.S. Bancorp	Financials	1999	35
VF Corp.	Consumer Discretionary	1941	35
Wal-Mart Stores	Consumer Discretionary	1973	29
Walgreen Co.	Consumer Staples	1933	31

Source: Standard & Poor's Corp.

Data as of 12/31/2002.

fewer than 245 companies in the S & P 500 index met that criterion as of early 2003, leaving the defensive investor an ample list to choose from. (If you double the cumulative growth hurdle to 100%, or 7% average annual growth, then 198 companies make the cutoff.)

Moderate P/E ratio. Graham recommends limiting yourself to stocks whose current price is no more than 15 times average earnings over the past three years. Incredibly, the prevailing practice on Wall Street today is to value stocks by dividing their current price by something called “next year’s earnings.” That gives what is sometimes called “the forward P/E ratio.” But it’s nonsensical to derive a price/earnings ratio by dividing the known current price by unknown future earnings. Over the long run, money manager David Dreman has shown, 59% of Wall Street’s “consensus” earnings forecasts miss the mark by a mortifyingly wide margin—either underestimating or overestimating the actual reported earnings by at least 15%.² Investing your money on the basis of what these myopic soothsayers predict for the coming year is as risky as volunteering to hold up the bulls-eye at an archery tournament for the legally blind. Instead, calculate a stock’s price/earnings ratio yourself, using Graham’s formula of current price divided by average earnings over the past three years.³

As of early 2003, how many stocks in the Standard & Poor’s 500 index were valued at no more than 15 times their average earnings of 2000 through 2002? According to Morgan Stanley, a generous total of 185 companies passed Graham’s test.

Moderate price-to-book ratio. Graham recommends a “ratio of price to assets” (or price-to-book-value ratio) of no more than 1.5. In recent years, an increasing proportion of the value of companies has come from intangible assets like franchises, brand names, and patents and trademarks. Since these factors (along with goodwill from acquisitions) are excluded from the standard definition of book value, most companies today are priced at higher price-to-book multiples than in Graham’s day. According to Morgan Stanley, 123 of the companies in the S & P 500 (or one in four) are priced below 1.5 times book value.

² David Dreman, “Bubbles and the Role of Analysts’ Forecasts,” *The Journal of Psychology and Financial Markets*, vol. 3, no. 1 (2002), pp. 4–14.

³ You can calculate this ratio by hand from a company’s annual reports or obtain the data at websites like www.morningstar.com or <http://finance.yahoo.com>.

All told, 273 companies (or 55% of the index) have price-to-book ratios of less than 2.5.

What about Graham's suggestion that you multiply the P/E ratio by the price-to-book ratio and see whether the resulting number is below 22.5? Based on data from Morgan Stanley, at least 142 stocks in the S & P 500 could pass that test as of early 2003, including Dana Corp., Electronic Data Systems, Sun Microsystems, and Washington Mutual. So Graham's "blended multiplier" still works as an initial screen to identify reasonably-priced stocks.

DUE DILIGENCE

No matter how defensive an investor you are—in Graham's sense of wishing to minimize the work you put into picking stocks—there are a couple of steps you cannot afford to skip:

Do your homework. Through the EDGAR database at www.sec.gov, you get instant access to a company's annual and quarterly reports, along with the proxy statement that discloses the managers' compensation, ownership, and potential conflicts of interest. Read at least five years' worth.⁴

Check out the neighborhood. Websites like <http://quicktake.morningstar.com>, <http://finance.yahoo.com> and www.quicken.com can readily tell you what percentage of a company's shares are owned by institutions. Anything over 60% suggests that a stock is scarcely undiscovered and probably "overowned." (When big institutions sell, they tend to move in lockstep, with disastrous results for the stock. Imagine all the Radio City Rockettes toppling off the front edge of the stage at once and you get the idea.) Those websites will also tell you who the largest owners of the stock are. If they are money-management firms that invest in a style similar to your own, that's a good sign.

