While nothing is sure in investing, perhaps the least unsure of any of the assumptions we make is that highest grade bonds will pay their interest and principal when due. Provided such bonds are not callable for ten years or more, as is true of many of them, the buyer who invests his money to yield 8-1/2 percent is very likely to receive 8-1/2 percent through good times and bad until the bonds are redeemed or refunded.

The man who buys stocks yielding half that much must foresee a big increase in the dividends on his stocks or his action makes no sense at all. He may scoff at dividends because he is buying for capital gains but unless earnings and dividends rise, his capital gains will be as ephemeral as the oft-cited snowball in hell.

Late in 1961 when the stock market was exuberant I remarked to the first chairman of the SEC, Joseph P. Kennedy, “People don’t care about dividends any more.”

“Where are these people?” Mr. Kennedy challenged. “I never met one.”

International Business Machines, the greatest growth stock of them all, sold twenty years ago to yield about 1-3/4 percent. Clearly, you might think, the people who bought it were not looking for dividends. But if they still hold the stock they bought at the 1951 high they are getting dividends, in cash, now at the rate of more than 70 percent on their 1951 cost. Without that increase in dividends, and in earnings out of which to pay them, the phenomenal rise in the price of IBM stock simply could not have taken place.

Wise investors do not buy a stock just because it is going up or is expected to go up. Wise investors buy because they foresee an increase in earnings and dividends that will make today’s price look cheap in years to come. Even the wisest sometimes misjudge the future of earnings and dividends. Only fools—and perhaps some professional short-term traders—buy without giving that future a thought.

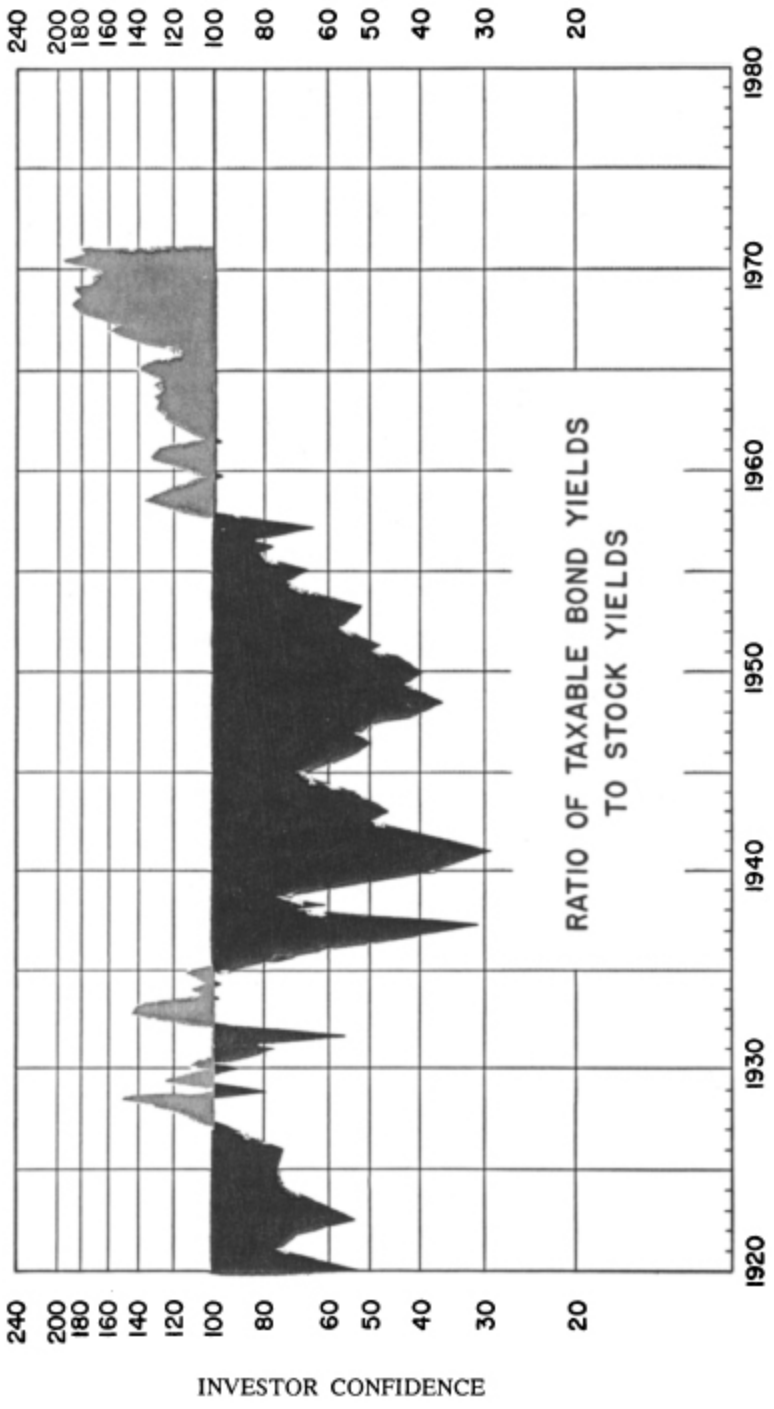
Over the years, comparing the yield on bonds with the yield on stocks has provided a remarkable gauge of investor optimism and pessimism, as the accompanying chart shows.

Between twenty-five and thirty years ago dividend yields on stocks were three times as great as interest yields on bonds. This made sense only if one assumed that dividends on stocks were highly undependable and very likely to decline over the years to come.

Actually, instead of declining, dividends rose steadily until about five years ago. At the same time the price per dollar of dividends rose relative to the price per dollar of bond interest. At the recent peak the investor could get almost twice as high a yield on the best corporate bonds as he could get on an average of fifty leading common stocks. In other words in a single generation the price of dividends rose from a third of the price of interest to almost twice the price of interest. It would be hard to imagine a more dramatic demonstration of the impact of a change from pessimism to optimism on security prices.

Just as it made no sense for dividend income to sell at a third the price of interest income unless one assumed a prolonged decline in dividends, so at the other extreme it made no sense for dividend income to sell at nearly twice the price of interest income unless one assumed a prolonged advance in dividends.

Over the last half century investors have tended to be optimistic about further increases in dividends when they should have been pessimistic. Likewise they have tended to be pessimistic about the future of dividends when in the bright light of hindsight we can see they should have been optimistic. They were, however, correctly optimistic about the future of dividends at the time the dollar was devalued in 1934, and again when dividends first sold at a premium over interest in 1958. Will their relative optimism today be justified? Only the future can tell. What we do know is that dividends must increase just to give today's stock buyers what they already have paid for. From here the trend of the stock market will depend not on whether dividends increase—that is already in the price—but on whether the increase in dividends is *more* or *less* than is expected.



Just as the price of dividend income relative to the price of interest income reveals the stock market's expectations regarding the future trend of

dividends, so do comparative prices of earnings of individual stocks reveal investors' expectations regarding their relative future trends.

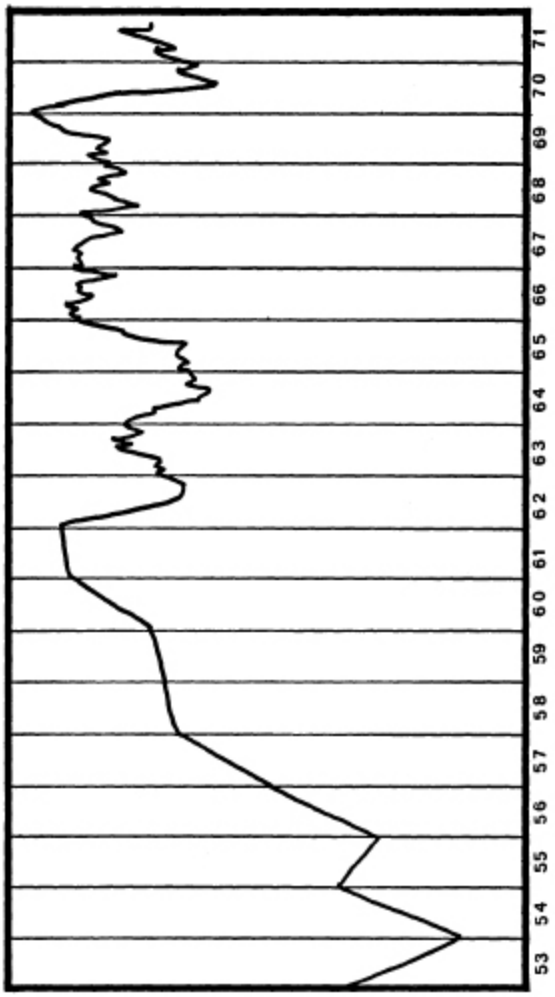
In time most businesses develop their own jargon which is at best confusing and at worst incomprehensible to the uninitiated. Wall Street is no exception. Since the financial community talks of interest yields on bonds and dividend yields on stocks, it would be merely consistent to talk of earnings yields as well. But as though to avoid the imputation that consistency is a virtue of small minds, the financial community divides the dividend by the price to get the dividend yield, then turns around and divides the price by the earnings to get the price-earnings ratio. For example, if a stock pays $3.00 a year in dividends and sells at 100, its dividend yield is 3 percent. If the same stock earns $5.00 a share its price-earnings ratio is 20.

The meaning would be the same if Wall Street talked of a 5 percent earnings yield but that simply isn't the language used.

When one stock sells 10 times earnings while another sells 20 times earnings the inference is that the market (that is, the consensus of investor money) expects the earnings of the company selling at the higher price to increase much more rapidly (or decline much more slowly) than the earnings of the company selling at the lower price.

Using this method the investor still has to guess what the future holds, but he can be relatively precise in his calculations of what the stock market expects the future to hold.

Later on I shall point out some of the pitfalls in uncritical use of price-earnings ratios for comparative purposes. Like matches in the hands of a child, they can be deadly dangerous. To the expert they are an essential tool. Properly adjusted and related to a good general market gauge such as the Dow-Jones Industrial Average, they become Hope Thermometers.



POLAROID HOPE CHART

Here, plotted monthly within each year shown, is the price-earnings ratio of Polaroid divided by the price-earnings ratio of the Dow-Jones. This is called Polaroid's relative price-earnings ratio or relative multiplier. When this relative price-earnings ratio is at the level of 1 on the scale on both sides of the chart, the inference is that the stock market expects about the same rate of growth in Polaroid's earnings as in the earnings of the Dow-Jones Industrial Average. When this relative price-earnings ratio is at the level of 4 on the scale, the stock market is paying four times as much for a dollar of Polaroid earnings as for a dollar of earnings of the Dow. From that level Polaroid's earnings must quadruple to give the buyer as much as he could have had by buying the Dow instead.

No good doctor would prescribe for a patient on the basis of a thermometer reading alone. But I have seldom seen a doctor who did not take my temperature as part of his examination.

