

The Superinvestors of Graham-and-Doddsville

By Warren E. Buffett

Reprinted from Hermes, the Columbia Business School Magazine

Copyright © 1984 by The Trustees of Columbia University. All Rights Reserved.

Is the Graham and Dodd “look for values with a significant margin of safety relative to prices” approach to security analysis out of date? Many of the professors who write textbooks today say “yes.” They argue that the stock market is efficient; that is, that stock prices reflect everything that is known about a company’s prospects and about the state of the economy. There are no undervalued stocks, these theorists argue, because there are smart security analysts who utilize all available information to insure unfailingly appropriate prices. Investors who seem to “beat the market” year after year are just lucky. “If prices fully reflect available information, this sort of investment adeptness is ruled out,” writes one of today’s textbook authors.

Well, maybe. But I want to present to you a group of investors who have, year in and year out, beaten the Standard & Poor’s 500 stock index. The hypothesis that they do this by pure chance is at least worth examining. Crucial to this examination is the fact that these winners were all well known to me and pre-identified as superior investors, the most recent identification occurring over 15 years ago. Absent this condition—that is, if I had just recently searched



The Superinvestors of Graham-and-Doddsville

By Warren E. Buffett

“Superinvestor” Warren E. Buffett, who got an A+ from Ben Graham at Columbia in 1951, never stopped making the grade. He made his fortune using the principles of Graham & Dodd’s Security Analysis. Here, in celebration of the fiftieth anniversary of that classic text, he tracks the records of investors who stick to the “value approach” and have gotten rich going by the book.

among thousands of records to select a few names for you this morning—I would advise you to stop reading right here. I should add that all of these records have been audited. And I should further add that I have known many of those who have invested with these managers, and the checks received by those participants over the years have matched the stated records.

Before we begin this examination, I would like you to imagine a national coin-flipping contest. Let's assume we get 225 million Americans up tomorrow morning and we ask them all to wager a dollar. They go out in the morning at sunrise, and they all call the flip of a coin. If they call correctly, they win a dollar from those who called wrong. Each day the losers drop out, and on the subsequent day the stakes build as all previous winnings are put on the line. After ten flips on ten mornings, there will be approximately 220,000 people in the United States who have correctly called ten flips in a row. They each will have won a little over \$1,000.

Now this group will probably start getting a little puffed up about this, human nature being what it is. They may try to be modest, but at cocktail parties they will occasionally admit to attractive members of

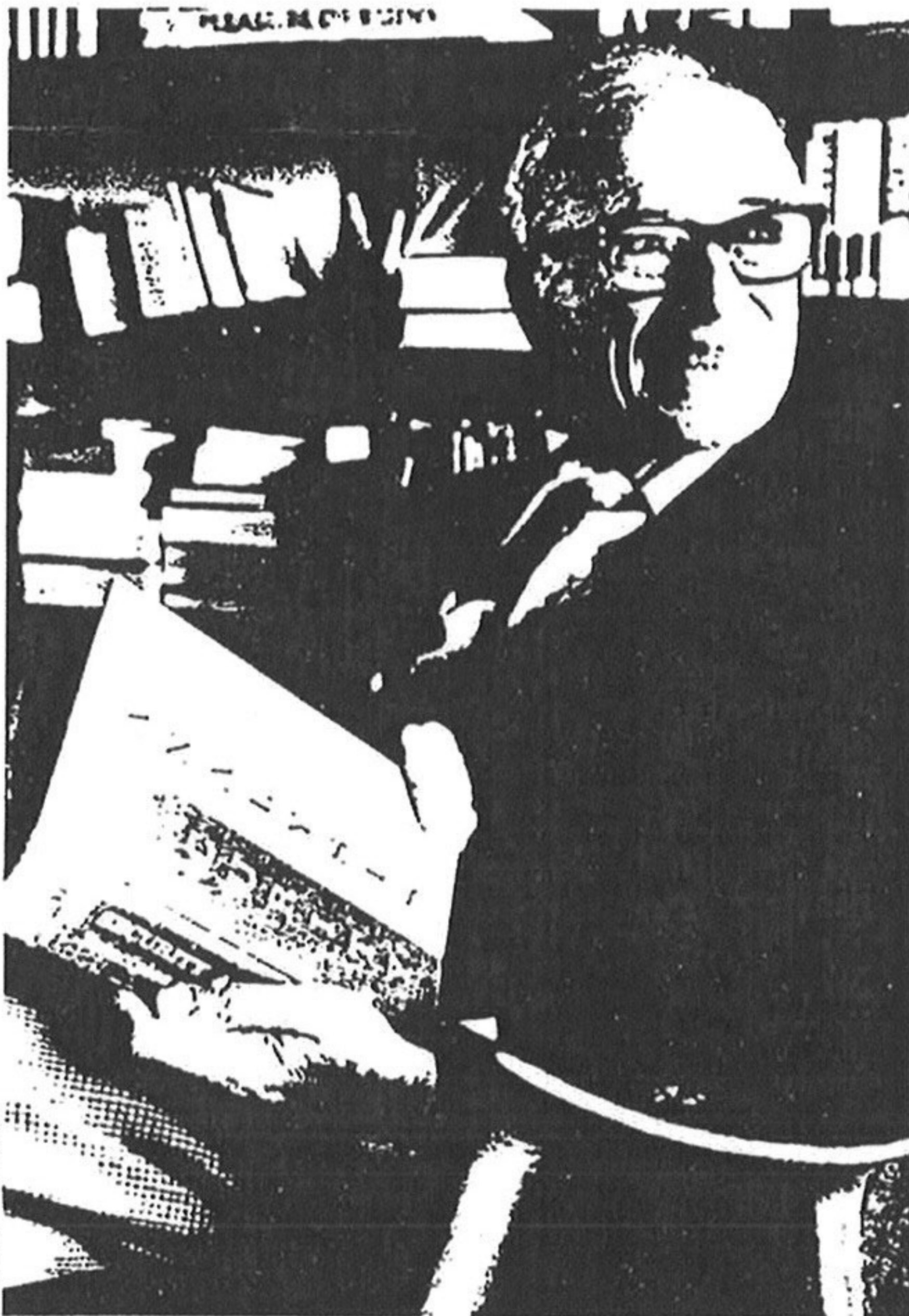
the opposite sex what their technique is, and what marvelous insights they bring to the field of flipping.

Assuming that the winners are getting the appropriate rewards from the losers, in another ten days we will have 215 people who have successfully called their coin flips 20 times in a row and who, by this exercise, each have turned one dollar into a little over \$1 million. \$225 million would have been lost, \$225 million would have been won.

By then, this group will really lose their heads. They will probably write books on "How I Turned a Dollar into a Million in Twenty Days Working Thirty Seconds a Morning." Worse yet, they'll probably start jetting around the country attending seminars on efficient coin-flipping and tackling skeptical professors with, "If it can't be done, why are there 215 of us?"

But then some business school professor will probably be rude enough to bring up the fact that if 225 million orangutans had engaged in a similar exercise, the results would be much the same—215 egotistical orangutans with 20 straight winning flips.

I would argue, however, that there *are* some important differences in the examples I am going to present. For one thing, if (a) you had taken 225 million



The New York Times

The late Benjamin Graham (left) and David L. Dodd wrote Security Analysis in 1934. The book, still in print, went to four editions, and has become an invaluable investment management tool.



Leslie Jean-Bart

David L. Dodd was awarded an honorary doctorate from Columbia University in May 1984, in recognition of the lasting intellectual achievement of the book. Dodd, professor emeritus at Columbia, lives in Maine.

orangutans distributed roughly as the U.S. population is; if (b) 215 winners were left after 20 days; and if (c) you found that 40 came from a particular zoo in Omaha, you would be pretty sure you were on to something. So you would probably go out and ask the zookeeper about what he's feeding them, whether they had special exercises, what books they read, and who knows what else. That is, if you found any really extraordinary concentrations of success, you might want to see if you could identify concentrations of unusual characteristics that might be causal factors.

Scientific inquiry naturally follows such a pattern. If you were trying to analyze possible causes of a rare type of cancer—with, say, 1,500 cases a year in the United States—and you found that 400 of them occurred in some little mining town in Montana, you would get very interested in the water there, or the occupation of those afflicted, or other variables. You know that it's not random chance that 400 come from a small area. You would not necessarily know the causal factors, but you would know where to search.

I submit to you that there are ways of defining an

origin other than geography. In addition to geographical origins, there can be what I call an *intellectual* origin. I think you will find that a disproportionate number of successful coin-flippers in the investment world came from a very small intellectual village that could be called Graham-and-Doddsville. A concentration of winners that simply cannot be explained by chance can be traced to this particular intellectual village.