⁴ For more on what to look for, see the commentary on Chapters 11, 12, and 19. If you are not willing to go to the minimal effort of reading the proxy and making basic comparisons of financial health across five years' worth of annual reports, then you are too defensive to be buying individual stocks at all. Get yourself out of the stock-picking business and into an index fund, where you belong.

CHAPTER 15

Stock Selection for the Enterprising Investor

*I*n the previous chapter we have dealt with common-stock selection in terms of broad groups of eligible securities, from which the defensive investor is free to make up any list that he or his adviser prefers, provided adequate diversification is achieved. Our emphasis in selection has been chiefly on exclusions—advising on the one hand against all issues of recognizably poor quality, and on the other against the highest-quality issues if their price is so high as to involve a considerable speculative risk. In this chapter, addressed to the enterprising investor, we must consider the possibilities and the means of making *individual* selections which are likely to prove more profitable than an across-the-board average.

What are the prospects of doing this successfully? We would be less than frank, as the euphemism goes, if we did not at the outset express some grave reservations on this score. At first blush the case for successful selection appears self-evident. To get average results—e.g., equivalent to the performance of the DJIA—should require no special ability of any kind. All that is needed is a portfolio identical with, or similar to, those thirty prominent issues. Surely, then, by the exercise of even a moderate degree of skill—derived from study, experience, and native ability—it should be possible to obtain substantially better results than the DJIA.

Yet there is considerable and impressive evidence to the effect that this is very hard to do, even though the qualifications of those trying it are of the highest. The evidence lies in the record of the numerous investment companies, or “funds,” which have been in operation for many years. Most of these funds are large enough to command the services of the best financial or security analysts in the field, together with all the other constituents of an adequate research department. Their expenses of operation, when spread

over their ample capital, average about one-half of 1% a year thereon, or less. These costs are not negligible in themselves; but when they are compared with the approximately 15% annual overall return on common stocks generally in the decade 1951–1960, and even the 6% return in 1961–1970, they do not bulk large. A small amount of superior selective ability should easily have overcome that expense handicap and brought in a superior net result for the fund shareholders.

Taken as a whole, however, the all-common-stock funds failed over a long span of years to earn quite as good a return as was shown on Standard & Poor's 500-stock averages or the market as a whole. This conclusion has been substantiated by several comprehensive studies. To quote the latest one before us, covering the period 1960–1968:*

It appears from these results that random portfolios of New York Stock Exchange stocks with equal investment in each stock performed on the average better over the period than did mutual funds in the same risk class. The differences were fairly substantial for the low- and medium-risk portfolios (3.7% and 2.5% respectively per annum), but quite small for the high-risk portfolios (0.2% per annum).¹

As we pointed out in Chapter 9, these comparative figures in no way invalidate the usefulness of the investment funds as a financial institution. For they do make available to all members of the

* The Friend-Blume-Crockett research covered January 1960, through June 1968, and compared the performance of more than 100 major mutual funds against the returns on portfolios constructed randomly from more than 500 of the largest stocks listed on the NYSE. The funds in the Friend-Blume-Crockett study did better from 1965 to 1968 than they had in the first half of the measurement period, much as Graham found in his own research (see above, pp. 158 and 229–232). But that improvement did not last. And the thrust of these studies—that mutual funds, on average, underperform the market by a margin roughly equal to their operating expenses and trading costs—has been reconfirmed so many times that anyone who doubts them should found a financial chapter of The Flat Earth Society.

investing public the possibility of obtaining approximately average results on their common-stock commitments. For a variety of reasons, most members of the public who put their money in common stocks of their own choice fail to do nearly as well. But to the objective observer the failure of the funds to better the performance of a broad average is a pretty conclusive indication that such an achievement, instead of being easy, is in fact extremely difficult.