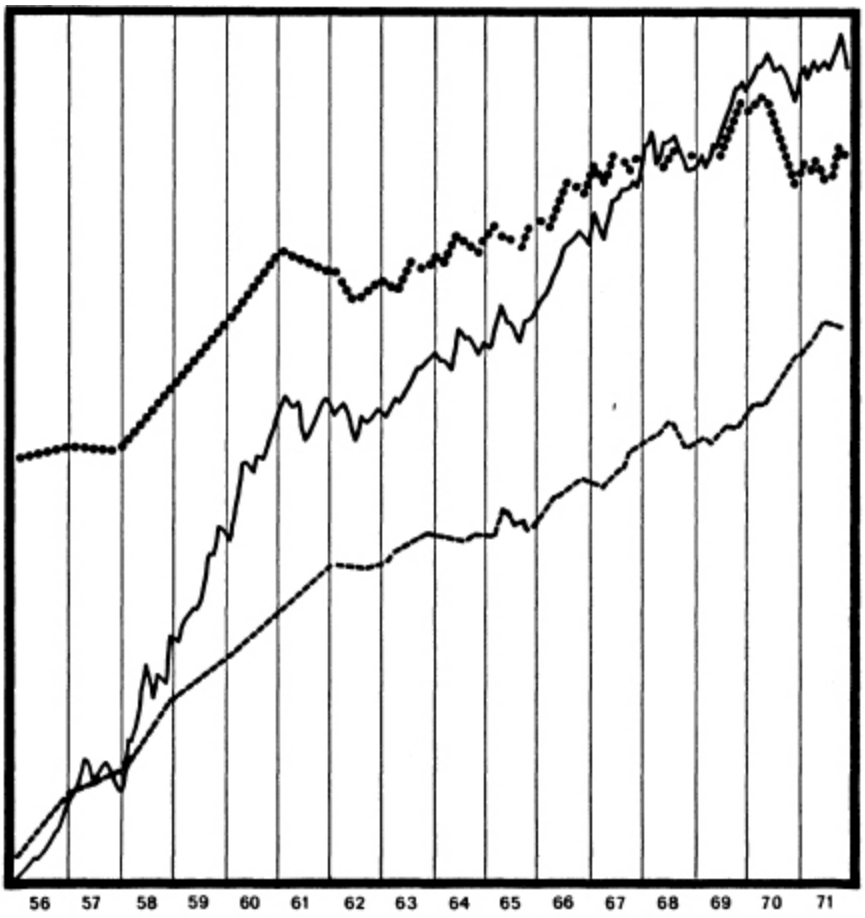
Good investment doctors use Hope Thermometers the same way. Because a picture is worth a thousand words, and can be read much more

quickly, Scudder, Stevens & Clark keep Hope Thermometers on thousands of stocks. On page 97 is one on Polaroid for the last twenty years. It indicates that hopes for Polaroid's future earnings exactly equalled hopes for the thirty leading companies in the Dow-Jones Industrial Average.

Even at the 1970 low the market price of a dollar of Polaroid earnings was still more than twice the price of a dollar of earnings of the Dow-Jones Industrial Average. To warrant *that* relationship, Polaroid's earnings must more than double relative to the Dow-Jones Industrial Average earnings and do as well as the Dow thereafter. But there will be no sound basis for expecting Polaroid stock to outrun the Dow-Jones Industrial Average unless, after Polaroid's earnings more than double, the outlook is still more favorable for Polaroid than for the Dow. In effect, at the 1970 low, the Polaroid buyer was saying to the Polaroid seller: "I am so sure Polaroid's earnings will more than double relative to the Dow that I am willing to pay you now what Polaroid would be worth if they had already more than doubled. Why will I do that? Because I believe that after Polaroid's earnings have risen to the level I am now paying for, they will continue to rise faster than the Dow's."

All this shows a high degree of confidence in Polaroid's future, and great self-confidence in the buyer's ability to foresee Polaroid's future. Both may be justified. Time will tell. But as investors we play blind man's buff unless we thus define the implications of relative prices.

The careful observer will note that the price of Polaroid anticipated a record rise in its earnings relative to the average of thirty leading stocks at the same time the price of leading stocks was anticipating a record rise in dividends—sort of a double whammy!



AVON PRODUCTS

Because we have talked about relative prices, relative earnings, and relative price-earnings ratios or relative multipliers, it may be helpful to look at a chart which shows all three together. Here is one of Avon Products covering the 16-year period in which an initial $10,000 investment in the stock would have made us millionaires by 1971.

A stock's price may rise because its earnings rise, or because the price of each dollar of those earnings rises, or both. If a stock is earning $2 a share and selling at $20, the price of each dollar of those earnings is $10. If the stock earns $3 a share in the next year, and the price of each dollar of those earnings remains at $10, the stock's price will rise to $30. But if as often happens the price of each dollar of the stock's earnings rises too, say from $10 to $15, then the stock's price will rise to 15 times $3, or to $45 a share. Most great advances in the stock market result from some such combination of rising earnings *and* rising price-earnings ratios.

Likewise, the rise in the relative price of any stock must be derived from a rise in its relative earnings plus or minus any change in its relative multiplier or price-earnings ratio. That is simple arithmetic.

As the Avon Products chart shows, the great rise in the relative price of the stock was based on a steep and persistent advance in Avon Products' relative earnings. But without the accompanying advance in the relative price paid for each dollar of those earnings, the rise in Avon Products' relative price would not have been much more than half what it actually was.

This may seem to belabor the obvious, but many investors are so intent on earnings that they fail to appreciate the oft-times greater significance of changes in the market price of each dollar of those earnings. Price-earnings ratios and relative price-earnings ratios measure investor expectations. Ofttimes more than half of the rise in the price of stock is due to a change in investor psychology.

Paying attention to the psychological content of any stock price advance is important for two reasons:

1. What goes up on a rise in investor expectations can go down on a fall in those expectations. Both can occur without any change in reported earnings.

2. It is rare for seasoned stocks to have price-earnings ratios much over four times the Dow's. Hence when a stock sells at 60 times earnings while the Dow is selling at 15 times earnings, the prospective buyer is on notice (a) that his optimism about the stock's future is widely shared, and (b) that the chances of a further rise in the price of the stock due to a further rise in its relative price-earnings ratio are slim. What this means is that the buyer must look to further increases in earnings to carry all of the burden of any further increase in the stock's price which heretofore has been lifted both by a rise in its relative earnings and by a rise in its relative price-earnings ratio.

A stock can rise one hundredfold if its earnings increase twenty-five fold while its price-earnings ratio increases fourfold. (25 X 4 = 100). But if its price-earnings ratio remains unchanged, its earnings must increase one hundredfold to produce the same price advance. If, heaven forbid, its price-earnings ratio should be halved, its earnings must double just to keep its price unchanged.

It is no more unsound to buy a stock in anticipation of a rise in its relative price-earnings ratio than it is to buy a stock in anticipation of a rise in its relative earnings. Department store buyers would be stupid indeed if they paid no attention to fads and fashions. But it is unsound to buy any stock without knowing to what extent its price is based on its relative earnings and how much it is based on its relative price-earnings ratio.

There is no such thing as a “correct” price-earnings ratio. Nor is there a “correct” relative price-earnings ratio. All depends on what the unknown future brings forth. But one does not have to be a financial genius to realize that when he buys a stock at a very high relative price-earnings ratio he is paying someone hard cash now for what is hoped for in the rather distant future.

Turning again to the Avon Products chart, note that as late as 1957 Avon Products stock sold at a lower price-earnings ratio than the Dow-Jones Industrial Average. By the end of 1969 each dollar of Avon Products earnings was valued in the market at more than 4-1/2 times the price of each dollar of the Dow-Jones Industrial Average earnings.

If Avon Products price had advanced and declined proportionately to the Dow from 1955 to 1971 its relative price line would have been straight and horizontal. If Avon Products relative earnings had increased and decreased proportionately to the Dow’s, Avon Products relative earnings line would have been straight and horizontal. Finally, if Avon Products price earnings ratio had remained equal to the Dow’s, that line too would have been straight and horizontal. Going forward in time from any point on any of the three lines, an advance above the horizontal or a decline below the horizontal shows that Avon Products’ price, earnings, or multiplier has gained or lost compared with the Dow-Jones Industrial Average.

To me the picture suggests that:

1. Further rise in the price of Avon Products stock must depend largely on further gains in Avon Products earnings.

2. Investor confidence in those further gains in Avon Products earnings must stay high or go higher if the stock price-stimulus of rising earnings is not to be offset by a declining multiplier.

3. Avon Products’ sales and earnings must grow to three or four times the greatest they ever have been just to support the 1971 price of Avon Products stock unless it is assumed that even after Avon Products has

tripled or quadrupled in size its prospects for further growth still will be better than prospects for the Dow.

If these comments seem inconsistent with my theme of “buy right and hold on,” I welcome the chance to make a point. Buying right will do you little good unless you hold on. But holding on will do you little good—and may do you great harm—unless you have bought right.

After a stock has risen to 50 times what you paid for it, you can be quite sure you have bought right. If it doubles once more, you have your 100 for one. You can afford to run some risks for a reward of that size.

The new buyer faces a different problem. He must ask and answer correctly the question: “What are my chances of making 100 for one from here?” As we saw in the case of American Can, history is no help. Only correct assumptions about the future are relevant. And unless those assumptions are materially better than the stock’s price already is anticipating, there is still no profit in them.

Relative value analysis provides no final answers. It does help to define what is expected, and thus afford a benchmark against which the investor can gauge the profit potential in whatever assumptions he chooses to make.

In the bright light of hindsight it can often be seen that the stock market has gone to unjustified extremes. It is much safer for the investor to proceed on the basis that these unwarranted extremes result from the common human inability to foresee the future rather than from stupidity. As a matter of fact, in the stock market money tends to move from stupid to intelligent hands. The stupid round-lotter* becomes an odd-lotter.* The intelligent odd-lotter soon is trading in round lots. When one attempts to outguess the stock market he enters the lists against the distilled essence of the best financial brains of the world. It is a sobering thought. What should give the average man hope is the realization that the most expert, the most experienced are constantly retiring or dying, often being succeeded by inexperienced youngsters who insist on learning the hard way.

A further comforting thought is that since no one knows what the future holds, all of us are entitled to guess about it. We should not forget, though, that an informed guess has an edge over a wild one.

How can you calculate this hope element (relative price-earnings ratio) for yourself?

Every Monday, at the bottom of the first column on the next to the last page of the *Wall Street Journal*, is reported the price-earnings ratio for the Dow-Jones Industrial Average. Get the latest price for your stock from any newspaper. Divide that price by the per share earnings of the stock for the latest twelve months. If you are a stockholder you can get the earnings figure from the latest annual report. If you are only thinking of becoming a stockholder, you may find the latest twelve months' earnings a share reported in *Barron's Stock Market at a Glance*. If you have access to *Standard & Poor's* or *Moody's* manuals, you can find the earnings figures there. Your broker may be willing to look them up for you.