Conditions could exist that would make even that concentration unimportant. Perhaps 100 people were simply imitating the coin-flipping call of some terribly persuasive personality. When he called heads, 100 followers automatically called that coin the same way. If the leader was part of the 215 left at the end, the fact that 100 came from the same intellectual origin would mean nothing. You would simply be identifying one case as a hundred cases. Similarly, let's assume that you lived in a strongly patriarchal society and every family in the United States conveniently consisted of ten members. Further assume that the patriarchal culture was so strong that, when the 225 million people went out the first day, every member of the family identified with the father's call. Now, at the end of the

Table 1 • Walter J. Schloss

Year	S&P Overall Gain, Including Dividends (%)	WJS Ltd Partners Overall Gain per year (%)	WJS Partnership Overall Gain per year (%)
1956	7.5	5.1	6.8
1957	-10.5	-4.7	-4.7
1958	42.1	42.1	54.6
1959	12.7	17.5	23.3
1960	-1.6	7.0	9.3
1961	26.4	21.6	28.8
1962	-10.2	8.3	11.1
1963	23.3	15.1	20.1
1964	16.5	17.1	22.8
1965	13.1	26.8	35.7
1966	-10.4	0.5	0.7
1967	26.8	25.8	34.4
1968	10.6	26.6	35.5
1969	-7.5	-9.0	-9.0
1970	2.4	-8.2	-8.2
1971	14.9	25.5	28.3
1972	19.8	11.6	15.5
1973	-14.8	-8.0	-8.0
1974	-26.6	-6.2	-6.2
1975	36.9	42.7	52.2
1976	22.4	29.4	39.2
1977	-8.6	25.8	34.4
1978	7.0	36.6	48.8
1979	17.6	29.8	39.7
1980	32.1	23.3	31.1
1981	-6.7	18.4	24.5
1982	20.2	24.1	32.1
1983	22.8	38.4	51.2
1984 1st Qtr.	-2.3	0.8	1.1

Standard & Poor's 28 1/4 year compounded gain	887.2%
WJS Limited Partners 28 1/4 year compounded gain	6,678.8%
WJS Partnership 28 1/4 year compounded gain	23,104.7%
Standard & Poor's 28 1/4 year annual compounded rate	8.4%
WJS Limited Partners 28 1/4 year annual compounded rate	16.1%
WJS Partnership 28 1/4 year annual compounded rate	21.3%

During the history of the Partnership it has owned over 800 issues and, at most times, has had at least 100 positions. Present assets under management approximate \$45 million.

20-day period, you would have 215 winners, and you would find that they came from only 21.5 families. Some naive types might say that this indicates an enormous hereditary factor as an explanation of successful coin-flipping. But, of course, it would have no significance at all because it would simply mean that you didn't have 215 individual winners, but rather 21.5 randomly-distributed families who were winners.

In this group of successful investors that I want to consider, there has been a common intellectual patriarch, Ben Graham. But the children who left the house of this intellectual patriarch have called their "flips" in very different ways. They have gone to different places and bought and sold different stocks and companies, yet they have had a combined record that simply can't be explained by random chance. It certainly cannot be explained by the fact that they are all calling flips identically because a leader is signaling the calls to make. The patriarch has merely set forth the intellectual theory for making coin-calling decisions, but each student has decided on his own manner of applying the theory.

The common intellectual theme of the investors

from Graham-and-Doddsville is this: they search for discrepancies between the *value* of a business and the *price* of small pieces of that business in the market. Essentially, they exploit those discrepancies without the efficient market theorist's concern as to whether the stocks are bought on Monday or Thursday, or whether it is January or July, etc. Incidentally, when businessmen buy businesses—which is just what our Graham & Dodd investors are doing through the medium of marketable stocks—I doubt that many are cranking into their purchase decision the day of the week or the month in which the transaction is going to occur. If it doesn't make any difference whether all of a business is being bought on a Monday or a Friday, I am baffled why academicians invest extensive time and effort to see whether it makes a difference when buying small pieces of those same businesses. Our Graham & Dodd investors, needless to say, do not discuss beta, the capital asset pricing model or covariance in returns among securities. These are not subjects of any interest to them. In fact, most of them would have difficulty defining those terms. The investors simply focus on two variables: price and value.

I always find it extraordinary that so many studies

Table 2 • Tweedy, Browne Inc.

Period Ended (September 30)	Dow Jones* (%)	S & P 500* (%)	TBK Overall (%)	TBK Limited Partners (%)
1968 (9 mos.)	6.0	8.8	27.6	22.0
1969	- 9.5	- 6.2	12.7	10.0
1970	- 2.5	- 6.1	- 1.3	- 1.9
1971	20.7	20.4	20.9	16.1
1972	11.0	15.5	14.6	11.8
1973	2.9	1.0	8.3	7.5
1974	-31.8	-38.1	1.5	1.5
1975	36.9	37.8	28.8	22.0
1976	29.6	30.1	40.2	32.8
1977	- 9.9	-4.0	23.4	18.7
1978	8.3	11.9	41.0	32.1
1979	7.9	12.7	25.5	20.5
1980	13.0	21.1	21.4	17.3
1981	- 3.3	- 2.7	14.4	11.6
1982	12.5	10.1	10.2	8.2
1983	44.5	44.3	35.0	28.2
Total Return 15 3/4 years	191.8%	238.5%	1,661.2%	936.4%
Standard & Poor's 15 3/4 year annual compounded rate				7.0%
TBK Limited Partners 15 3/4 year annual compounded rate				16.0%
TBK Overall 15 3/4 year annual compounded rate				20.0%

*Includes dividends paid for both Standard & Poor's 500 Composite Index and Dow Jones Industrial Average.

Table 3 • Buffett Partnership, Ltd.

Year	Overall Results From Dow (%)	Partnership Results (%)	Limited Partners' Results (%)
1957	- 8.4	10.4	9.3
1958	38.5	40.9	32.2
1959	20.0	25.9	20.9
1960	- 6.2	22.8	18.6
1961	22.4	45.9	35.9
1962	- 7.6	13.9	11.9
1963	20.6	38.7	30.5
1964	18.7	27.8	22.3
1965	14.2	47.2	36.9
1966	-15.6	20.4	16.8
1967	19.0	35.9	28.4
1968	7.7	58.8	45.6
1969	-11.6	6.8	6.6
On a cumulative or compounded basis, the results are:			
1957	- 8.4	10.4	9.3
1957-58	26.9	55.6	44.5
1957-59	52.3	95.9	74.7
1957-60	42.9	140.6	107.2
1957-61	74.9	251.0	181.6
1957-62	61.6	299.8	215.1
1957-63	94.9	454.5	311.2
1957-64	131.3	608.7	402.9
1957-65	164.1	943.2	588.5
1957-66	122.9	1156.0	704.2
1957-67	165.3	1606.9	932.6
1957-68	185.7	2610.6	1403.5
1957-69	152.6	2794.9	1502.7
Annual Compounded Rate	7.4	29.5	23.8

are made of price and volume behavior, the stuff of chartists. Can you imagine buying an entire business simply because the price of the business had been marked *up* substantially last week and the week before? Of course, the reason a lot of studies are made of these price and volume variables is that now, in the age of computers, there are almost endless data available about them. It isn't necessarily because such studies have any utility; it's simply that the data are there and academicians have worked hard to learn the mathematical skills needed to manipulate them. Once these skills are acquired, it seems sinful not to use them, even if the usage has no utility or negative utility. As a friend said, to a man with a hammer, everything looks like a nail.

I think the group that we have identified by a common intellectual home is worthy of study. Incidentally, despite all the academic studies of the influence of such variables as price, volume, seasonality, capitalization size, etc., upon stock performance, no interest has been evidenced in studying the methods of this unusual concentration of value-oriented winners.

I begin this study of results by going back to a group of four of us who worked at Graham-Newman Corporation from 1954 through 1956. There

were only four—I have not selected these names from among thousands. I offered to go to work at Graham-Newman for nothing after I took Ben Graham's class, but he turned me down as overvalued. He took this value stuff very seriously! After much pestering he finally hired me. There were three partners and four of us at the "peasant" level. All four left between 1955 and 1957 when the firm was wound up, and it's possible to trace the record of three.

The first example (Table 1) is that of Walter Schloss. Walter never went to college, but took a course from Ben Graham at night at the New York Institute of Finance. Walter left Graham-Newman in 1955 and achieved the record shown here over 28 years.

Here is what 'Adam Smith'—after I told him about Walter—wrote about him in *Supermoney* (1972):

He has no connections or access to useful information. Practically no one in Wall Street knows him and he is not fed any ideas. He looks up the numbers in the manuals and sends for the annual reports, and that's about it.