Why should this be so? We can think of two different explanations, each of which may be partially applicable. The first is the possibility that the stock market does in fact reflect in the current prices not only all the important facts about the companies' past and current performance, but also whatever expectations can be reasonably formed as to their future. If this is so, then the diverse market movements which subsequently take place—and these are often extreme—must be the result of new developments and probabilities that could not be reliably foreseen. This would make the price movements essentially fortuitous and random. To the extent that the foregoing is true, the work of the security analyst—however intelligent and thorough—must be largely ineffective, because in essence he is trying to predict the unpredictable.

The very multiplication of the number of security analysts may have played an important part in bringing about this result. With hundreds, even thousands, of experts studying the value factors behind an important common stock, it would be natural to expect that its current price would reflect pretty well the consensus of informed opinion on its value. Those who would prefer it to other issues would do so for reasons of personal partiality or optimism that could just as well be wrong as right.

We have often thought of the analogy between the work of the host of security analysts on Wall Street and the performance of master bridge players at a duplicate-bridge tournament. The former try to pick the stocks "most likely to succeed"; the latter to get top score for each hand played. Only a limited few can accomplish either aim. To the extent that all the bridge players have about the same level of expertness, the winners are likely to be determined by "breaks" of various sorts rather than superior skill. On Wall Street the leveling process is helped along by the freemasonry that exists in the profession, under which ideas and discoveries are quite freely shared at the numerous get-togethers of various sorts.

It is almost as if, at the analogous bridge tournament, the various experts were looking over each other's shoulders and arguing out each hand as it was played.

The second possibility is of a quite different sort. Perhaps many of the security analysts are handicapped by a flaw in their basic approach to the problem of stock selection. They seek the industries with the best prospects of growth, and the companies in these industries with the best management and other advantages. The implication is that they will buy into such industries and such companies at any price, however high, and they will avoid less promising industries and companies no matter how low the price of their shares. This would be the only correct procedure if the earnings of the good companies were sure to grow at a rapid rate indefinitely in the future, for then in theory their value would be infinite. And if the less promising companies were headed for extinction, with no salvage, the analysts would be right to consider them unattractive at any price.

The truth about our corporate ventures is quite otherwise. Extremely few companies have been able to show a high rate of uninterrupted growth for long periods of time. Remarkably few, also, of the larger companies suffer ultimate extinction. For most, their history is one of vicissitudes, of ups and downs, of change in their relative standing. In some the variations "from rags to riches and back" have been repeated on almost a cyclical basis—the phrase used to be a standard one applied to the steel industry—for others spectacular changes have been identified with deterioration or improvement of management.*

How does the foregoing inquiry apply to the enterprising investor who would like to make individual selections that will yield superior results? It suggests first of all that he is taking on a

* As we discuss in the commentary on Chapter 9, there are several other reasons mutual funds have not been able to outperform the market averages, including the low returns on the funds' cash balances and the high costs of researching and trading stocks. Also, a fund holding 120 companies (a typical number) can trail the S & P 500-stock index if *any* of the other 380 companies in that benchmark turns out to be a great performer. The fewer stocks a fund owns, the more likely it is to miss "the next Microsoft."

difficult and perhaps impracticable assignment. Readers of this book, however intelligent and knowing, could scarcely expect to do a better job of portfolio selection than the top analysts of the country. But if it is true that a fairly large segment of the stock market is often discriminated against or entirely neglected in the standard analytical selections, then the intelligent investor may be in a position to profit from the resultant undervaluations.