Let us suppose your stock is selling for $60 a share, and that its latest year's earnings are $2 a share. The price-earnings ratio then is 30 (60 divided by 2 = 30). Let us suppose that the latest price-earnings ratio reported for the Dow is 15. Divide 30, the price-earnings ratio for your stock, by 15, the price-earnings ratio for the Dow. The answer, of course, is 2. This means that the market is paying twice as much for each dollar of earnings of your stock as it is paying for each dollar of earnings of the thirty great companies in the Dow-Jones Industrial Average.

The inference is that the market (that is, the consensus of investor money) expects the earnings of your stock to increase much more rapidly (or decline much more slowly) than the earnings of the Dow-Jones Industrial Average. Using this method you still have to guess what the future holds for your stock, but you start from a factual base of what the market expects the future to hold for your stock relative to other stocks. If what you expect is better than what the market expects, you buy. If what you expect is less than what the market expects, you sell. But only if the difference between what you expect and what the market expects is great enough to give you a profit after allowing yourself a wide margin for error!

Having thus made a case for the use of price-earnings ratios, I shall now cite some of the hazards in doing so.

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* A round lotter is one who buys stocks 100 shares or more at a time. An odd lotter buys fewer than 100 shares, often just 10 shares. Since the odd lotter must pay slightly more per share than the round lotter, buyers who can afford to do so usually buy at least 100 shares at a time.

CHAPTER X

The Quality of Earnings Is Strained

Every age has its mass delusions. So, I suppose, does every race, nation, and occupation. While a delusion persists, it is lonesome, sometimes dangerous, and always unprofitable to say that the emperor has no clothes on. Nevertheless I shall put my head through the sheet and say that to my mind one of the worst delusions of the investment business is the uncritical use of price-earnings ratios, or more specifically the misuse of price-earnings ratios, to arrive at relative evaluations of various stocks and stock groups.

Basically the fallacy of using price-earnings ratios for comparative purposes is the implied assumption that the earnings are as comparable as the prices. We know that the prices are comparable, so long as the quotations are expressed in the same currencies. But the earnings of different companies vary so much in quality and hence in value that we might as well be comparing cows and horses on the basis of how fast they can run. When I see tabulations of stocks ranked according to the quotients of their prices divided by their latest year's reported earnings, I am reminded of the World War I veteran who lost his job and turned to begging under a placard reading:

Three years in the trenches.
Two wounds.
One wife.
Four children.
Seven months out of a job.
Total seventeen.
Please help.

Let me make plain that I am not implying either originality or novelty for this idea that price-earnings ratios, like martinis, can be very deceptive. Nor do I mean to suggest that professional security analysts ignore the dangers in uncritical use of price-earnings ratios. Far from it. All I am questioning is whether as investors we try hard enough to allow for the differences in the quality of earnings. Do we perhaps sometimes pay lip service to these differences while using statistical procedures which ignore them? Does our pressing need to reach more investment decisions faster tempt us to gloss over differences in the quality of earnings because, after all, in this business one must be "practical"? Let's see.

There are two approaches to the problem. One might be called the accounting approach. The other is perhaps best described as conceptual.

The accounting approach is the better known but to my mind the conceptual approach is even more important. In saying that, I do not mean to belittle the significance of accounting variations and omissions. If the stock market clock ever strikes midnight again, as it did on September 3, 1929, Leonard Spacek, chairman of Arthur Andersen & Company, will be one whose C.P.A. coach should not turn into a pumpkin. No one has done more than he to deflate the "accepted practice" balloon which for so many years had lifted sharp practice to respectability.

I lack the accounting expertise to gild Mr. Spacek's lilies, but I do want to say an especially loud "Amen!" to his early criticism of corporate reporting of lease financing. If anything were needed to point up the gulf between the owners and the managers of some businesses, it could be supplied by the failure of some managers to tell the owners the amount and terms of lease financing in the same detail as they matter-of-factly disclose the amounts and terms of other long-term obligations.

The accounting profession weaseled out of this for decades by saying that it was not accepted accounting practice to show unaccrued rents as a liability. Accordingly when a corporation sold its headquarters building, or factory, or tanker, to an insurance company, then leased it back for a period of years at a rate sufficient to repay the entire purchase price plus interest, the transaction became off-balance sheet financing, the terms of which all too often were known only to the managers of the business.

These are material facts whose absence I am deploring. Take for example three companies with $100 million capital each. All wish to

expand, because each is earning 20 percent before taxes on its invested capital. For this illustration let us assume that the effective tax rate is 50 percent.

The first of the three companies issues additional stock to increase its invested capital to $200 million. The second sells 8 percent long-term bonds to bring its invested capital to $200 million. In each case, whether we approve or not, we at least know what is going on. The first company, with all common stock capitalization, continues to earn 20 percent before taxes, 10 percent after taxes, on its invested capital and on its equity.

The second company continues to earn 20 percent on its invested capital, before taxes, but earns 16 percent on equity after taxes as a result of the capital leverage. That percentage is arrived at as follows: 20 percent of $200 million equals $40 million, less $8 million interest on $100 million of funded debt leaves $32 million less 50 percent corporate income tax leaves $16 million which is equal to 16 percent on $100 million equity.

The third company acquires $100 million of additional facilities by lease financing on terms which amount to 10 percent interest. Since neither the amount nor the terms of this lease financing are disclosed to the investing public, and since the lease obligations are not shown on the balance sheet, the investing public is encouraged to conclude that this third company now is earning 15 percent on invested capital and on equity. The 15 percent is calculated as follows: Earnings of 20 percent before undisclosed lease rentals and taxes on $200 million of assets amount to $40 million less $10 million of lease rentals leaves $30 million less 50 percent corporate income tax leaves $15 million which equals 15 percent on $100 million equity. Thus we have three companies each employing $200 million of assets, each earning 20 percent before taxes and undisclosed lease rentals on each dollar of assets employed in its business, but one apparently earning 10 percent after taxes on equity and on invested capital, another with disclosed leverage earning 16 percent on equity and 10 percent on invested capital, and the third with undisclosed leverage apparently earning 15 percent both on equity and on invested capital.

Suppose business turns bad, so bad that each of our three companies earns only 5 percent before taxes on each dollar of assets employed in its business. The first company with the all common stock capitalization earns 5 percent before taxes and 2-1/2 percent after taxes on both invested capital

and on equity The second company with the $100 million of 8 percent bonds earns 5 percent before taxes on invested capital and 1 percent after taxes on equity. The figures are arrived at as follows: Pretax earnings of 5 percent on $200 million equal $10 million less $8 million bond interest leaves $2 million less 50 percent corporate income tax leaves $1 million which is 1 percent on $100 million equity. Security analysts could foresee the impact of the decline in business on the second company, of course, because they had the pertinent facts about the capital leverage. But how about the third company? Still assuming precisely the same conditions that we applied to the first and second companies, that is, a decline in pretax earnings on invested capital from 20 percent to 5 percent, the aftertax return on equity of the third company would plummet mysteriously from 15 percent to zero We arrive at that figure this way: Pretax earnings of 5 percent on $200 million of assets (before off-balance-sheet financing lease rentals) amount to $10 million. When we deduc $10 million of lease rentals from pretax earnings of $10 million, nothing is left.

If and when we manage to ferret out the details of lease financing, which is the villain in the cast, we discover that the return on the capital employed in the business is 5 percent but hat the return on the equity has been wiped out by the necessity of paying 10 percent on the lease rentals.

Management, of course, is fully aware of all these lease financing details, but neither management, the company auditors, nor the S.E.C. thus far has seen fit to regard such vital statistics—vital to investors, I mean—as coming under the head of information which the owners of American business are entitled to have *in the same detail as debt.*

In times of long-continued prosperity, with prices, profits, and business volume all trending up, it seems old maidish to harp on such matters. Yet if we ignore these prior charges, we might as well ignore all others too, and henceforth consider only the equity. It is a pity for the business and financial community to leave undone those things which ought to be done. Sooner or later some reformer from outside grabs the ball and runs with it, upsetting the financial community’s applecart as he goes. We can’t block him because we know he’s only doing what we should have done long ago. Many other examples could be cited, but they have all been in the news.

I said there are two approaches to this matter of the quality of earnings, one accounting, the other conceptual. Let’s look at the conceptual:

Part of most companies' earnings is paid out in dividends. Those dividends are equal to each other, dollar for dollar. Your grocer never asks whether the money you pay him came from dividends or interest. He couldn't care less.

But how about the earnings not paid out in dividends? Suppose those retained earnings were stolen, what would they then be worth? More realistically, suppose they are invested in projects which do not pay off, with the result they add nothing to the company's earning power. What then is the proper price-earnings ratio at which such earnings should sell?

My feeling is that such plowed-back earnings are entitled to about the same multiplier as is given to the per share depreciation.

"That's nonsense," you may be thinking. "We don't apply any multiplier whatsoever to depreciation in figuring the value of a stock."

That is exactly the point I am trying to make. As investors, let us say we buy a company earning $1.00 per share, and paying us each year in dividends 50 cents a share. If at the end of five or ten years the company is still earning $1.00 a share and still paying us 50 cents a share in dividends, what has happened to the earnings retained each year? The answer may be that they have been required to maintain what we bought in the first place. But that comes close to being a definition of a charge for depreciation. Is it unrealistic therefore to disregard plowed-back earnings which fail to produce any improvement in the earning power of the business?

Let's not answer that question too hastily. Suppose we have two companies each earning $1.00 a share, each paying 50 cents a share in dividends, and each failing to show any growth in earnings as a result of the plowed-back profits. Before we conclude that one is as bad an investment as the other, let us note that the sales of the first company have been increasing at the rate of 10 percent compounded annually while the volume of business done by the second company has been declining 10 percent a year. Is it possible that the first company has been "buying" additional business out of its pretax earnings so effectively that if we capitalized the additional business fairly the adjusted earnings would have shown a nice increase? By the same token is it not possible that the second company has only managed to maintain its reported earnings at the starting level by in effect liquidating its business on the installment plan, thereby taking into

the income account some money which in economic theory should have been return of capital?

Few would argue against the proposition that a dollar of earnings of the first company is worth more than a dollar of earnings of the second company. How much more is another question. The answer to that question depends primarily on how long one is prepared to assume the future will be like the past. The evidence is overwhelming that the future will be like the past for a little while. When the head of the Weather Bureau in New York City retired some years ago he was quoted as saying that a man could make a pretty good record as a weather forecaster by predicting that tomorrow's weather would be like today's. Since we tend to have periods of fair weather followed by rainy spells, weather forecasting based on nothing more than a look out of the office window would be right much more often than not.

Since for all men the visibility of the future is zero beyond this instant, assumptions as to how long observed trends will continue must be based on probabilities which in turn have been derived from the past and hence may not apply to the future. This is a long-winded way of saying that all estimates of the future are to some degree subjective.