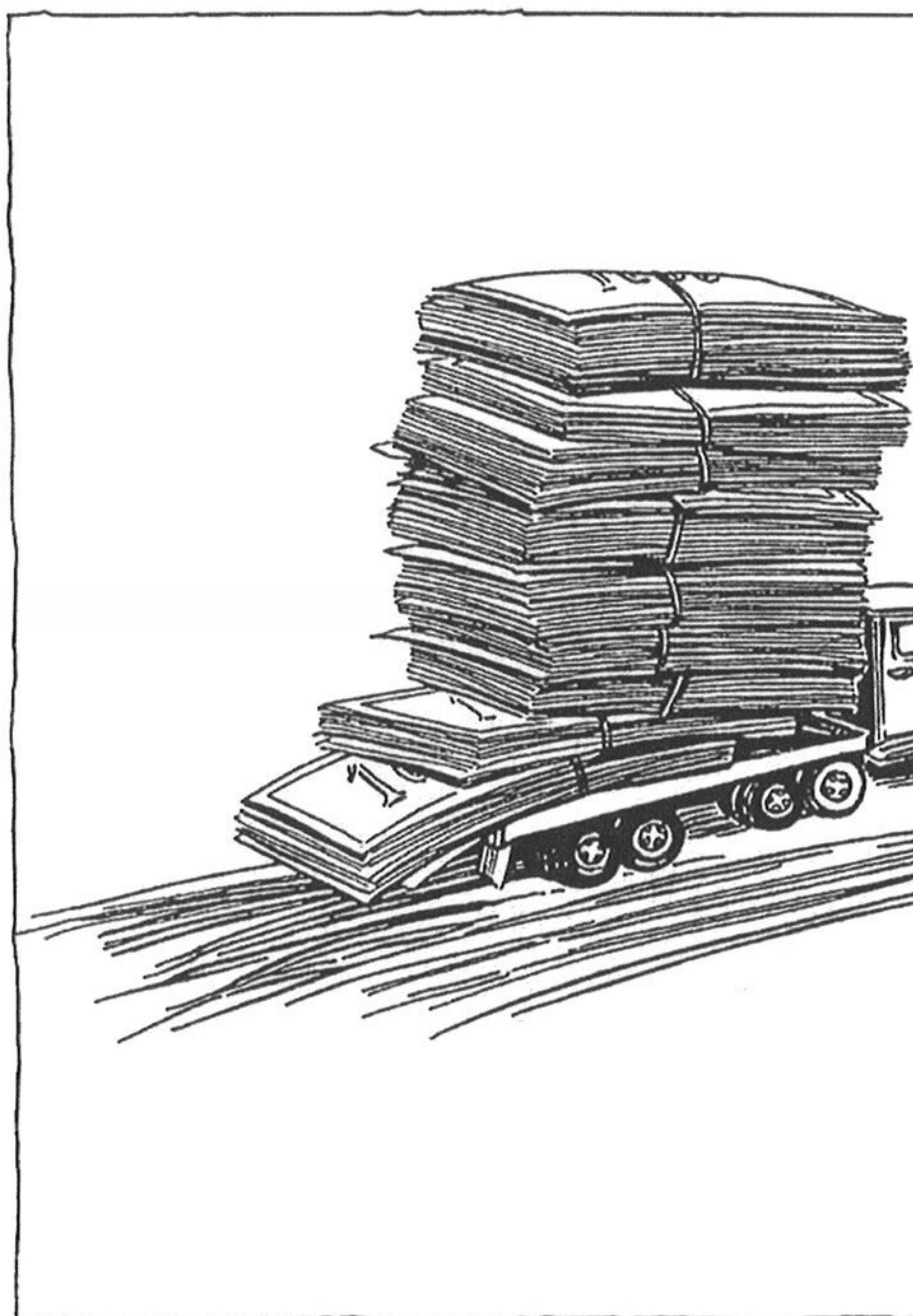
In introducing me to [Schloss] Warren had also, to

Table 4 • Sequoia Fund, Inc.

Year	Annual Percentage Change**	
	Sequoia Fund (%)	S&P 500 Index* (%)
1970 (from July 15)	12.1	20.6
1971	13.5	14.3
1972	3.7	18.9
1973	- 24.0	- 14.8
1974	- 15.7	- 26.4
1975	60.5	37.2
1976	72.3	23.6
1977	19.9	- 7.4
1978	23.9	6.4
1979	12.1	18.2
1980	12.6	32.3
1981	21.5	- 5.0
1982	31.2	21.4
1983	27.3	22.4
1984 (first quarter)	- 1.6	- 2.4
Entire Period	775.3%	270.0%
Compound Annual Return	17.2%	10.0%
Plus 1% Management Fee	1.0%	
Gross Investment Return	18.2%	10.0%

*Includes dividends (and capital gains distributions in the case of Sequoia Fund) treated as though reinvested.

**These figures differ slightly from the S&P figures in Table 1 because of a difference in calculation of reinvested dividends.



my mind, described himself. 'He never forgets that he is handling other people's money and this reinforces his normal strong aversion to loss. He has total integrity and a realistic picture of himself. Money is real to him and stocks are real—and from this flows an attraction to the 'margin of safety' principle.

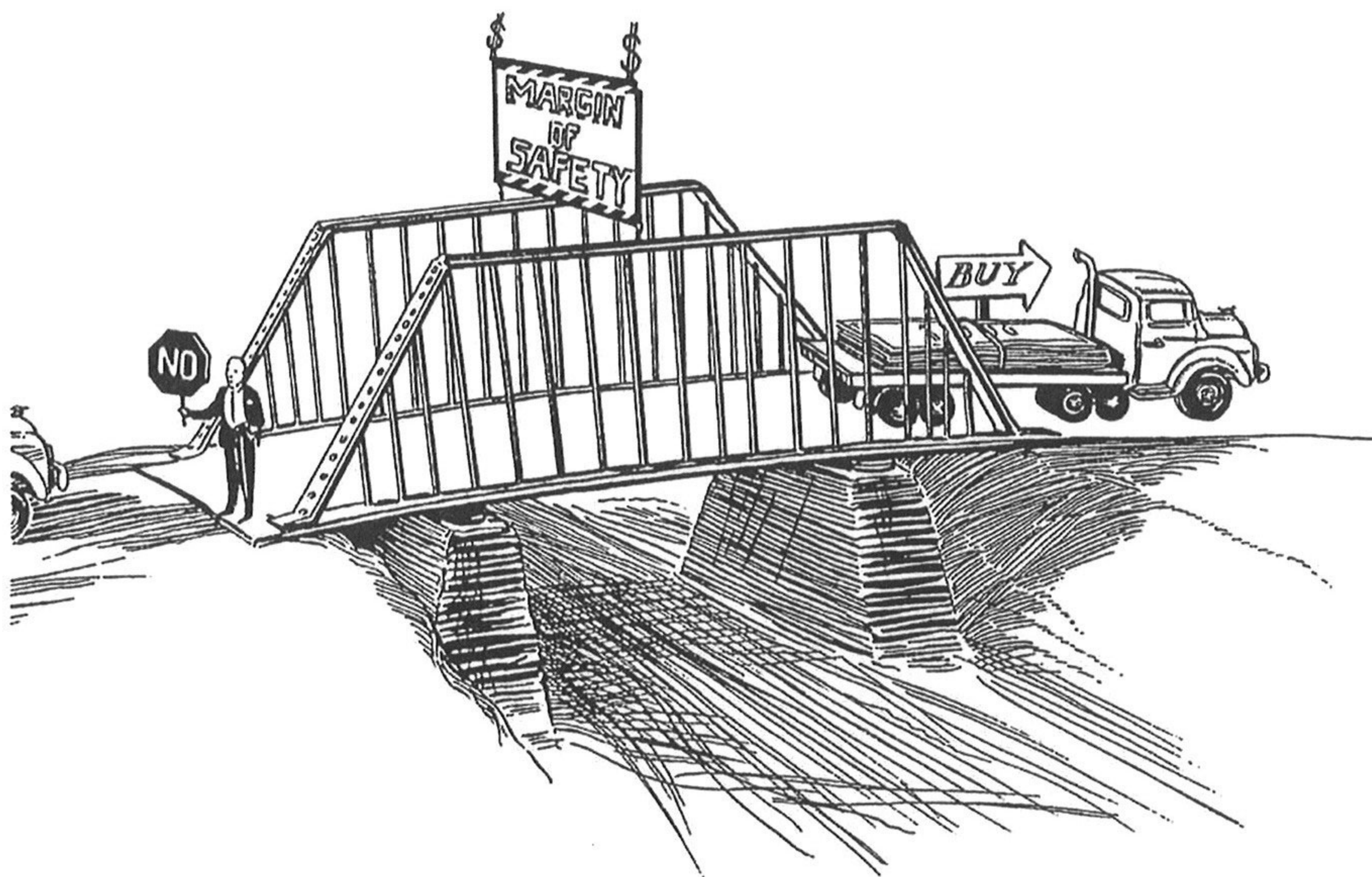
Walter has diversified enormously, owning well over 100 stocks currently. He knows how to identify securities that sell at considerably less than their value to a private owner. *And that's all he does.* He doesn't worry about whether it's January, he doesn't worry about whether it's Monday, he doesn't worry about whether it's an election year. He simply says, if a business is worth a dollar and I can buy it for 40 cents, something good may happen to me. And he does it over and over and over again. He owns many more stocks than I do—and is far less interested in the underlying nature of the business; I don't seem to have very much influence on Walter. That's one of his strengths; no one has much influence on him.