But to do so he must follow specific methods that are not generally accepted on Wall Street, since those that are so accepted do not seem to produce the results everyone would like to achieve. It would be rather strange if—with all the brains at work professionally in the stock market—there could be approaches which are both sound and relatively unpopular. Yet our own career and reputation have been based on this unlikely fact.*

A Summary of the Graham-Newman Methods

To give concreteness to the last statement, it should be worthwhile to give a brief account of the types of operations we engaged in during the thirty-year life of Graham-Newman Corporation, between 1926 and 1956.† These were classified in our records as follows:

Arbitrages: The purchase of a security and the simultaneous sale

* In this section, as he did also on pp. 363–364, Graham is summarizing the Efficient Market Hypothesis. Recent appearances to the contrary, the problem with the stock market today is not that so many financial analysts are idiots, but rather that so many of them are so smart. As more and more smart people search the market for bargains, that very act of searching makes those bargains rarer—and, in a cruel paradox, makes the analysts look as if they lack the intelligence to justify the search. The market's valuation of a given stock is the result of a vast, continuous, real-time operation of collective intelligence. Most of the time, for most stocks, that collective intelligence gets the valuation approximately right. Only rarely does Graham's "Mr. Market" (see Chapter 8) send prices wildly out of whack.

† Graham launched Graham-Newman Corp. in January 1936, and dissolved it when he retired from active money management in 1956; it was the successor to a partnership called the Benjamin Graham Joint Account, which he ran from January 1926, through December 1935.

of one or more other securities into which it was to be exchanged under a plan of reorganization, merger, or the like.

Liquidations: Purchase of shares which were to receive one or more cash payments in liquidation of the company's assets.

Operations of these two classes were selected on the twin basis of (a) a calculated annual return of 20% or more, and (b) our judgment that the chance of a successful outcome was at least four out of five.

Related Hedges: The purchase of convertible bonds or convertible preferred shares, and the simultaneous sale of the common stock into which they were exchangeable. The position was established at close to a parity basis—i.e., at a small maximum loss if the senior issue had actually to be converted and the operation closed out in that way. But a profit would be made if the common stock fell considerably more than the senior issue, and the position closed out in the market.

Net-Current-Asset (or "Bargain") Issues: The idea here was to acquire as many issues as possible at a cost for each of less than their book value in terms of net-current-assets alone—i.e., giving no value to the plant account and other assets. Our purchases were made typically at two-thirds or less of such stripped-down asset value. In most years we carried a wide diversification here—at least 100 different issues.

We should add that from time to time we had some large-scale acquisitions of the control type, but these are not relevant to the present discussion.

We kept close track of the results shown by each class of operation. In consequence of these follow-ups we discontinued two broader fields, which were found not to have shown satisfactory overall results. The first was the purchase of apparently attractive issues—based on our general analysis—which were not obtainable at less than their working-capital value alone. The second were "unrelated" hedging operations, in which the purchased security was not exchangeable for the common shares sold. (Such operations correspond roughly to those recently embarked on by the new group of "hedge funds" in the investment-company field.* In

* An "unrelated" hedge involves buying a stock or bond issued by one company and short-selling (or betting on a decline in) a security issued by a dif-

both cases a study of the results realized by us over a period of ten years or more led us to conclude that the profits were not sufficiently dependable—and the operations not sufficiently “headache proof”—to justify our continuing them.

Hence from 1939 on our operations were limited to “self-liquidating” situations, related hedges, working-capital bargains, and a few control operations. Each of these classes gave us quite consistently satisfactory results from then on, with the special feature that the related hedges turned in good profits in the bear markets when our “undervalued issues” were not doing so well.

We hesitate to prescribe our own diet for any large number of intelligent investors. Obviously, the professional techniques we have followed are not suitable for the defensive investor, who by definition is an amateur. As for the aggressive investor, perhaps only a small minority of them would have the type of temperament needed to limit themselves so severely to only a relatively small part of the world of securities. Most active-minded practitioners would prefer to venture into wider channels. Their natural hunting grounds would be the entire field of securities that they felt (a) were certainly not overvalued by conservative measures, and (b) appeared decidedly more attractive—because of their prospects or past record, or both—than the average common stock. In such choices they would do well to apply various tests of quality and price-reasonableness along the lines we have proposed for the defensive investor. But they should be less inflexible, permitting a considerable plus in one factor to offset a small black mark in another. For example, he might not rule out a company which had shown a deficit in a year such as 1970, if large average earnings and other important attributes made the stock look cheap. The enterprising investor may confine his choice to industries and companies about which he holds an optimistic view, but we counsel strongly against paying a high price for a stock (in relation to earn-

ferent company. A “related” hedge involves buying and selling different stocks or bonds issued by the same company. The “new group” of hedge funds described by Graham were widely available around 1968, but later regulation by the U.S. Securities and Exchange Commission restricted access to hedge funds for the general public.