The business of the stock market is to cash in on the future now. Accordingly it is really not as important, short term, to know what sales and earnings are going to be five and ten years hence as to know what other investors are going to think they will be. In general the longer a trend continues the more people can be found willing to risk their savings on the proposition that it will continue longer still. As a practical matter then we probably should assume that old trends will persist longer than new trends simply because, whether they do or not, more investors will be inclined to assume that they will.

Let us return for a moment to the two companies each earning $1.00 a share and each paying 50 cents a share in dividends, with no improvement in either over the last five years. Let us further assume that there has been no change in the relative sales of either company. Surely now we have the basis for a meaningful comparison of price-earnings ratios. If one of those two companies sells at ten times earnings while the other sells at twenty times earnings, our course is clear. Or is it?

Let us assume that one of the two companies has been spending $1.00 a share a year on basic research which thus far has been totally unproductive. The second company has been spending nothing on research. The first company's earnings obviously are worth more than the second company's earnings for two reasons:

1. The first company has a chance of striking it rich in research at any moment. The second company, doing no research, has no such chance.

2. The first company can discontinue the research program, in which case, other factors remaining equal, the money now being spent on research would be added to pretax earnings. The second company, doing no research, has no opportunity to cut expenses by eliminating its research program.

If instead of research you substitute prospecting for mineral deposits or wildcatting for oil, the comparisons between the two companies would be affected in much the same way.

Some readers may think I'm reciting things they have long known. Others may be feeling that the theoretical illustrations I have used are extreme and unrealistic.

"In practice," the latter may be saying to themselves, "such variations do not amount to enough to alter my investment decisions."

I shall not argue against anyone who contends that *in most cases* such variations as I have cited would not alter an investment decision reached while ignoring such variations. Neither shall I argue that in most cases when you get into your automobile it does not matter whether you fasten your seat belt or not. But just as fastening your seat belt may at some time save your life, so scrupulous attention to the wide potential variations in the quality of earnings may someday save your fortune.

Let me cite two or three more ways in which $1 of reported earnings of one company may be found to be worth substantially more or less than $1 of reported earnings of another company in the same business at the same time:

1. Two companies each reporting the same earnings and paying the same dividends per share, each showing the same rate of sales growth, each spending the same amount on research or wildcatting, show sharply different trends in inventories and receivables. The first company has held its inventories and receivables in roughly the same relationship to its

volume of business as in previous years. The second company has held down its unit cost of production by running its plants at a rate 10 percent higher than warranted by its sales with the result that its inventory has increased sharply. At the same time, as a sales gimmick, the second company has been selling its goods on extremely liberal credit terms with the result that its receivables have risen sharply in relation to the volume of business being done. Who would argue that the earnings of the second company are equivalent, dollar for dollar, to those of the first?

2. Two companies of equal size, with the same earnings and dividends per share, each spending the same amount on research or wildcatting, each showing the same sales growth, each maintaining receivables and inventories at the same ratio to the volume of business being done, are surely near enough alike to make it meaningful to compare their price-earnings ratios.

But the first of the two companies has been a good citizen. Its waste water has been purified before being returned to the river on which its factory is situated. Obnoxious fumes have been removed from the gases billowing out of its chimneys. Soil turned over in its strip-mining operations has been landscaped and planted to trees and grass.

The second of these two companies has cut corners on all these matters. The day after the identical earnings reports are issued, the second company is hit by court orders requiring the remedying of the stream and air pollution. It is made defendant in damage suits brought by its irate neighbors in the name of ecology. Before the battle is over its earnings are half those of the first company, which took its ecological stitch in time.

3. Two companies report the same earnings. One does so after paying competitive wages and up-grading its key personnel. The other does so by squeezing its employees to the point where the best men leave and those who remain are ripe for a strike.

How can you as an individual investor adjust or correct reported earnings for such differences in quality? In reading annual reports you can look for such variables as I have just cited. It is no job for an amateur, though, particularly not after a big dinner. Close reading of the financial press will give you some professional help at low cost. Detailed criticisms of corporate accounting have been much in the news in recent years. *The New York Times* financial pages, *Barron's* and the *Wall Street Journal* all

have carried such articles in the past year. Exposing accounting gimmickry has become an accepted part of the financial reporter's job. It is an important part of what a security analyst is paid for.

The best safeguard against sleight-of-hand bookkeeping is to have nothing to do with it, or with the men who practice it. See the chapter entitled *Profits in Ethics.*

CHAPTER XI

Manipulation Despite the SEC

Seventy years ago in a *Wall Street Journal* editorial Charles H. Dow wrote: "A method employed by some operators of large experience is that of responses. The theory involved is this: *The market is always under more or less manipulation. . . .*" William Peter Hamilton, who followed Dow as editor of the *Wall Street Journal*, while not denying the theory, declared: "Manipulation in the stock market is reported 20 times for once it occurs. It is the inefficient reporter's method of accounting for a stock market movement which he has not taken the trouble to understand."

For more than thirty-five years manipulation has been against the law. The Securities Exchange Commission both monitors the market and prosecutes manipulators. Is manipulation a thing of the past?

I cannot say, "Some of my best friends are manipulators." I do not know any. But nature abhors a vacuum. Where there are opportunities for profitable manipulation in a truly international market I assume there are manipulators, some of them beyond reach of our authorities and laws. My reasoning is the same as that which leads me to expect to find cockroaches in a dirty kitchen. What they feed on is there.

What are some of the more obvious opportunities for manipulation in the stock market?

S. A. Nelson's little book, *The ABC of Stock Speculation*, largely devoted to quoting Dow's editorials, cites the basic opportunity for manipulation in these words: "The great mistake made by the public is paying attention to prices instead of to values."

That is as true today as it was at the turn of the century, perhaps more true. The whole performance cult which dominated the stock market in the late 1960s was based on paying attention to prices rather than values.

But what do we mean by paying attention to prices rather than values? I quote *The ABC of Stock Speculation* again simply to emphasize that human nature is one of the few constants in an ever-changing world: “It is only fair to say that the public rarely sees value until it is most markedly demonstrated to them, and the demonstration comes generally at a pretty high price. It is easier for them, as experience shows, to believe a stock is cheap when it is relatively dear, than to believe it is cheap when it is more than cheap.”

Shooting where the rabbit was, is one of the most common investment errors. 1 have said it before and shall say it again. Time after time, year after year, men who would think you were crazy if you fired your gun at the spot from which a rabbit jumped a moment before, buy stocks that have advanced and sell stocks that have declined. Even security analysts are not immune to this malady. Too many of them, possibly reflecting the attitudes of the investors they are supposed to guide, tend to like stocks better the higher they go, and to be come increasingly disenchanted with them as their prices fall.

The stock market is almost unique in that the way to attract buyers is to mark up the price of the merchandise you want to sell. Conversely, if a large operator wanted to accumulate a position in a stock with great long-term potential the least effective thing he could do would be to bid up for it. On the contrary, if he could supply stock on each embryonic advance so that after a year or two speculators agreed that it was acting badly, they would sell him all they had at successively lower prices.

The money that has been lost by ill-advised sales of stocks in this great and growing country probably many times exceeds the money lost by unwise purchases. Yet the SEC so far as I know has never turned its beady eyes on a case of manipulation to drive or hold prices down, perhaps because it would be almost impossible to prove.

Dow wrote once that the elder Rothschilds are said to have acted on the principle that it was well to buy up property of known value when others wanted to sell, and to sell when others wanted to buy.

“There is a great deal of sound wisdom in this,” Dow said. “The public, as a whole, buys at the wrong time and sells at the wrong time. The reason is that markets are made in part by manipulation and the public buys on manipulated advances and after they are well along. Hence it buys at the

time when manipulators wish to sell and sells when manipulators wish to buy."

One area of possible manipulation and abuse of inside information to which so far as I know no official attention has been paid is via corporate acquisitions or mergers. Most managements scrupulously will avoid any personal investments in stocks of companies they might someday hope to acquire. But if all men were honest there would be less crowding in our jails.

The opportunity for the dishonest to play with marked cards in corporate acquisitions is great, as a perusal of Tables I and II will show. To cash in on such opportunities, top managers would not even have to buy up stocks in companies they planned to take over. They could make well-advised personal purchases of stocks their friends' companies were to acquire, and vice versa. Birds of a feather flock together.

Many people innocently assume that stock prices are manipulated simply by conspiracies to buy them so as to mark up their prices. Actually that probably never has been the prime tool of manipulators. It is much more effective to manipulate earnings.

In the bad old days of the 1920s, railroad reporters on the *Wall Street Journal* used to take it for granted that railroads would go through cycles of heavy maintenance expenditures and low earnings followed by light maintenance expenditures and high earnings. It was all done with a straight face. A new management would go over a railroad and "discover" that its roadbed was in poor condition. Years of expensive betterment would follow. Sometimes dividends had to be cut or omitted to pay for putting the track in good condition. Not surprisingly the price of the railroad's stock would decline.

Then would come a day when the property was in such good shape that maintenance expenditures could be reduced. Earnings rose, and with them the price of the stock. Investors who "understood" the program bought when earnings were depressed and sold when earnings were benefiting from subnormal maintenance ratios.

It is fair to say that some companies still manipulate their earnings, the SEC and the reformers in the accounting profession to the contrary notwithstanding.

Nothing is harder for security analysts to foresee than sharp changes in corporate earnings resulting from changes in the industry's pricing policies. Years of cutthroat competition suddenly give way to industrial statesmanship which could only have been foretold by mindreaders. The converse is often easier to anticipate because it follows overexpansion induced by a prolonged period of prosperity.

The moral of all this takes us back to Mr. Barron's, "The fact without the truth is false. Always connect." When you read a bearish story on a company whose stock has declined to a third of what it was two or three years ago, ask yourself not only whether the story rings true but also why it was published at this late date. It may be factual but still highly misleading to investors because of its timing. Good reporters know this and try to avoid being "used." Investors themselves must be the final judges.

But for the gullible there would be no manipulators. In Africa, where there are no antelope there are no lions.

CHAPTER XII

Keep Your Eyes Open on Those Random Walks

Stocks are bought and sold because *both* the buyer and the seller expect to benefit by their actions. Neither intends to do the other a favor. When a buyer and seller take the opposite action on the same stock at the same moment, as they must do to effect a trade, it's a good guess that they do not think alike. Without such differences of opinion the stock market as we know it could not be.

In a business thus based on a continuous flow of diametrically opposite opinions, it would not be surprising if there were differences of opinion about *how to decide* whether to buy or sell. There are. These differences of opinion about investment philosophies, methods, techniques, and procedures are many and varied. Among them I know of none more highly charged with emotion than the difference of opinion between the so-called fundamentalists and the so-called technicians.

I have been in both camps. My conclusion after forty-four years of observation and study is that technical work is not an alternative to fundamental security analysis. Rather it is a means of providing additional information of significant value m reaching profitable investment decisions.