The second case is Tom Knapp who also worked at Graham-Newman with me. Tom was a chemistry major at Princeton before the war; when he came back from the war, he was a beach bum. And then one day

he read that Dave Dodd was giving a night course in investments at Columbia. Tom took it on a non-credit basis, and he got so interested in the subject from taking that course that he came up and enrolled at Columbia Business School where he got the MBA degree. He took Dodd's course again, and took Ben Graham's course. Incidentally, 35 years later I called Tom to ascertain some of the facts involved here and I found him on the beach again. The only difference is that now he owns the beach!

In 1968 Tom Knapp and Ed Anderson, also a Graham disciple, along with one or two other fellows of similar persuasion, formed Tweedy, Browne Partners, and their investment results appear in Table 2. Tweedy, Browne built that record with very wide diversification. They occasionally bought control of businesses, but the record of the passive investments is equal to the record of the control investments.

Table 3 describes the third member of the group who formed Buffett Partnership in 1957. The best thing he did was to quit in 1969. Since then, in a sense, Berkshire Hathaway has been a continuation of the partnership in some respects. There is no single index I can give you that I would feel would



be a fair test of investment management at Berkshire. But I think that any way you figure it, it has been satisfactory.

Table 4 shows the record of the Sequoia Fund, which is managed by a man whom I met in 1951 in Ben Graham's class, Bill Ruane. After getting out of Harvard Business School, he went to Wall Street. Then he realized that he needed to get a real business education so he came up to take Ben's course at Columbia, where we met in early 1951. Bill's record from 1951 to 1970, working with relatively small sums, was far better than average. When I wound up Buffett Partnership I asked Bill if he would set up a fund to handle all of our partners so he set up the Sequoia Fund. He set it up at a terrible time, just when I was quitting. He went right into the two-tier market and all the difficulties that made for comparative performance for value-oriented investors. I am happy to say that my partners, to an amazing degree, not only stayed with him but added money, with the happy result shown.

There's no hindsight involved here. Bill was the only person I recommended to my partners, and I said at the time that if he achieved a four point per annum advantage over the Standard & Poor's, that would be

solid performance. Bill has achieved well over that, working with progressively larger sums of money. That makes things much more difficult. Size is the anchor of performance. There is no question about it. It doesn't mean you can't do better than average when you get larger, but the margin shrinks. And if you ever get so you're managing two trillion dollars, and that happens to be the amount of the total equity evaluation in the economy, don't think that you'll do better than average!

I should add that, in the records we've looked at so far, throughout this whole period there was practically no duplication in these portfolios. These are men who select securities based on discrepancies between price and value, but they make their selections very differently. Walter's largest holdings have been such stalwarts as Hudson Pulp & Paper and Jeddo Highland Coal and New York Trap Rock Company and all those other names that come instantly to mind to even a casual reader of the business pages. Tweedy Browne's selections have sunk even well below that level in terms of name recognition. On the other hand, Bill has worked with big companies. The overlap among these portfolios has been very, very low.

Table 5 • Charles Munger

Year	Mass. Inv. Trust (%)	Investors Stock (%)	Lehman (%)	Tri-Cont. (%)	Dow (%)	Over-all Partnership (%)	Limited Partners (%)
Yearly Results (1)							
1962	- 9.8	-13.4	-14.4	- 12.2	- 7.6	30.1	20.1
1963	20.0	16.5	23.8	20.3	20.6	71.7	47.8
1964	15.9	14.3	13.6	13.3	18.7	49.7	33.1
1965	10.2	9.8	19.0	10.7	14.2	8.4	6.0
1966	- 7.7	- 9.9	- 2.6	- 6.9	- 15.7	12.4	8.3
1967	20.0	22.8	28.0	25.4	19.0	56.2	37.5
1968	10.3	8.1	6.7	6.8	7.7	40.4	27.0
1969	- 4.8	- 7.9	- 1.9	0.1	- 11.6	28.3	21.3
1970	0.6	- 4.1	- 7.2	- 1.0	8.7	- 0.1	- 0.1
1971	9.0	16.8	26.6	22.4	9.8	25.4	20.6
1972	11.0	15.2	23.7	21.4	18.2	8.3	7.3
1973	-12.5	-17.6	-14.3	- 21.3	- 13.1	- 31.9	- 31.9
1974	-25.5	-25.6	-30.3	- 27.6	- 23.1	- 31.5	- 31.5
1975	32.9	33.3	30.8	35.4	44.4	73.2	73.2
Compound Results (2)							
1962	- 9.8	-13.4	- 14.4	- 12.2	- 7.6	30.1	20.1
1962-3	8.2	0.9	6.0	5.6	11.5	123.4	77.5
1962-4	25.4	15.3	20.4	19.6	32.4	234.4	136.3
1962-5	38.2	26.6	43.3	32.4	51.2	262.5	150.5
1962-6	27.5	14.1	39.5	23.2	27.5	307.5	171.3
1962-7	53.0	40.1	78.5	54.5	51.8	536.5	273.0
1962-8	68.8	51.4	90.5	65.0	63.5	793.6	373.7
1962-9	60.7	39.4	86.9	65.2	44.5	1046.5	474.6
1962-70	61.7	33.7	73.4	63.5	57.1	1045.4	474.0
1962-71	76.3	56.2	119.5	100.1	72.5	1336.3	592.2
1962-72	95.7	79.9	171.5	142.9	103.9	1455.5	642.7
1962-73	71.2	48.2	132.7	91.2	77.2	959.3	405.8
1962-74	27.5	10.3	62.2	38.4	36.3	625.6	246.5
1962-75	69.4	47.0	112.2	87.4	96.8	1156.7	500.1
Average Annual Compounded Rate	3.8	2.8	5.5	4.6	5.0	19.8	13.7

These records do not reflect one guy calling the flip and fifty people yelling out the same thing after him.

Table 5 is the record of a friend of mine who is a Harvard Law graduate, who set up a major law firm. I ran into him in about 1960 and told him that law was fine as a hobby but he could do better. He set up a partnership quite the opposite of Walter's. His portfolio was concentrated in very few securities and therefore, his record was much more volatile but it was based on the same discount-from-value approach. He was willing to accept greater peaks and valleys of performance, and he happens to be a fellow whose whole psyche goes toward concentration, with the results shown. Incidentally, this record belongs to Charlie Munger, my partner for a long time in the operation of Berkshire Hathaway. When he ran his partnership, however, his portfolio holdings were almost completely different from mine and the other fellows mentioned earlier.

Table 6 is the record of a fellow who was a pal of Charlie Munger's—another non-business school type—who was a math major at USC. He went to work for IBM after graduation and was an IBM sales-

man for a while. After I got to Charlie, Charlie got to him. This happens to be the record of Rick Guerin. Rick, from 1965 to 1983, against a compounded gain of 316 percent for the S&P, came off with 22,200 percent which, probably because he lacks a business school education, he regards as statistically significant.

One sidelight here: it is extraordinary to me that the idea of buying dollar bills for 40 cents takes immediately with people or it doesn't take at all. It's like an inoculation. If it doesn't grab a person right away, I find that you can talk to him for years and show him records, and it doesn't make any difference. They just don't seem able to grasp the concept, simple as it is. A fellow like Rick Guerin, who had no formal education in business, understands immediately the value approach to investing and he's applying it five minutes later. I've never seen anyone who became a gradual convert over a ten-year period to this approach. It doesn't seem to be a matter of I.Q. or academic training. It's instant recognition, or it is nothing.

Table 7 is the record of Stan Perlmeter. Stan was a liberal arts major at the University of Michigan who was a partner in the advertising agency of Bozell & Jacobs. We happened to be in the same building in