ings and assets) because of such enthusiasm. If he followed our philosophy in this field he would more likely be the buyer of important cyclical enterprises—such as steel shares perhaps—when the current situation is unfavorable, the near-term prospects are poor, and the low price fully reflects the current pessimism.*

Secondary Companies

Next in order for examination and possible selection would come secondary companies that are making a good showing, have a satisfactory past record, but appear to hold no charm for the public. These would be enterprises on the order of ELTRA and Emhart at their 1970 closing prices. (See Chapter 13 above.) There are various ways of going about locating such companies. We should like to try a novel approach here and give a reasonably detailed exposition of one such exercise in stock selection. Ours is a double purpose. Many of our readers may find a substantial practical value in the method we shall follow, or it may suggest comparable methods to try out. Beyond that what we shall do may help them to come to grips with the real world of common stocks, and introduce them to one of the most fascinating and valuable little volumes in existence. It is Standard & Poor's *Stock Guide*, published monthly, and made available to the general public under annual subscription. In addition many brokerage firms distribute the *Guide* to their clients (on request.)

The great bulk of the *Guide* is given over to about 230 pages of condensed statistical information on the stocks of more than 4,500 companies. These include all the issues listed on the various exchanges, say 3,000, plus some 1,500 unlisted issues. Most of the items needed for a first and even a second look at a given company appear in this compendium. (From our viewpoint the important missing datum is the net-asset-value, or book value, per share, which can be found in the larger Standard & Poor's volumes and elsewhere.)

* In 2003, an intelligent investor following Graham's train of thought would be searching for opportunities in the technology, telecommunications, and electric-utility industries. History has shown that yesterday's losers are often tomorrow's winners.

The investor who likes to play around with corporate figures will find himself in clover with the *Stock Guide*. He can open to any page and see before his eyes a condensed panorama of the splendors and miseries of the stock market, with all-time high and low prices going as far back as 1936, when available. He will find companies that have multiplied their price 2,000 times from the minuscule low to the majestic high. (For prestigious IBM the growth was "only" 333 times in that period.) He will find (not so exceptionally) a company whose shares advanced from $\frac{3}{8}$ to 68, and then fell back to 3.² In the dividend record column he will find one that goes back to 1791—paid by Industrial National Bank of Rhode Island (which recently saw fit to change its ancient corporate name).^{*} If he looks at the *Guide* for the year-end 1969 he will read that Penn Central Co. (as successor to Pennsylvania Railroad) has been paying dividends steadily since 1848; alas!, it was doomed to bankruptcy a few months later. He will find a company selling at only 2 times its last reported earnings, and another selling at 99 times such earnings.³ In most cases he will find it difficult to tell the line of business from the corporate name; for one U.S. Steel there will be three called such things as ITI Corp. (bakery stuff) or Santa Fe Industries (mainly the large railroad). He can feast on an extraordinary variety of price histories, dividend and earnings histories, financial positions, capitalization setups, and what not. Backward-leaning conservatism, run-of-the-mine featureless companies, the most peculiar combinations of "principal business," all kinds of Wall Street gadgets and widgets—they are all there, waiting to be browsed over, or studied with a serious objective.

The *Guides* give in separate columns the current dividend yields and price/earnings ratios, based on latest 12-month figures, wherever applicable. It is this last item that puts us on the track of our exercise in common-stock selection.