It seems to me important for the professional investor to know at all times not only *what ought to be happening in the stock market,* as determined by fundamental security analysis, but also *what is happening in the stock market,* as determined by technical work. Good charts merely portray information any fully informed investor should have. Whether he gets this information in chart form or columns of figures is unimportant so long as he gets it. To me a picture is worth a thousand words. Hence charts save time.

There are two reasons why the fundamentalist security analyst needs technical assistance. The first reason is that no matter how good analysts are, there is always a chance that they do not know the whole story. When a stock persistently fails to act the way it should on the basis of the information I have, I conclude that I am missing something and redouble my efforts to find out what it is.

The other reason the fundamentalist security analyst needs technical assistance is to help him recognize when he is among the first to get the glad tidings, and when he is among the last. What difference does it make? Simply the difference between foretelling a price advance and explaining why one took place. The price-proof seesaw is always with us. The less the buyer has to go on, the airier the evidence, the lower the price. The more solid the proof, the higher the price.

Why do price movements sometimes reveal what investigation does not? Simply because no one except a manipulator lies to his broker. A man may mislead his competitors, hold out on his fellow directors, cheat his stockholders, and two-time his wife. But when he picks up the telephone and tells his broker to buy or sell he expresses the net of all he knows, hopes, and fears. Even manipulators know better than to try to make water run up hill. The composite of all this ultimate truthfulness tells a story that no businessman or investor can afford to ignore.

Neither can he afford to rely on market analysis alone. When the experienced hunter finds elephant footprints going up the side of a barn, he stops tracking and looks for a practical joker.

Getting the meaning out of almost infinitely varied price fluctuations is not easy. Sometimes I think it is as complex and difficult as any refining process I know of. Hundreds of individuals, scores of firms, have perfected methods of correlating market data which they regard as trade secrets. I shall not try even to suggest what they might be, though I suspect vast amounts of duplicate effort are involved.

For the individual investor it is enough to know two things:

1. Most price charts fall into one of two classes, a. Actual prices, and b. Relative prices
2. Even the most astute chart reader can only tell what the market seems about to do. Whether the market is right in what it does is another question.

Who cares whether the market is right in what it does, if only he knows it first?

My answer is that anyone trying to make $100 on an investment of $1 must care very much. Only by ignoring many unwarranted market movements can he achieve his goal, even if he has bought right.

In the bright light of hindsight, the general stock market decline from May 1946 to June 1949 was misguided, and could and should have been ignored by investors seeking to make their fortunes in the stock market.

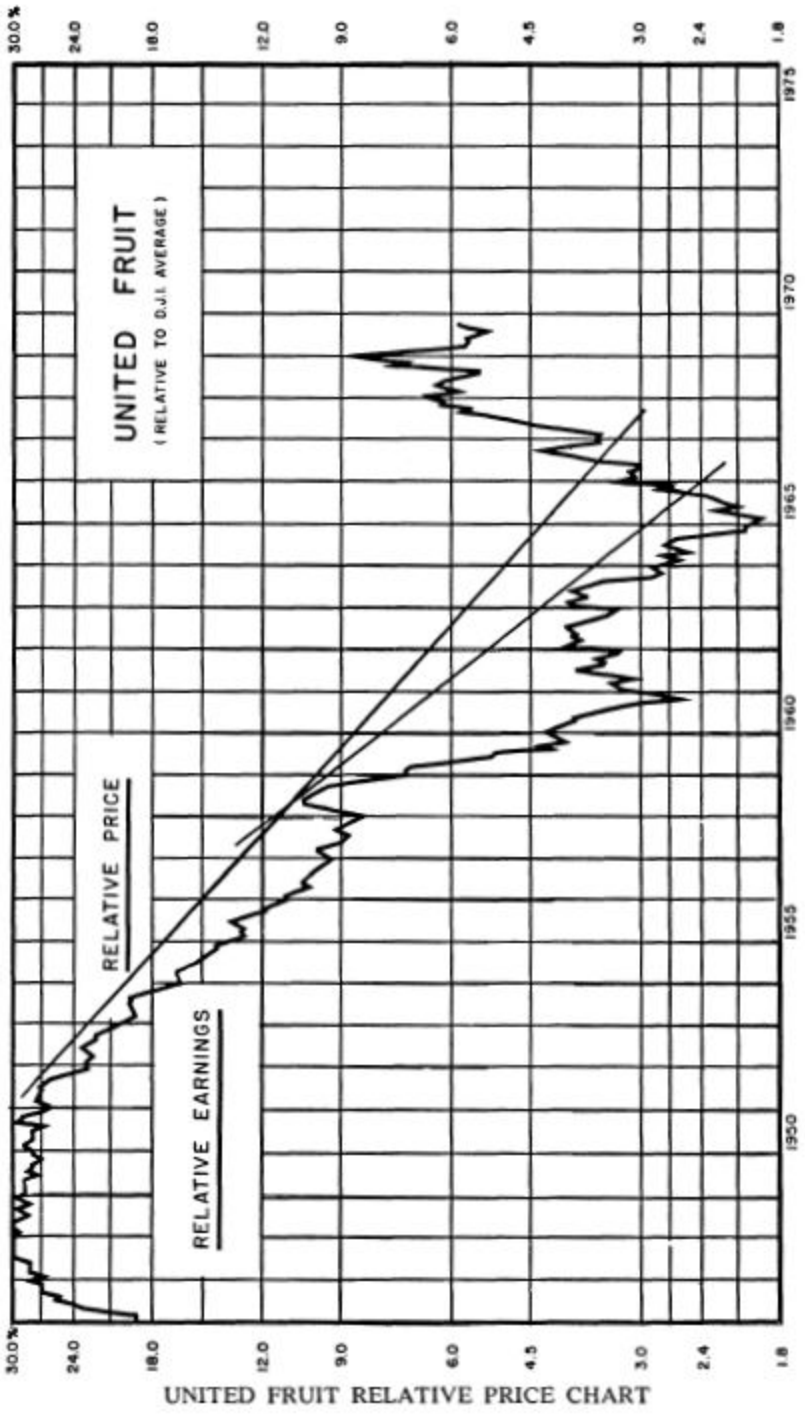
A relative price is simply an absolute price expressed as a percent of another absolute price. I learned the logic of doing this from Francis I. du Pont, one of the three or four truly great men I have been privileged to work with.

“The trouble with economics and finance,” Mr. du Pont said, “is that we are always working with dirty test tubes.” Mr. du Pont knew something about test tubes because he founded the research department of E. I. duPont de Nemours.

The use of relative prices enables us to take some of the dirt out of our economic and financial test tubes. That is so because when we divide the price (or earnings) of an individual company’s stock by the price (or earnings) of any good average of stocks, we take out of the record of that stock those ups and downs which are common to the whole economy. What we have left is peculiar to the subject under study.

Not only prices but earnings and multipliers or price-earnings ratios, when analyzed in this way, reveal much that is hidden when we examine only the actual figures.

As you might expect when one removes extraneous factors from the price history of a stock by dividing its price by the Dow-Jones Industrial Average, the relative price line thus obtained shows much more persistent trends than the absolute price line. This should surprise no one. Companies, like individuals, tend to run true to form. Here is a relative price chart of United Fruit. I chose a stock no longer traded because I wanted to provide an illustration without even an implied “tip.”



UNITED FRUIT RELATIVE PRICE CHART

This chart covers the period from the end of World War II to the end of 1968 when United Fruit was merged into AMK, now United Brands. The heavy black line is the price of United Fruit expressed as a percent of the

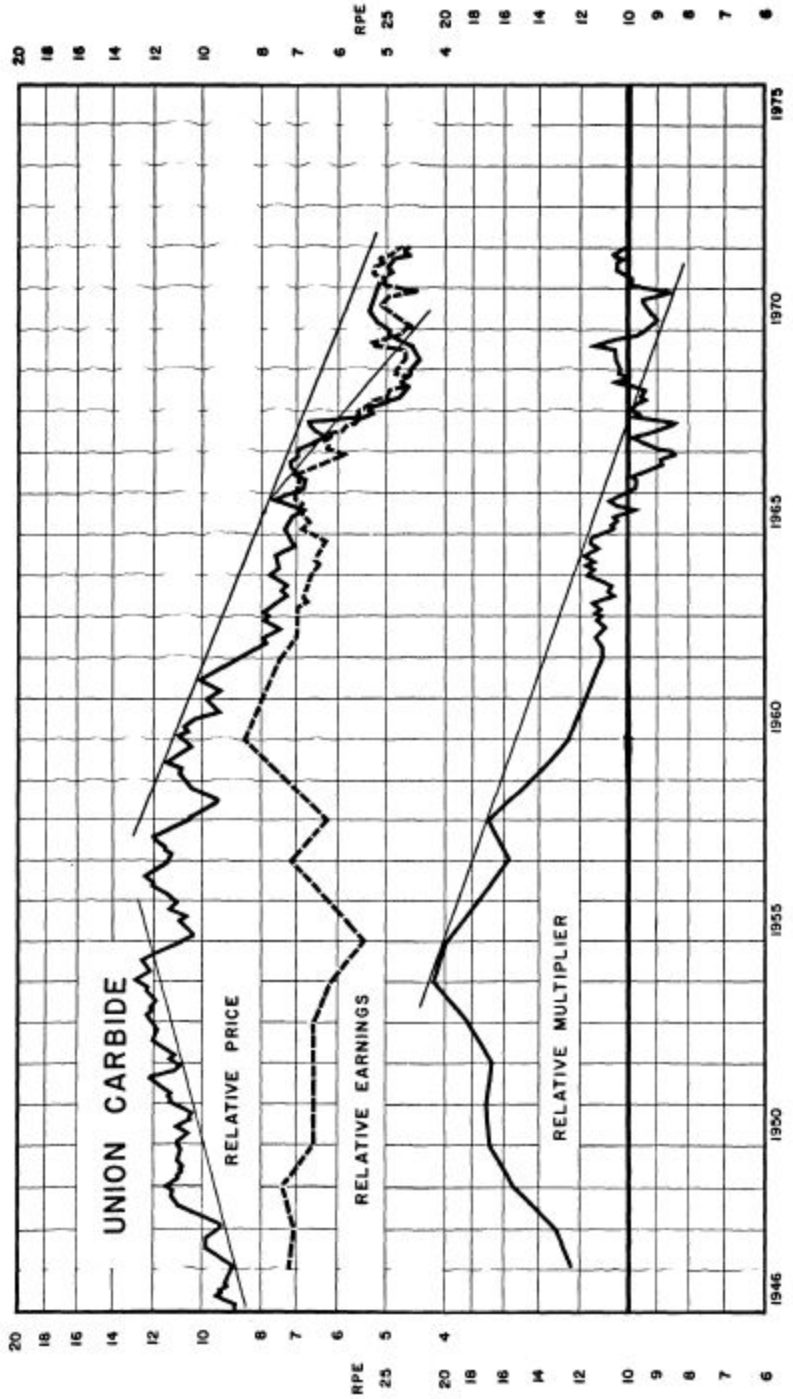
price of the Dow-Jones Industrial Average at the end of each month. If the price of United Fruit had moved up and down proportionately to the changes in the Dow-Jones Industrial Average, the black line would be straight and horizontal.