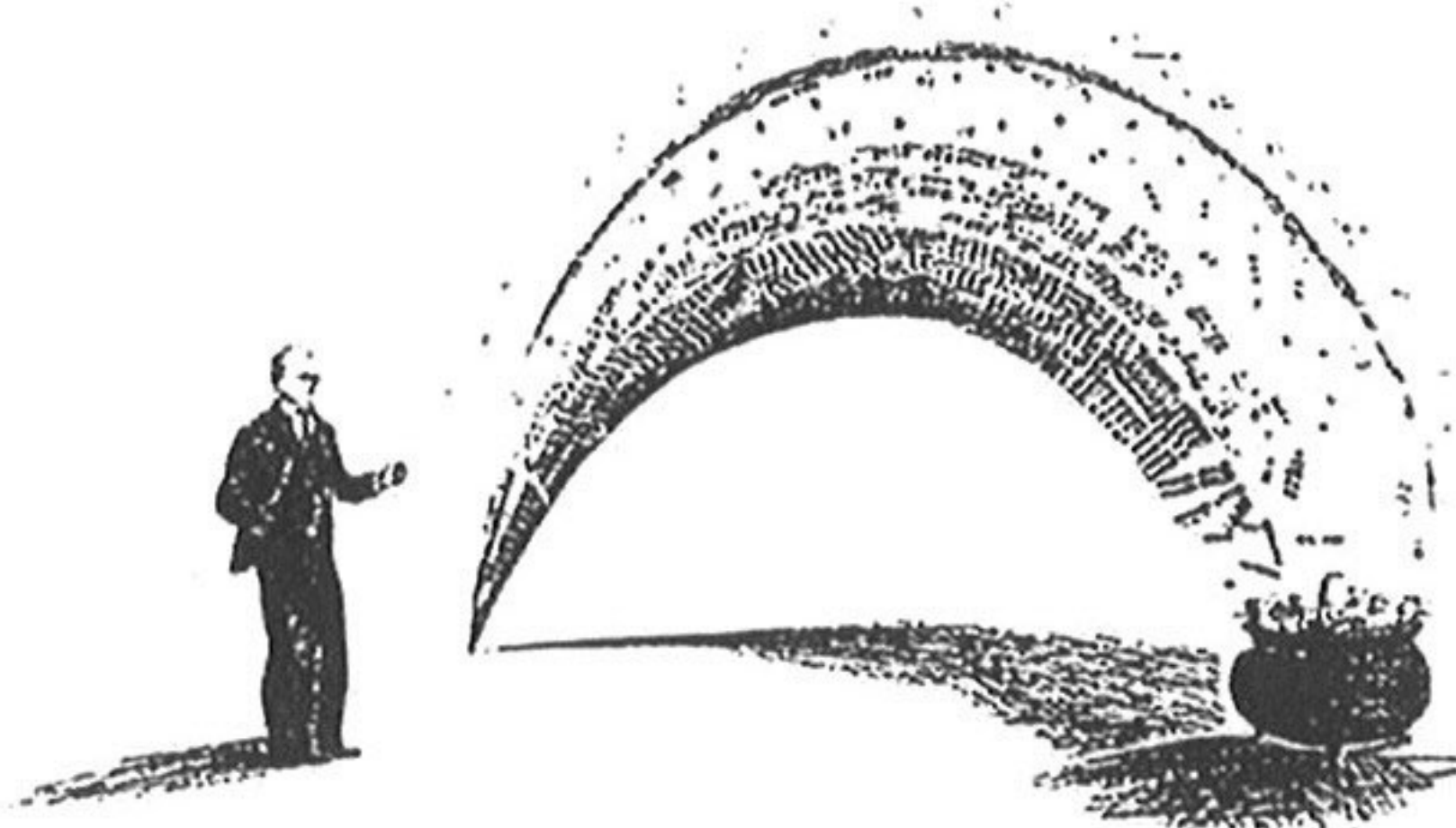


Table 6 • Pacific Partners, Ltd.

Year	S & P 500 Index (%)	Limited Partnership Results (%)	Overall Partnership Results (%)
1965	12.4	21.2	32.0
1966	-10.1	24.5	36.7
1967	23.9	120.1	180.1
1968	11.0	114.6	171.9
1969	-8.4	64.7	97.1
1970	3.9	-7.2	-7.2
1971	14.6	10.9	16.4
1972	18.9	12.8	17.1
1973	-14.8	-42.1	-42.1
1974	-26.4	-34.4	-34.4
1975	37.2	23.4	31.2
1976	23.6	127.8	127.8
1977	-7.4	20.3	27.1
1978	6.4	28.4	37.9
1979	18.2	36.1	48.2
1980	32.3	18.1	24.1
1981	-5.0	6.0	8.0
1982	21.4	24.0	32.0
1983	22.4	18.6	24.8
Standard & Poor's 19 year compounded gain			316.4%
Ltd. Partnership 19 year compounded gain			5,530.2%
Overall Partnership 19 year compounded gain			22,200.0%
Standard & Poor's 19 year annual compounded rate			7.8%
Ltd. Partnership 19 year annual compounded rate			23.6%
Overall Partnership 19 year annual compounded rate			32.9%

Omaha. In 1965 he figured out I had a better business than he did, so he left advertising. Again, it took five minutes for Stan to embrace the value approach.

Perlmer does not own what Walter Schloss owns. He does not own what Bill Ruane owns. These are records made *independently*. But every time Perlmer buys a stock it's because he's getting more for his money than he's paying. That's the only thing he's thinking about. He's not looking at quarterly earnings projections, he's not looking at next year's earnings, he's not thinking about what day of the week it is, he doesn't care what investment research from any place says, he's not interested in price momentum, volume or anything. He's simply asking: What is the business worth?

Table 8 and Table 9 are the records of two pension funds I've been involved in. They are not selected from dozens of pension funds with which I have had involvement; they are the only two I have influenced. In both cases I have steered them toward value-oriented managers. Very, very few pension funds are managed from a value standpoint. Table 8 is the Washington Post Company's Pension Fund. It was with a large bank some years ago, and I

suggested that they would do well to select managers who had a value orientation.

As you can see, overall they have been in the top percentile ever since they made the change. The Post told the managers to keep at least 25 percent of these funds in bonds, which would not have been necessarily the choice of these managers. So, I've included the bond performance simply to illustrate that this group has no particular expertise about bonds. They wouldn't have said they did. Even with this drag of 25 percent of their fund in an area that was not their game, they were in the top percentile of fund management. The Washington Post experience does not cover a terribly long period but it does represent many investment decisions by three managers who were not identified retroactively.

Table 9 is the record of the FMC Corporation fund. I don't manage a dime of it myself but I did, in 1974, influence their decision to select value-oriented managers. Prior to that time they had selected managers much the same way as most larger companies. They now rank number one in the Becker survey of pension funds for their size over the period of time subsequent to this "conversion" to the value approach. Last year they had eight equity managers of any duration

Table 7 • Perlmer Investments

Year	PIL Overall (%)	Limited Partner (%)
8/1-12/31/65	40.6	32.5
1966	6.4	5.1
1967	73.5	58.8
1968	65.0	52.0
1969	-13.8	-13.8
1970	-6.0	-6.0
1971	55.7	49.3
1972	23.6	18.9
1973	-28.1	-28.1
1974	-12.0	-12.0
1975	38.5	38.5
1/1-10/31/76	38.2	34.5
11/1/76-10/31/77	30.3	25.5
11/1/77-10/31/78	31.8	26.6
11/1/78-10/31/79	34.7	28.9
11/1/79-10/31/80	41.8	34.7
11/1/80-10/31/81	4.0	3.3
11/1/81-10/31/82	29.8	25.4
11/1/82-10/31/83	22.2	18.4

Total Partnership Percentage Gain 8/1/65 through 10/31/83	4277.2%
Limited Partners Percentage Gain 8/1/65 through 10/31/83	2309.5%
Annual Compound Rate of Gain Overall Partnership	23.0%
Annual Compound Rate of Gain Limited Partners	19.0%
Dow Jones Industrial Averages 7/31/65 (Approximate)	882
Dow Jones Industrial Averages 10/31/83 (Approximate)	1225
Approximate Compound Rate of Gain of DJI including dividends	7%

beyond a year. Seven of them had a cumulative record better than the S&P. All eight had a better record last year than the S&P. The net difference now between a median performance and the actual performance of the FMC fund over this period is \$243 million. FMC attributes this to the mindset given to them about the selection of managers. Those managers are not the managers I would necessarily select but they all have the common denominator of selecting securities based on value.

So these are nine records of "coin-flippers" from Graham-and-Doddsville. I haven't selected them with hindsight from among thousands. It's not like I am reciting to you the names of a bunch of lottery winners—people I had never heard of before they won the lottery. I selected these men years ago based upon their framework for investment decision-making. I knew what they had been taught and additionally, I had some personal knowledge of their intellect, character and temperament. It's very important to understand that this group has assumed far less risk than average; note their record in years when the general market was weak. While they differ greatly in style, these investors are, mentally, always *buying the business, not buying the stock*. A few of them sometimes

buy whole businesses, far more often they simply buy small pieces of businesses. Their attitude, whether buying all or a tiny piece of a business, is the same. Some of them hold portfolios with dozens of stocks; others concentrate on a handful. But all exploit the difference between the market price of a business and its intrinsic value.

I'm convinced that there is much inefficiency in the market. These Graham-and-Doddsville investors have successfully exploited gaps between price and value. When the price of a stock can be influenced by a "herd" on Wall Street with prices set at the margin by the most emotional person, or the greediest person, or the most depressed person, it is hard to argue that the market always prices rationally. In fact, market prices are frequently nonsensical.