^{*} The successor corporation to Industrial National Bank of Rhode Island is FleetBoston Financial Corp. One of its corporate ancestors, the Providence Bank, was founded in 1791.

A Winnowing of the Stock Guide

Suppose we look for a simple *prima facie* indication that a stock is cheap. The first such clue that comes to mind is a low price in relation to recent earnings. Let's make a preliminary list of stocks that sold at a multiple of nine or less at the end of 1970. That datum is conveniently provided in the last column of the even-numbered pages. For an illustrative sample we shall take the first 20 such low-multiplier stocks; they begin with the sixth issue listed, Aberdeen Mfg. Co., which closed the year at 10¼, or 9 times its reported earnings of \$1.25 per share for the 12 months ended September 1970. The twentieth such issue is American Maize Products, which closed at 9½, also with a multiplier of 9.

The group may have seemed mediocre, with 10 issues selling below \$10 per share. (This fact is not truly important; it would probably—not necessarily—warn defensive investors against such a list, but the inference for enterprising investors might be favorable on balance.)* Before making a further scrutiny let us calculate some numbers. Our list represents about one in ten of the first 200 issues looked at. On that basis the *Guide* should yield, say, 450 issues selling at multipliers under 10. This would make a goodly number of candidates for further selectivity.

So let us apply to our list some additional criteria, rather similar to those we suggested for the defensive investor, but not so severe. We suggest the following:

1. Financial condition: (a) Current assets at least 1½ times current liabilities, and (b) debt not more than 110% of net current assets (for industrial companies).

* For today's investor, the cutoff is more likely to be around \$1 per share—the level below which many stocks are “delisted,” or declared ineligible for trading on major exchanges. Just monitoring the stock prices of these companies can take a considerable amount of effort, making them impractical for defensive investors. The costs of trading low-priced stocks can be very high. Finally, companies with very low stock prices have a distressing tendency to go out of business. However, a diversified portfolio of dozens of these distressed companies may still appeal to some enterprising investors today.

2. Earnings stability: No deficit in the last five years covered in the *Stock Guide*.
3. Dividend record: Some current dividend.
4. Earnings growth: Last year's earnings more than those of 1966.
5. Price: Less than 120% net tangible assets.

The earnings figures in the *Guide* were generally for those ending September 30, 1970, and thus do not include what may be a bad quarter at the end of that year. But an intelligent investor can't ask for the moon—at least not to start with. Note also that we set no lower limit on the size of the enterprise. Small companies may afford enough safety if bought carefully and on a group basis.

When we have applied the five additional criteria our list of 20 candidates is reduced to only five. Let us continue our search until the first 450 issues in the *Guide* have yielded us a little "portfolio" of 15 stocks meeting our six requirements. (They are set forth in Table 15-1, together with some relevant data.) The group, of course, is presented for illustration only, and would not necessarily have been chosen by our inquiring investor.

The fact is that the user of our method would have had a much wider choice. If our winnowing approach had been applied to all 4,500 companies in the *Stock Guide*, and if the ratio for the first tenth had held good throughout, we would end up with about 150 companies meeting all six of our criteria of selection. The enterprising investor would then be able to follow his judgment—or his partialities and prejudices—in making a third selection of, say, one out of five in this ample list.

The *Stock Guide* material includes "Earnings and Dividend Rankings," which are based on stability and growth of these factors for the past eight years. (Thus *price* attractiveness does not enter here.) We include the S & P rankings in our Table 15-1. Ten of the 15 issues are ranked B+ (= average) and one (American Maize) is given the "high" rating of A. If our enterprising investor wanted to add a seventh mechanical criterion to his choice, by considering only issues ranked by Standard & Poor's as average or better in quality, he might still have about 100 such issues to choose from. One might say that a group of issues, of at least average quality, meeting criteria of financial condition as well, purchasable at a low multiplier of current earnings and below asset value, should offer good promise of satisfactory investment results.