Note the awesome persistency of the downtrend in United Fruit once it got under way in 1950. I wish I could say that I had consistently avoided the stock until it hit its relative price low fifteen years later. Unfortunately, at times I shared some of the hopes of the United Fruit management that this deteriorating situation could be turned around.

Note what happened once the relative price downtrend was broken. I have superimposed two straight lines (A and B) to emphasize how clear this downtrend was, and how unmistakable the change when the trend turned upward.

Relative price studies can be used not only to detect long-term trends but also as a gauge of what the stock market is expecting. To show what I mean let us go back in our memories to Monday, June 13, 1955. Union Carbide had just closed at 100, which is equal to 50 for the present stock which was split 2-for-l in 1965. The Dow-Jones Industrial Average had closed at 440. Now let us suppose that our earnings forecasting was perfect. In other words let us assume that we *knew* that in 1966 Union Carbide's earnings would reach a record high 146 percent above what they were in 1954, and that we knew that earnings of the Dow-Jones Industrial Average would be up 102 percent. Or, putting it another way, suppose we knew in 1955 that Union Carbide's earnings would grow 7.8 percent compounded annually for the next twelve years.

Would you have bought Union Carbide?



UNION CARBIDE

A great many people did. Yet by the end of 1966, despite an increase of 146 percent in its earnings, Union Carbide actually was selling 5-1/2 percent below the price at which it sold on that Monday the 13th of June, 1955. Meanwhile the Dow-Jones Industrial Average was up more than 78 percent.

How can such things be? On the face of it such market action would seem to be unfair to fundamental security analysts. There ought to be a law against such carryings-on in the stock market. But wait. When we look at the relative multiplier we see that the market in 1955 was paying nearly twice as much for each dollar of Union Carbide's earnings as for each dollar of Dow-Jones Industrial Average earnings.

On the basis of relative prices prevailing in mid-1955 the market was expecting Union Carbide's earnings to rise so much faster than the earnings of the Dow-Jones Industrial Average that the buyer of Union Carbide would be better off over the foreseeable future than the buyer of the Dow-Jones Industrial Average, even though the Union Carbide buyer was getting much less to start with. As you know now, Union Carbide's earnings did rise faster than the earnings of the Dow-Jones Industrial Average, but not enough faster.

The market reaction recalls the story of the happy boy and the sad boy at Christmas. Both received identical bicycles. One boy was happy because he had expected nothing but a candy cane. The other boy was in tears because he had thought he was going to get a Mustang. Relative multipliers measure expectations. What happens subsequently is bullish or bearish only if it is better or worse than what was expected.

What do I think of Union Carbide now? "Now" as I write and "now" as you read may be months or even years apart. Ask your current investment advisor. I can say, however, that the market is no longer expecting the stock's earnings to outgain the Dow's. Against that background of expectations, if Union Carbide's earnings should show relative improvement over the next ten years, the market's response could be quite favorable. A dozen years ago the market was expecting great things of Union Carbide and found merely good things to be bitterly disappointing. Now the market is expecting little from Union Carbide. This means that good results could prove a delightful and even exhilarating surprise.

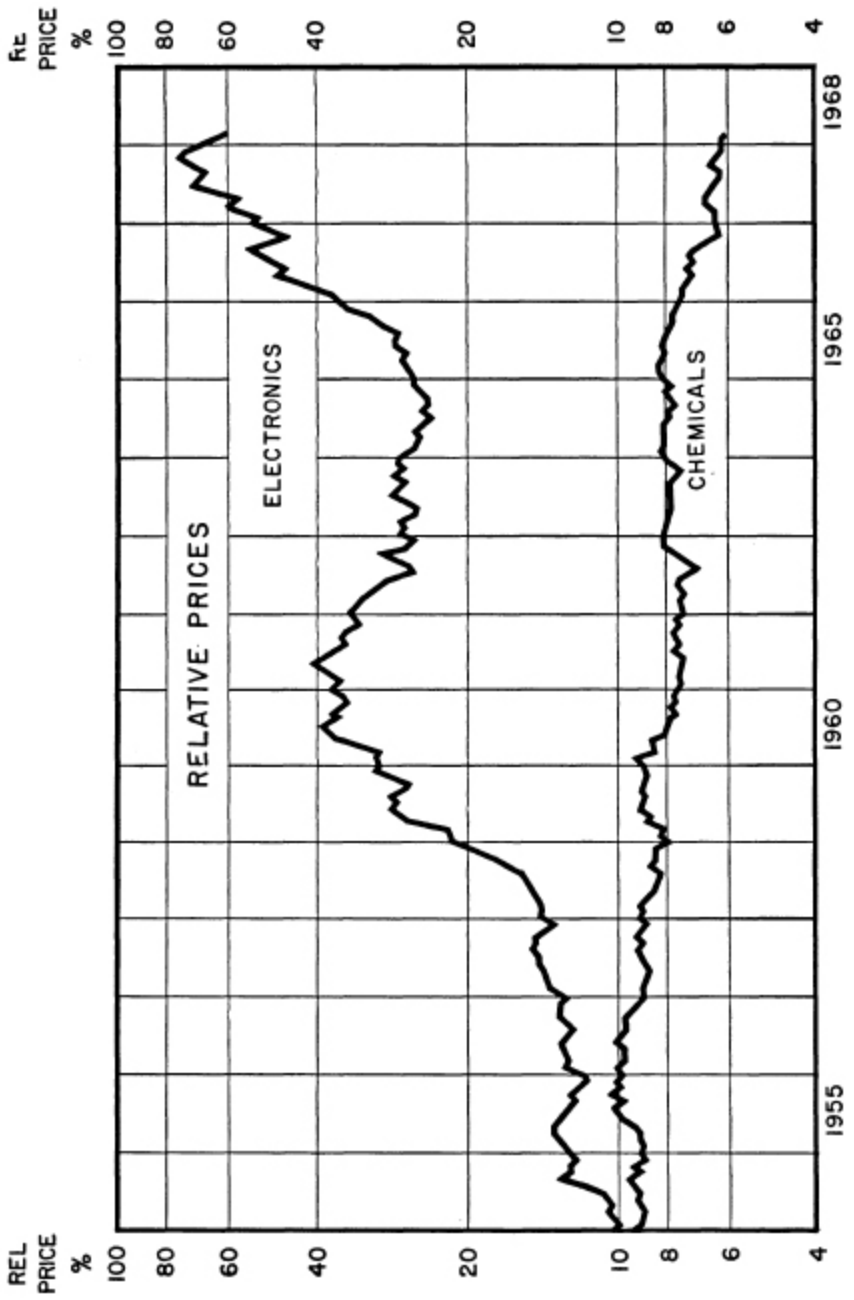
Just to emphasize again that relative multipliers are sometimes more important than any other investment consideration, here is a chart—What Makes Stocks Rise—of the relative prices of Standard & Poor's chemical average compared with Standard & Poor's electronics average, for the twelve years 1954 to 1966. You will note how profitable it would have been to switch from chemicals to electronics in 1954. How could we have known this at that time? A natural guess is that if we had known what the earnings would be we could have invested in the right group.

Actually earnings of the two groups started together and ended together. Most of the time the chemicals were doing better than the electronics.

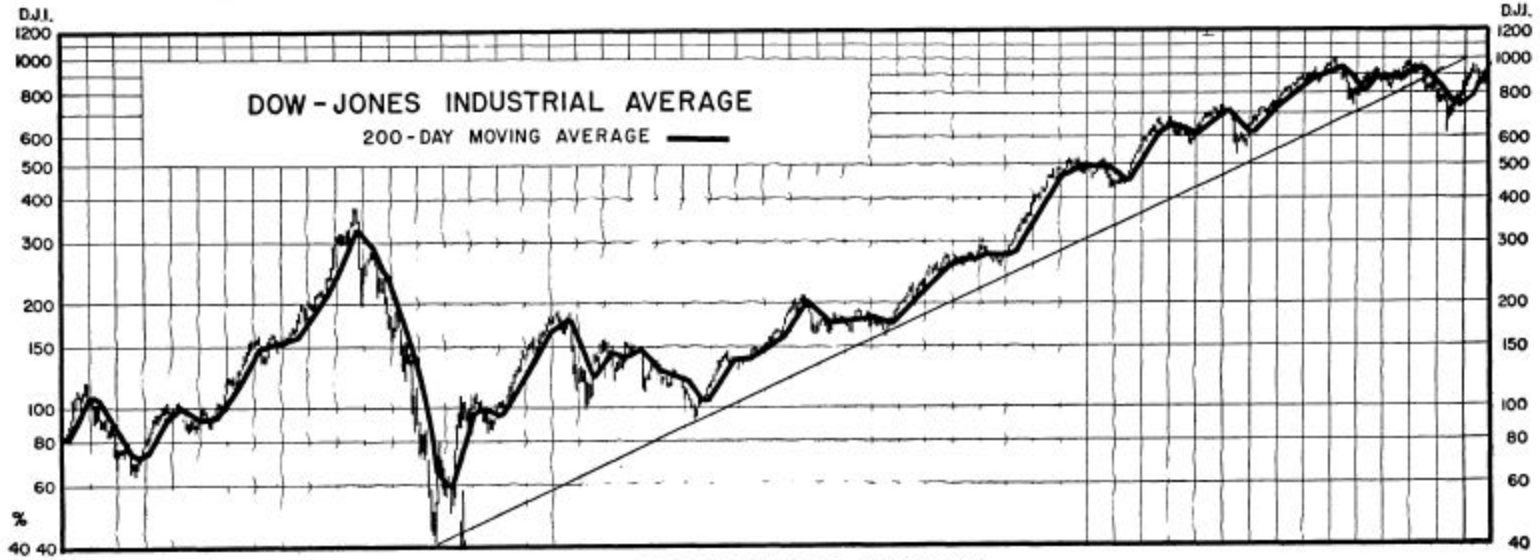
Perhaps you are thinking that if we had been watching relative sales we might have gotten a clue as to what to do. Here again there was no material disparity.

What *did* make the difference? At the start of the period, the price-earnings ratio of the chemicals was twice that of the Dow, while the price-earnings ratio of the electronics was half that of the Dow. By the end of the twelve years, the price-earnings ratio of the chemicals was about the same as the Dow, while the price-earnings ratio of the electronics was twice that of the Dow.