I would like to say one important thing about risk and reward. Sometimes risk and reward are correlated in a positive fashion. If someone were to say to me, "I have here a six-shooter and I have slipped one cartridge into it. Why don't you just spin it and pull it once? If you survive, I will give you \$1 million." I would decline—perhaps stating that \$1 million is not enough. Then he might offer me \$5 million to

Table 8 • The Washington Post Company, Master Trust, December 31, 1983

	Current Quarter		Year Ended		2 Years Ended*		3 Years Ended*		5 Years Ended*	
	% Ret.	Rank	% Ret.	Rank	% Ret.	Rank	% Ret.	Rank	% Ret.	Rank
All Investments										
	4.1	2	22.5	10	20.6	40	18.0	10	20.2	3
	3.2	4	34.1	1	33.0	1	28.2	1	22.6	1
	5.4	1	22.2	11	28.4	3	24.5	1	—	—
Master Trust	3.9	1	28.1	1	28.2	1	24.3	1	21.8	1
Common Stock										
	5.2	1	32.1	9	26.1	27	21.2	11	26.5	7
	3.6	5	52.9	1	46.2	1	37.8	1	29.3	3
	6.2	1	29.3	14	30.8	10	29.3	3	—	—
Master Trust	4.7	1	41.2	1	37.0	1	30.4	1	27.6	1
Bonds										
	2.7	8	17.0	1	26.6	1	19.0	1	12.2	2
	1.6	46	7.6	48	18.3	53	12.7	84	7.4	86
	3.2	4	10.4	9	24.0	3	18.9	1	—	—
Master Trust	2.2	11	9.7	14	21.1	14	15.2	24	9.3	30
Bonds & Cash Equivalents										
	2.5	15	12.0	5	16.1	64	15.5	21	12.9	9
	2.1	28	9.2	29	17.1	47	14.7	41	10.8	44
	3.1	6	10.2	17	22.0	2	21.6	1	—	—
Master Trust	2.4	14	10.2	17	17.8	20	16.2	2	12.5	9

*Annualized

Rank indicates the fund's performance against the A.C. Becker universe.

Rank is stated as a percentile; 1 = best performance, 100 = worst.

pull the trigger twice—now that would be a positive correlation between risk and reward!

The exact opposite is true with value investing. If you buy a dollar bill for 60 cents, it's riskier than if you buy a dollar bill for 40 cents, but the expectation of reward is greater in the latter case. The greater the potential for reward in the value portfolio, the less risk there is.

One quick example: The Washington Post Company in 1973 was selling for \$80 million in the market. At the time, that day, you could have sold the assets to any one of ten buyers for not less than \$400 million, probably appreciably more. The company owned the *Post*, *Newsweek*, plus several television stations in major markets. Those same properties are worth \$2 billion now so the person who would have paid \$400 million would not have been crazy.

Now, if the stock had declined even further to a price that made the valuation \$40 million instead of \$80 million, its beta would have been greater. And to people who think beta measures risk, the cheaper price would have made it look riskier. This is truly Alice in Wonderland. I have never been able to figure out why it's riskier to buy \$400 million worth of prop-

erties for \$40 million than \$80 million. And, as a matter of fact, if you buy a group of such securities and you know anything at all about business valuation, there is essentially no risk in buying \$400 million for \$80 million, particularly if you do it by buying ten \$40 million piles for \$8 million each. Since you don't have your hands on the \$400 million, you want to be sure you are in with honest and reasonably competent people, but that's not a difficult job.

You also have to have the knowledge to enable you to make a very general estimate about the value of the underlying businesses. But you do not cut it close. That is what Ben Graham meant by having a margin of safety. You don't try and buy businesses worth \$83 million for \$80 million. You leave yourself an enormous margin. When you build a bridge, you insist it can carry 30,000 pounds, but you only drive 10,000-pound trucks across it. And that same principle works in investing.

In conclusion, some of the more commercially minded among you may wonder why I am writing this article. Adding many converts to the value approach will perforce narrow the spreads between price and value. I can only tell you that the secret has been out

Table 9 • FMC Corporation Pension Fund, Annual Rate of Return (Percent)

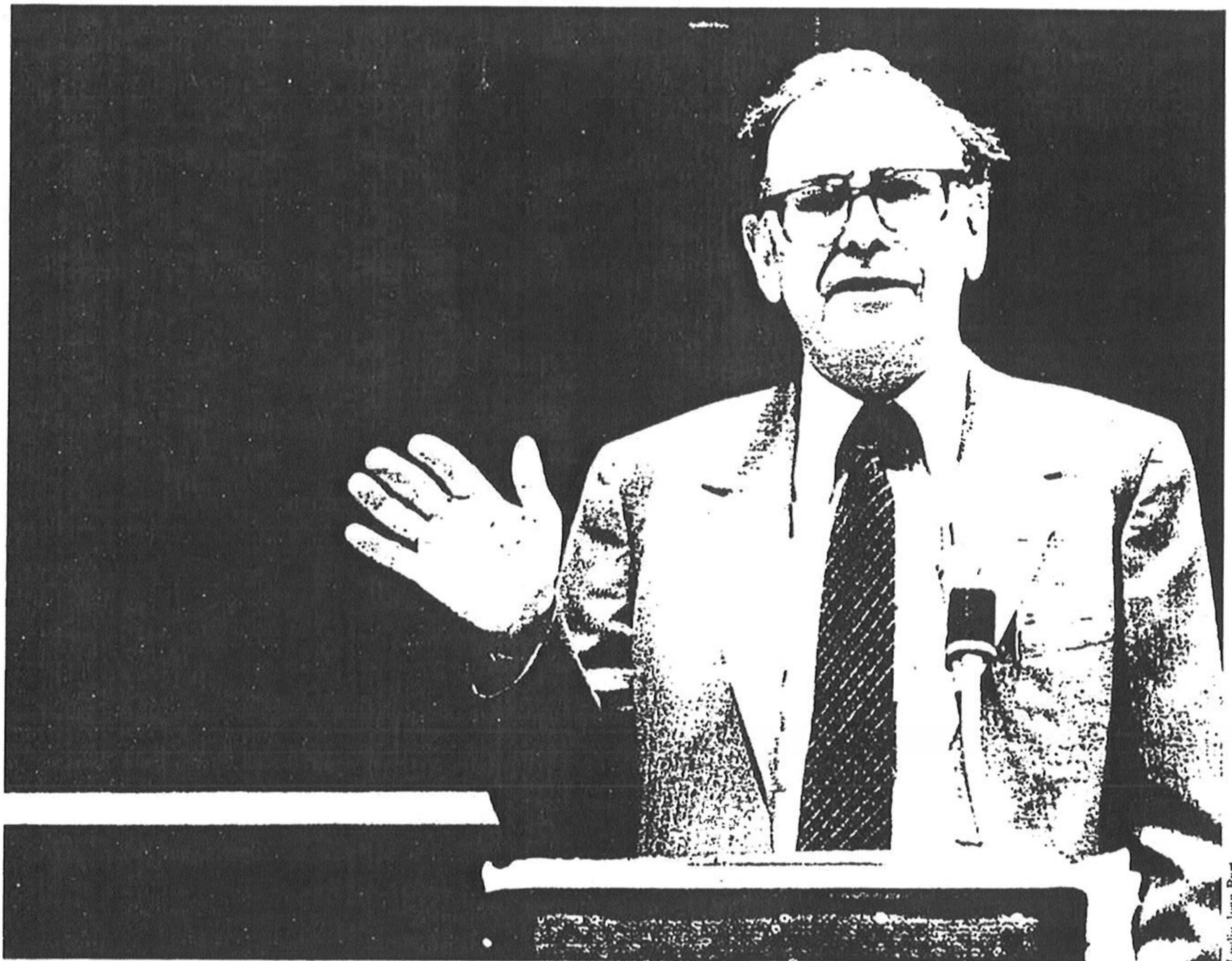
Period ending	1 Year	2 Years	3 Years	4 Years	5 Years	6 Years	7 Years	8 Years	9 Years
FMC									
1983	23.0								*17.1
1982	22.8	13.6	16.0	16.6	15.5	12.3	13.9	16.3	
1981	5.4	13.0	15.3	13.8	10.5	12.6	15.4		
1980	21.0	19.7	16.8	11.7	14.0	17.3			
1979	18.4	14.7	8.7	12.3	16.5				
1978	11.2	4.2	10.4	16.1					
1977	- 2.3	9.8	17.8						
1976	23.8	29.3							
1975	35.0								*18.5 from equities only
Becker large plan median									
1983	15.6								12.6
1982	21.4	11.2	13.9	13.9	12.5	9.7	10.9	12.3	
1981	1.2	10.8	11.9	10.3	7.7	8.9	10.9		
1980	20.9	NA	NA	NA	10.8	NA			
1979	13.7	NA	NA	NA	11.1				
1978	6.5	NA	NA	NA					
1977	- 3.3	NA	NA						
1976	17.0	NA							
1975	24.1								
S&P 500									
1983	22.8								15.6
1982	21.5	7.3	15.1	16.0	14.0	10.2	12.0	14.9	
1981	- 5.0	12.0	14.2	12.2	8.1	10.5	14.0		
1980	32.5	25.3	18.7	11.7	14.0	17.5			
1979	18.6	12.4	5.5	9.8	14.8				
1978	6.6	- 0.8	6.8	13.7					
1977	- 7.7	6.9	16.1						
1976	23.7	30.3							
1975	37.2								

for 50 years, ever since Ben Graham and Dave Dodd wrote *Security Analysis*, yet I have seen no trend toward value investing in the 35 years I've practiced it. There seems to be some perverse human characteristic that likes to make easy things difficult. The academic world, if anything, has actually backed away from the teaching of value investing over the last 30 years. It's likely to continue that way. Ships will sail around the world but the Flat Earth Society will flourish. There will continue to be wide discrepancies between price and value in the marketplace, and those who read their Graham & Dodd will continue to prosper. 4

on a speech he gave at Columbia Business School, May 17, 1984 at a seminar marking the 50th anniversary of the publication of Benjamin Graham and David Dodd's Security Analysis.