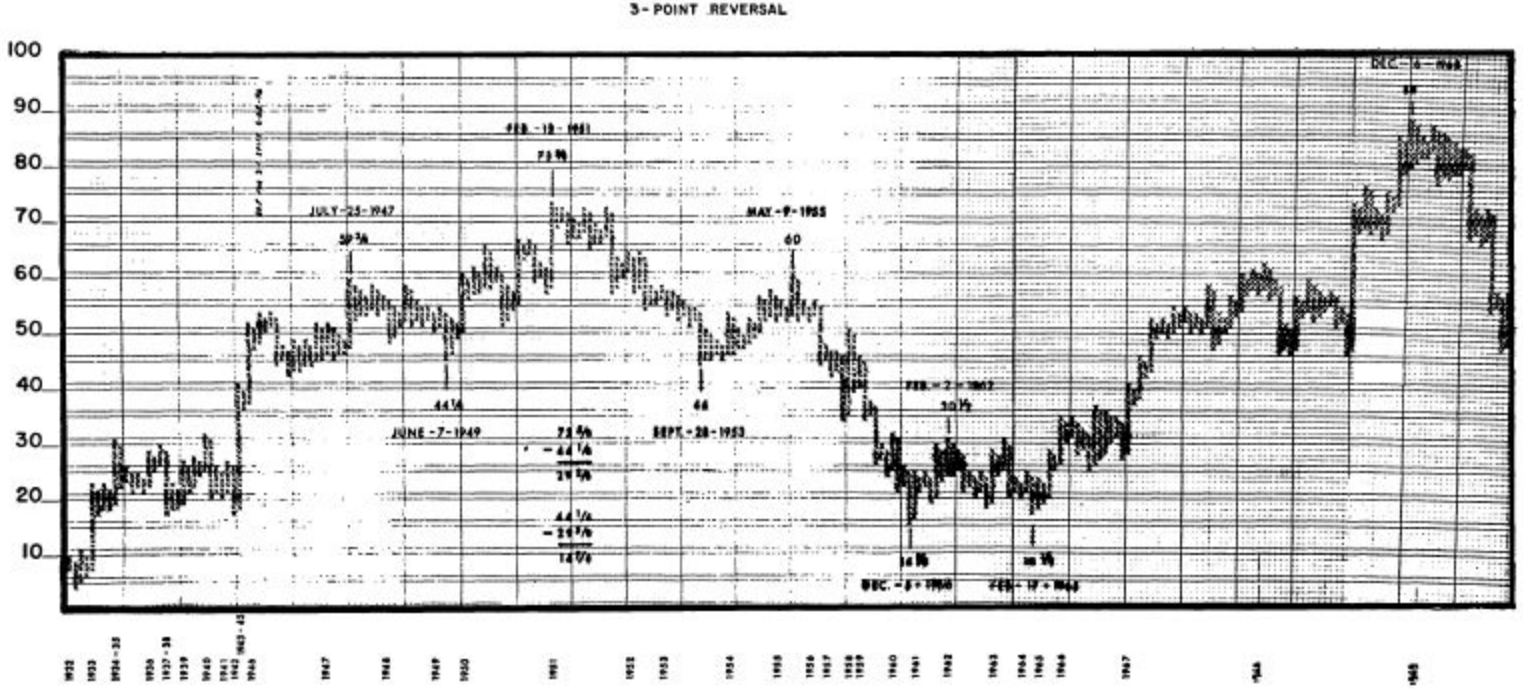
Turning now to absolute price charts, they are studied for signs of accumulation or distribution, and for manifestations of the great law of action and reaction. To show you what I mean by trend, look at this fifty-year chart of the Dow-Jones Industrial Average. Note how the market advanced for a quarter of a century above the line drawn through the 1932 and 1942 lows. Since this is a chart drawn to a scale that gives equal amplitude to equal percentage price movements, the ability of the stock market to stay above this line means that for more than thirty-five years the price trend was upward at the compounded annual rate of nearly 9 percent a year. Thus a generation of men came to maturity and leadership in the financial community without ever experiencing any other trend but this. Some came to take it for granted, like summer and winter.



WHAT MAKES STOCKS RISE



DOW-JONES INDUSTRIAL AVERAGE
200-DAY MOVING AVERAGE



POINT-AND-FIGURE CHART

UNITED FRUIT

Probably the oldest and simplest form of keeping price records on the stock market is what is called the point-and-figure chart. This method records price fluctuations only, without any regard to the passage of time. If a stock should sell for the same price every day for a year no new mark would be made on its point-and-figure chart. When the market is active, as many marks may be made on a point-and-figure chart in a month as were made in five years back in the 1940s.

Traders find point-and-figure charts especially helpful for signs of accumulation or distribution, or for indications of action and reaction. Realizing that point-and-figure charts are probably the most controversial of the technical tools now in general use, and quite possibly the most abused, I am giving just one illustration. And to avoid the suspicion that I am trying to prove something rather than simply to be a good reporter, the example I have chosen is a point-and-figure chart on United Fruit—the same Boston-based company we have already seen in our relative price studies. It is now part of United Brands.

Point-and-figure buffs say that a classic sign of distribution in the stock market is what they call a head-and-shoulders top. This formation appears in the chart before you. Note the left shoulder at 59-3/4 on July 25, 1947, the left collar bone at 44-1/4 on June 7, 1949, then the head at 73-5/8 on February 21, 1951. You will note that the right shoulder at 60 on May 9, 1955, is exactly 25 cents higher than the left shoulder, while the right collar bone is precisely 25 cents lower than the left collar bone.

Head and shoulder tops are not always as symmetrical as that but such a nice balance between the left and the right is by no means unprecedented. Fundamental analysts “know” this is just coincidence. But when chartists see such a top, how much of a decline does it indicate to them? They take the distance from the left collar bone to the head and subtract it from the figure at the left collar bone. In this instance the stock advanced 29-3/8 points from the left collar bone at 44-1/4 to the head at 73-5/8. Subtracting 29-3/8 from 44-1/4 they got 14-7/8. That happened to be the precise low reached by the stock in December 1960, almost ten years later. At that time it was hard to find anyone to say a good word for the issue. Yet anyone following this method had at least a suggestion at that time and price that the stock was worth some special research attention. As is almost invariably the case at the low, both the news and the outlook were bad.

Even if one scoffs at charts himself, the fact they are being so widely used by performance funds and even by banks argues for paying some attention to them. At times they provide the only clue to the stock market's aberrations.

Chart-induced excesses in the market should be welcomed as providing investment opportunities for those who understand the fundamentals of the situation. It is a lot easier to keep one's faith in temporarily disregarded fundamentals when one knows the technical developments behind unwarranted buying or selling.

Misinterpretation of charts possibly is no more common and no more costly to investors than misinterpretation of such respected fundamental information as profit margins, rates of return, and growth of sales. The greatest danger in charts, to my mind, is the temptation to use them as a guide to trading, thereby losing sight of the greater opportunities in buying right and holding on.

Let's return to United Fruit. Suppose you had had the good fortune to buy the stock at its 1932 low of 10-1/4. For $10,000 you would have acquired 975 shares, later split 3-for-l. Let us assume that you held the stock until the head and shoulders top was confirmed by a sale at 43-1/4, $1 below the June 7, 1949, low of 44-1/4. Had you sold at that price you would have realized $126,506. After commissions and capital gains taxes aggregating 30 percent your net proceeds would have been $91,555. Then let us assume you reinvested your money in United Fruit at the low of 14-7/8 on December 5, 1960. You would then have had 6,154 shares.

Suppose further that by some magic you sold the entire block at the 1968 high of 88. You might have arrived at that figure by subtracting the date December 5 (12-5) at the preceding low from the date February 13 (2-13) at the preceding high—213 minus 125 = 88. Your gross proceeds would have been $541,552 and your net proceeds after commissions and capital gains taxes $406,553.

By perfect timing on those major swings you would have increased your starting capital fortyfold. Meantime hundreds of stocks had risen more than one hundredfold. Were you aiming at the right target?

"Wait a minute," you may be thinking. "How fanciful can you be—getting a price objective by subtracting a starting date from an ending date! What nonsense!"

I did not dream up the idea. I observed that the advance from 44-1/4 to 73-5/8 began on June 7 (6-7) and ended on February 13 (2-13). Subtracting 67 from 213 gave me 146 compared with 14-7/8, the actual low on the next decline.

“If subtracting the date at the start of an advance in price from the date at the end of that advance ‘signals’ the price at the bottom of the next decline,” I thought, “maybe subtracting the date at the end of that decline (12-5) from the date at its start (2-13) will ‘signal’ the price at the top of the next ad vance.”

It did, exactly.

Random walks, like bird walks, are more fun if you keep your eyes open.

CHAPTER XIII

Experience Sometimes a Poor Teacher

We used to have a boxer dog named Prince. He was dumb but not stupid. In cold weather he found it much more comfortable to lie on the living room sofa than on the floor. This was not good for the sofa. To discourage Prince we set mousetraps there. When he lay down on them they would go off, pinching what Sir Winston Churchill would call Prince's soft underbelly. Yelping in pain Prince would get off the sofa and stay off until the memory faded. Sometimes that would be a week or two.

Now if Prince had been more intelligent he would have associated the pain with the mousetraps rather with the sofa. When mousetraps were there he would have stayed away. When the sofa was clear he would have made himself comfortable on it.

Not being that smart, Prince confused memory with reasoning, and acted on memory.

In the stock market many people seem to do that too. They do now what hindsight shows would have been profitable if they had done it ten days, ten months, or ten years earlier, under quite different conditions. They shoot where the rabbit was. I have done it myself. Having come to Wall Street as an impressionable young man in 1927, my first great experience was the long and savage decline in stock prices from September 1929 to July 1932.

To show how deeply that decline was branded on my subconscious, let me cite one specific instance. Not many months before the 1929 bull market reached its peak, I bought Southern Railway common stock at $140 a share. In just a few weeks I sold my stock at $160 a share, having doubled my money on the $20 margins then permitted. I began to have a fraternal feeling for J. P. Morgan. You know the bewhiskered story. When asked how much it cost to run his yacht, the "Corsair," Mr. Morgan replied, "If it

matters, you can't afford it." I wished I had said that and intended to as soon as I got my yacht.

Some of us on the *Wall Street Journal* saw a decline coming, and I was short of several stocks at the start of the great toboggan. As the decline became more severe, and politicians in Washington began to snipe at Wall Street, our publisher banned all short selling by members of the news staff. Under that edict I covered Curtis Publishing (bought back the stock I had sold short) at $90 a share. By 1932 it was selling at $7 a share.

If newsmen on the *Wall Street Journal* could not sell short we could at least stay out of the market. I did until the Southern Railway stock I had sold at $160 got down to $8. That was the annual dividend Southern Railway had been paying at the time I sold the stock in 1929.

It seemed brilliant to buy back the stock for just the dividend it had been paying when I sold it. I bought all I could at $8 a share on 50 percent margin. Within a few months Southern Railway common had declined to $2.50 a share and I was wiped out.