Warren E. Buffett, is chairman and chief executive officer of Berkshire Hathaway, Inc., an Omaha-based insurer with major holdings in several other industries, including General Foods, Xerox and Washington Post Company.

After getting an A+ in Benjamin Graham's class and graduating from Columbia Business School in 1951, Buffett went to work on Wall Street at Graham-Newman & Company. In 1957 founded his own partnership, which he ran for ten years. This article is based



Leslie Jean-Bart

What Is Your Investing Edge?

By John Huber

Article Highlights

- Most investors focus on trying to gain information that others don't have, but this advantage is the one that's the most competitive.
- Short-term information might help with predicting quarterly earnings surprises, but it isn't much of an advantage in determining the long-term value of a company.
- A time-horizon advantage, where an investor is willing to look at business through a long-term lens, is a sustainable advantage that is likely to increase as investing time frames get shorter and shorter.

Last year, I came across an investment write-up on a large-cap stock that is one of the largest and most widely followed companies in the S&P 500 index.

There was a comment that basically asked: “What is your edge with this stock?”

The implication of this question is that there isn't any edge to be had with large, well-followed stocks, but there is an edge to be gained with small, underfollowed stocks.

This is a commonly held view among value investors: You need to seek out stocks that are underfollowed, in hopes of gaining bits of information that the market is not currently pricing into the stock. This is a well-intended strategy, but I think the presumption that there is a lot of informational advantage to be had in small-cap stocks is vastly overstated. This doesn't mean I believe the market is efficient. I just think that attempting to gain an informational advantage is not the most effective way of finding value, given the wide availability of easily obtainable information in today's market.

Investors' Three Main Advantages

I did a talk at the MicroCap Conference in Philadelphia last fall where I addressed three main advantages that can be had in markets:

- Informational advantage,
- Analytical advantage, and
- Time-horizon advantage.



Most investors only focus on the first advantage—and this is the advantage that is most competitive.

Finding information that others don't have is the primary reason why many investors prefer small caps over large caps. They think they'll uncover something that the market currently doesn't recognize. In the early 1950s, Warren Buffett was turning the pages of Moody's Manual and found Western Insurance. This stock was a profitable, well-managed insurance company with a clean balance sheet. The stock was trading between \$15 and \$20 that year despite having \$16 per share in earnings. In other words, the stock had a price-earnings (P/E) ratio of 1.0. This was not a soggy cigar butt with a bad balance sheet, it was a profitable business with real earning power and had a stable future as a going concern.

It probably took Buffett less than 60 seconds to realize this was a good deal. This was an example (albeit an extreme example) of information arbitrage. He found information that the market at large didn't have. It was simply because Buffett was willing to turn the pages of Moody's. He was doing work that others weren't doing. Some of the stocks he found were almost certain winners.

I think a lot of the low-hanging fruit has since been arbitrated away because the breadth of information and the ease with which we can access it has leveled the playing field. Everyone is out looking for bargains now.

That said, I am completely in favor of working very hard to locate undervalued ideas. And I'm completely in favor of looking at small-cap stocks for investment ideas. But unlike

so many other investors, I'm just as willing to look at widely followed large-cap stocks for ideas, and I think widely followed large-cap stocks can become very mispriced at times.

I also think that many investors think they have found information in small caps that others don't have. One of the advantages of writing a blog (Base Hit Investing, basehitinvesting.com) is that I hear from a lot of readers. In the past when I have mentioned small-cap stocks, I'm amazed at how many people have already researched the company I'm looking at and have found the same information I found. There might be 100 analysts on Wall Street following Apple (AAPL), but there are probably 500 or more small investors following every small-cap stock. As a percentage of the market capitalization and trading volume, the number of investors looking at the average small-cap stock probably equals or exceeds the coverage of the average large-cap stock.

In other words, I'm skeptical when someone claims to have found information that the market doesn't already have.

Again, I don't want to imply that it's not worth looking at small-cap stocks. I just think the gap between small-cap stocks and large-cap stocks in terms of publicly available information is much smaller than many realize.

Informational Focus Goes Hand-in-Hand With Short-Term Focus

Also, investors who focus on trying to gain an information edge are typically focused on short-term information. There was an article in the paper a few months ago that mentioned how various hedge funds are now paying for satellite imagery of farms in order to predict crop yields in the upcoming harvest. These funds are also using satellites to help them analyze traffic patterns at retailers like Wal-Mart (WMT) by counting cars in the parking lot and plotting the change in cars over a period of time.

This type of information might be useful in predicting whether or not a company will "beat expectations" in the next quarter, but it isn't all that

much of an advantage in determining the long-term value of the enterprise or its longer-term competitive position. (We'll get the same data that the satellite images provide; we'll just get it at a later date.)

So much focus is on the short term and so much focus is on trying to uncover information before the market. This creates an advantage for investors who choose to focus on a different potential advantage—namely, time-horizon advantage.

My answer to the question of "What is your edge?" with XYZ large-cap stock is not some hidden piece of information, but simply my willingness to view the business through a different lens than the majority of investors. And I think this is a real edge. I think it's also a sustainable edge and one that is likely to increase as investment time frames continue to get shorter and shorter. (The average investor held a stock for 14 years in 1965; by the end of the 1990s, this was down to 30 months. It is now likely under a year).

Therefore, I think this hyper-focus on generating short-term results, analyzing quarterly data, and emphasizing "catalysts" all help to increase the edge for those who are willing to buy good companies with no clear reason for why the value exists or certainty for when the market will correct the value.

Large-Cap Stocks Do Get Mispriced

Table 1 is a snapshot of the top 10 largest stocks in the market just before the Brexit scare back in June 2016.

The highlighted column in the table shows the difference (in percentage terms) between the 52-week high price and the 52-week low price. The average change for the top 10 largest companies in the United States was a whopping 49%. There is certainly no doubt that a company like General Electric (GE) doesn't see its intrinsic value (the price a private buyer would pay for the entire business) change by 68% in one year. Likewise, Johnson & Johnson's (JNJ) fair value doesn't change by 44% from one year to the next. But the stock prices for both those firms did fluctuate by those amounts, respectively. This doesn't mean General Electric or Johnson & Johnson were undervalued at any given point, but it just states that since stock prices fluctuate much more than fair valuations do, there are potentially many opportunities to locate undervalued opportunities when the market's pendulum swings too far toward the low end of a given range.

Table 2 presents a more comprehensive look at the fluctuations across a broad swath of stocks in the market. I did this analysis in October 2016 and the changes represent the average and

Table 1. Top 10 Largest Companies in S&P 500 (as of 6/24/2016)

Company (Ticker)	Current Market Cap (\$ Bil)	Market Price (\$)		% Change (High/Low)	Change in Market Value (\$ Bil)
		52-Wk Low	52-Wk High		
Apple (AAPL)	511	89	133	49.4	239
Google (GOOG)	459	515	790	53.4	187
Microsoft (MSFT)	391	40	57	42.5	134
Exxon Mobil (XOM)	370	67	92	37.3	106
Amazon (AMZN)	330	426	731	71.6	145
Berkshire Hathaway (BRK-B)	326	124	148	19.4	60
Facebook (FB)	320	72	121	68.1	141
Johnson & Johnson (JNJ)	318	82	118	43.9	100
General Electric (GE)	274	19	32	68.4	117
AT&T (T)	255	31	42	35.5	69
Average % Change High/Low				48.9%	
Average \$ Change in Market Value				\$130 billion	

median gaps between the 52-week high and the 52-week low prices for stocks in the various indexes.

Even before the surprise result of the U.S. presidential election, which took stocks to new all-time highs, there was a significant gap between the 52-week high and low prices. For example, the Russell 3000, which is an index that includes both large- and small-cap stocks, had a median gap of an incredible 64.5% between the 52-week high and low prices. This shows that there is a large number of securities in any given year that have a yearly high stock price that is significantly greater than its yearly low price.

This volatility is where our opportunity is as value investors. Intrinsic values do not fluctuate (on average) by 65% in any given year, but stock prices do. The fact that stock prices move much more than intrinsic values means that sometimes stock prices become disconnected from their fair values (sometimes they are overvalued and sometimes they are undervalued). The volatility of the market can be a useful tool that, as Ben Graham said, is there to serve us, not to be our master.

A Couple Examples of Mispriced Large Caps

Bank of America (BAC) is an example of how significant the gaps between price and value can be even when it comes to large-cap stocks. Bank of America ended 2015 trading around \$17. The stock traded for around \$11 just over a month later in early February 2016. As of early April 2017, it trades for around \$22.

In other words, the value that the stock market placed on Bank of America dropped by about \$60 billion in just six weeks at the beginning of 2016. Even more incredibly, the market values this same company around \$120 billion more than it did just nine months prior when the stock hit its “Brexit low.” This roller coaster ride in market capitalization is much more pronounced than the change in intrinsic value (the value a private buyer would have paid for BAC at any

Table 2. Average and Median Price Fluctuations in Overall Market

Russell 2000 (Small Caps)	
Average % Change Between 52-Week High and Low (High/Low)	114.7%
Median % Change Between 52-Week High and Low (High/Low)	76.4%
S&P 500 (Large Caps)	
Average % Change Between 52-Week High and Low (High/Low)	54.4%
Median % Change Between 52-Week High and Low (High/Low)	45.0%
Russell 3000 (Both Large and Small Caps)	
Average % Change Between 52-Week High and Low (High/Low)	97.8%
Median % Change Between 52-Week High and Low (High/Low)	64.5%

Data as of 10/13/2016.

given point during 2016).

How does a company as widely followed as Bank of America experience such a change in valuation?

Investors sold it off in the early part of 2016 because of fears about a negative impact to earnings that low oil prices would have on the bank’s energy portfolio, as well as fears related to an overall economic slowdown and a possible recession. These were factors that would have quite possibly impacted the near-term earnings outlook at Bank of America, but would be very unlikely to impact the long-term earning power of the franchise.

Those who were willing to look out three to five years and possibly deal with negative short-term results were able to buy stock in a profitable bank with a good balance sheet at really cheap prices.

Some quick, back-of-the-envelope math on the company when the stock traded around \$12 per share gives an example of how to estimate fair value:

- The bank had \$190 billion of tangible equity;
- The company was doing 10% returns on that equity, which I thought was a reasonable proxy for normal earning power;
- This equals around \$19 billion in profits (\$190 billion × 0.10);
- BAC had around 11 billion shares outstanding;
- This equates to approximately \$1.70 in earnings per share (\$19 billion ÷ 11 billion); and
- The stock’s price of \$12 was about seven times my estimate of earning

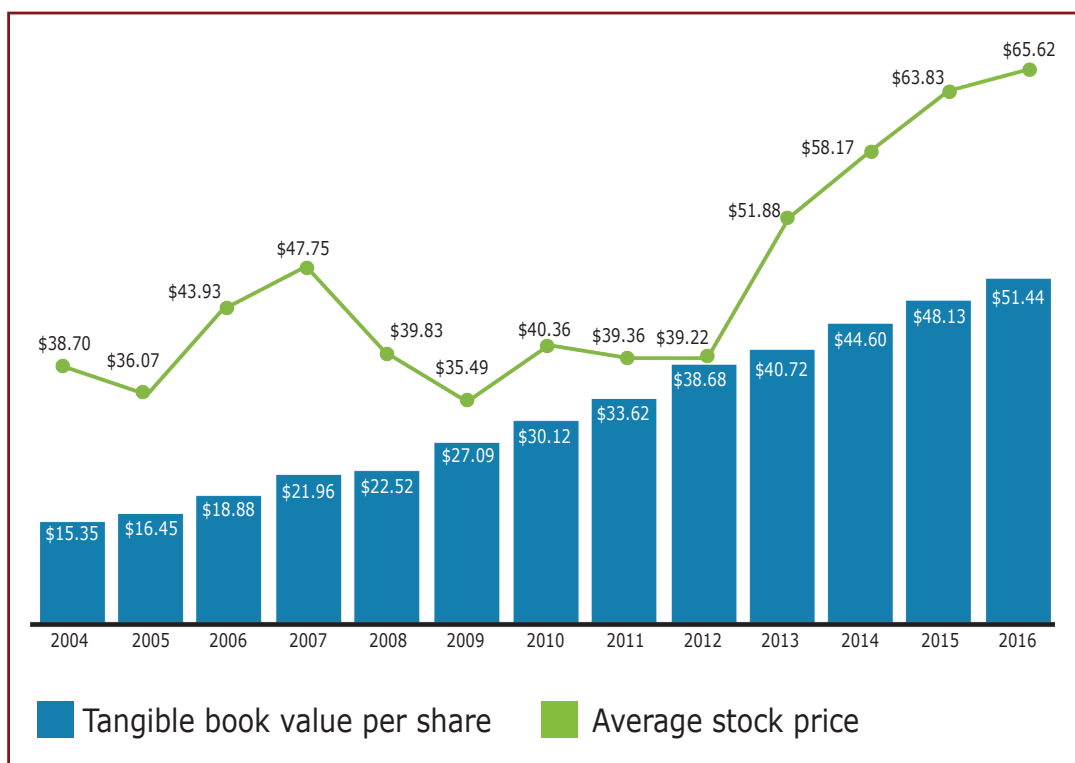
power (\$12 ÷ \$1.70).

Bank of America’s book value was growing at around 6% to 8% annually, which means the bank would have somewhere around \$20 of tangible book value per share in three years (2019). At a modest return on tangible equity of 10% (which is what the company was already doing at all-time low profit margins), the company will have around \$2 of earning power in three years. I think this would probably be worth 10 to 12 times earnings, meaning the stock would be worth somewhere between \$20 and \$24 in three years. You could have bought as much as you wanted for \$12 in early 2016.

In less than a year, the market “pulled forward” much of the gain that I expected over two or three years, but this is often what happens. Stocks can stay cheap for longer than you expect, and then can become repriced much more quickly than you expect.

This example is not to showcase an investment, but to demonstrate an example of a large-cap stock whose price fluctuates much more than its intrinsic value does. Long-term-oriented investors who were willing to buy into an uncertain short-term outlook could have purchased stock in a well-capitalized stable bank at really cheap prices relative to normal earning power. This was simply because the buyer of the stock could take a different time horizon than the seller, who was selling shares simply because they thought the news would be bad for a few quarters (and, by extension, that the stock price would perform

Figure 1. JPMorgan Chase's Tangible Book Value and Its Average Stock Price (2004–2016)



poorly in the short term).

A similar story could be told about JPMorgan Chase (JPM), which has a similarly volatile stock price but a much more stable intrinsic value, as illustrated by the consistency and stability of the firm’s tangible book value growth over the past decade in Figure 1.

Note that the stock price behavior of JPMorgan, and Bank of America in the latter half of 2016 and into 2017, is completely beside the point. Both stocks just as easily could have gone lower last year if the recessionary fears became reality. But the long-term franchise value of the companies wouldn’t have changed much. Both banks have sticky, low-cost deposit franchises, well-capitalized balance sheets, improving cost structures and durable earning power despite historically low interest rates and profit margins. The banks produce relatively unexciting (but stable) return on equity (ROE) and very

modest growth potential, but the price that their stocks trade at can offer, at times, significant value relative to the price paid.

The banks highlighted are just two examples of stocks that were mispriced last year, but there are countless examples of widely followed large-cap stocks that have become occasionally undervalued. I think a stock often gets mispriced because there is a general perception that the next year or so is going to be very difficult for the company and there isn’t any real near-term catalyst that will drive the stock price higher. This creates an advantage for those who are willing to deal with short-term underperformance.

What often happens is that the short-term underperformance doesn’t even occur. Sometimes the market “advances” gains—the stock appreciates an amount in six months that you thought would have taken three years. This

certainly happened with both Bank of America and JPMorgan.

Regardless of how quickly the stock appreciates to fair value, there is a real advantage for those investors who are willing to buy good companies when general market conditions or company-specific conditions are pessimistic (and without any clear-cut time frame for when that pessimism will subside).

This advantage is part of the market structure. Unlike the information advantage (which has decreased over time), I think time arbitrage’s advantage has increased. In fact, the advantage of time arbitrage has increased for the very reasons why informational

advantages have decreased: technology, the ease of gathering information and the short-term focus of market participants.

Conclusion

The “edge” is less about knowing more than everyone else about a specific stock, and more about the mindset, the discipline and the time horizon that you maintain as an investor.

Thinking long term is a commonly talked-about potential advantage, but one that is much less often acted upon. If you are a professional investor set up to capitalize on this or an individual investor who has the right mindset, you can give yourself a significant edge in the stock market. ▲

Disclosure: John Huber and Saber Capital Management clients own shares of JPMorgan Chase.

John Huber is the portfolio manager of Saber Capital Management LLC, an investment firm that manages separate accounts for clients. He also writes about investing at the blog Base Hit Investing (basehitinvesting.com). Find out more about the author at www.aaii.com/authors/john-huber.