I did not lose much then because I did not have much to lose. But the "lesson" I learned cost me millions. All the rest of my life I have risked too little and sold too soon. Even though in 1935 I heard President Roosevelt himself expound his doctrine of planned reflation, even though I was covering the United States Supreme Court the day the gold clause was invalidated, my memory was stronger than my reason. I continued to act as though the old rules were still in effect. So did millions of other people.

One college endowment fund with which I did business as a broker was managed for years on a plan of selling stocks on a scale up to 200 in the Dow-Jones Industrial Average and buying them on a scale down to 100. By hindsight a great deal of money could have been made via that plan between 1934 and 1946. But for the period from 1946 to 1966, in which the Dow rose from 160 to 1,000, the plan was disastrous. Once again its sponsors paid the price of "doing now" what hindsight showed they should have done ten years earlier.

My first personal experience with 100-to-one stocks began in April 1932, when I bought 100 Aluminium Ltd. D warrants in odd lots at prices ranging from 3-3/4 to 1-1/8. By the time the warrants expired Aluminium (now Alcan) was selling above $50 a share. Without putting up any more money I had my broker exercise my warrants at $30 a share. In March of

1937, I sold my last ten shares at a profit of more than $100 a share. Eight months later the stock was selling below $60. Clearly it seemed as though I had been wise or lucky to take my profit. Yet if I had held the stock until now the ten shares I sold would be 300 shares with a 1971 market value nearly 700 times my original investment. Had I held on, I would have paid no capital gains taxes or brokers' commissions, but would have been paying interest on my $300 margin.

A trade like that, following my earlier experience with Southern Railway common stock, convinced me that the road to wealth was marked by signs reading "buy 'em low" and "sell 'em high." I could not have been more wrong. Catching swings in the market, even when one is reasonably successful at it, makes pennies compared with the dollars garnered by those who buy right and hold on.

CHAPTER XIV

Why Computers Won’t Run the World

We have heard and read a lot in recent years about computers running the world. Yet our prehistoric forefathers survived millions of years without language, logic, or mathematics. Some of us are here today because one of our more recent ancestors started running when the birds stopped singing, instead of waiting until he could count the Indians. Could it be that we moderns are going overboard in our reliance on juggling figures to find the answers to all problems?

Try these three basic economic principles on your computer:

1. All market value is in the mind. Nothing is worth anything unless someone wants it. No matter how hard it is to find, no matter how much it costs to make, anything is worth what someone will give for it, not more.

There are many ways to estimate the market for any item or service. They are all based on how badly someone wants it and how hard it is for him to get it. Economists call this demand and supply.

Most of us want to live. Hence demand for what we must have to live is fairly constant. The market for air to breathe, water to drink, and food to eat is assured. The only uncertainty is on the supply side. If there were just enough air to go around —say in a plastic-domed colony on the moon— everyone there who wanted to go on living would give his all for it, if he had no other choice.

If the supply of air became so plentiful that everyone could have all he wanted for nothing, as on earth, it would cease to have market value because no one would give anything for it unless it was compressed enough to inflate a tire or chilled enough to cool a room or make dry ice. And even then what really would be marketed would be not the air but the energy expressed in the compressed, chilled, or solidified air.

If the supply of water became so plentiful that no one wanted any more, as is believed to have been the case at the time of Noah's Ark, it too would cease to have value as such, though ice, steam, and falling water might still find buyers for their energy content. If the supply of water, even though abundant, became so polluted that it was unpleasant or unsafe to drink, pure water would acquire market value as it already has in too many places. It is a horrible thought, but if the world continues on its present trends some of us may live to see the day when the more fortunate members of society buy pure air for release in their homes and offices, the way they now buy pure water.

The same principles apply to food except that as food in general becomes more plentiful we can have larger portions of the foods we like and perhaps stop eating some other kinds of foods altogether. At that point those other kinds of foods cease to have market value—or would if we could not find ways to turn them into something else we did still want. Feeding ensilage to cattle is an example. A man would have to be very hungry to eat cornstocks, even fresh ones, but steers fed on them can be quite good to eat.

The point to keep in mind is that how much it costs to produce anything means little or nothing unless you know what people will pay for it now and in the future. In business, it is bad luck to tell people what they should want instead of trying to give them what they do want. That is what we mean when we say the customer is king. There has never been a successful revolution against him.

2. *All laws made by men can be changed by men, and will be as soon as enough people decide that they would be better off if the laws were changed.* This goes for the Constitution, the Magna Carta, the United Nations, and the zoning ordinance in Podunk.

3. *No one's title or right to any property is worth any more than the ability and willingness of his fellow creatures to defend it* I have cited this law before, but it cannot be overemphasized. Those other human beings may be his fellow citizens, or they may be the citizens of the so-called Great Powers saying "Hands off" to the rest of the world while small nations determine things for themselves.

Just as public opinion and law are to each other as water and ice—different forms of the same thing—so are politics to property rights. Those

rights are not part of natural law like gravity. Rather they are derived from our social contract with each other. More than half the human race today has little or no property rights. The superior development of those parts of the world that do have property rights seems to argue that they provide an important incentive. But they are not immutable.

What this third law means is that no one has a really good title to any property being used to the detriment of the people making the laws on which that title depends. Even if he is using it for the common good, a man may have title to so much property that people will take away part of it, as we do in this country through progressive income and inheritance taxes. Whether this is right or wrong is as immaterial to one who would understand the psychology of investment as is a moral judgment on a wren eating a bug to a biologist. Mankind has lurched all the way from no one owning anything—even our Pilgrim forefathers tried that—to one owning everything *(L'état c'est moi),* and back again, at many times and in many places. Both extremes have been found uncomfortable. The search for the happy medium still goes on, and always will. The game is no fun—no one tries very hard—if the winner can keep none of the marbles. It cannot go on if the winner gets them all. That is true because, if for no other reason, the losers are understandably slow to rally to the defense of such a status quo, and the sole winner cannot defend it alone.

You do not need to be a mathematician to understand any of these three basic laws of economics. The figuring comes later. But when you see a company operating in ignorance or defiance of these three principles, don't stop to figure. Run, do not walk, to sell your stock, and don't be tempted to buy it back at any price

CHAPTER XV

Profits in Ethics

Earlier, I said there were two approaches to investing, one, the psychological and, two, the statistical. Actually there are three. And in the long run the third is the most important. It is what might be called the ethical or even spiritual approach.

He profits most who serves best. In the long run that is just as true of corporations as of individuals. Beware of cynics in high places. Avoid the fast buck artists, the something-for-nothing shysters. Remember that a man who will steal for you will steal from you. Ask yourself whether the company in which you contemplate investing is contributing to making this a better world. If the answer is no, avoid it like the plague.

The quest for capital gains pits anyone who engages in it against the distilled essence of the best brains in the world. Only a fool thinks he is clever enough to outsmart all others by trading in phony merchandise.

"Never do business with a man you do not trust," is a rule that would have saved many a fortune and many a heartache. No matter how tempting the prospect, how alluring the chance for a quick profit, stay away from men, companies, and ventures based on defrauding rather than helping their customers

If you have ever looked down the railroad tracks in flat country, you will recall how the rails on either side of you seem to meet near the horizon. In the same way, when one takes the long view, there is little to choose between what is right and what is most profitable. Half a century of reporting of one kind and another has convinced me beyond all argument that chiselers are not so much selfish as myopic, not so much greedy as stupid.

If this sounds like impractical idealism look at the $35 million fortune left by James Cash Penney who was such a square that he ran his business

by the Golden Rule. Look at the fortune built by Henry Ford. Contrast their enduring success with the meteoric careers of some of the conglomerate manipulators who sought by financial sleight-of-hand to make $2 grow where $1 grew before.

Thirty-five years ago as the editor of *Barron's* I called on a high official of an automobile manufacturer. Having just come from the impressive research facilities at General Motors, I asked what this other company was doing in research. His reply was this classic:

"When better cars are built, we'll copy them." (Buick then was advertising "When better cars are built Buick will build them.")

Doubtless he was joking. Perhaps I should have laughed and forgotten it. But in the years since then, measured from either the lows or the highs of 1936 to the highs of 1971, General Motors stock has risen more than three times as much as the stock of this other company. To the investor such a difference is no laughing matter.

Bernard Kilgore, under whose presidency the Dow-Jones organization achieved its greatest growth, was fond of saying, "It is very hard to cheat an honest man." His point, of course, is that when one approaches any problem with larceny in his soul he becomes vulnerable to even sharper thieves. The individual who operates a business or makes his personal investments with a view to benefiting his fellow men is much less susceptible to trickery. The suckerbait in many of the oldest and most successful frauds is "something for nothing."

Integrity in news was the solid foundation on which the great financial success of the *Wall Street Journal* was built. Kenneth C. (Casey) Hogate was in charge when both Barney Kilgore and I were hired. I can think of no higher tribute to Casey and the Dow-Jones organization he headed than that in eleven years in the course of which I was chief of the politically sensitive Washington bureau and later editor of *Barron's* I was never once told how to angle a story.

There are, of course, many ways of serving mankind. Man does not live by bread alone. See how many of the companies that have appreciated one hundredfold in the last forty years gratify people's deep urge to make fairy stories come true.

The great success of leaders in the cosmetics industry springs from our hopes for eternal youth. What is television but a magic mirror enabling us

to see and hear what is going on hundreds or thousands of miles away? The almost universal longing for a pill to cure all ills underlies the success of the drug companies. Mankind's yearning for a magic carpet has underwritten every fortune made from improved methods of transportation from the Model T to the Boeing 747. The computer provides seven-league boots for man's mind. It can do nothing that the human brain cannot do, but it can do it almost immeasurably faster.

There are three primary reasons for stressing the ethical or spiritual aspects of investing. The first is that corporations are analogous to human bodies in a highly important way.

Suppose you meet today an old friend whom you have not seen for fifteen years. Biologists tell us that there is probably not a single cell in either of you that was there when you last met. Yet you have no trouble recognizing each other and recalling matters which interested you both when you last met. This is possible only because each dying cell is so faithfully replaced by a like cell.

So it is with corporations. No matter how broad-minded we are, how dedicated to equal opportunity, we tend to hire and promote "our kind of people."

When morally derelict men get to the top of great corporations and stay there for a period of years, the evil they do does indeed live after them. Inevitably they bring into the organization and promote to higher levels men like themselves. The moral cancer thus introduced cannot be extirpated simply by removing the evil genius at the top. It may take a generation under a good management to purge the organization of the unprincipled sharp-shooters brought in by a bad management. Hence it is unwise to look for a quick turnaround in any organization whose management has demonstrated a lack of moral principle.

The converse is equally true. B. Brewster Jennings was chief executive of what is now Mobil Oil Corporation during most of the eleven years that I was there. At a time when the public relations department reported to me, the company became involved in a serious dispute. All I remember about it now was that I prepared a public statement demolishing the opposition. When I submitted it to Mr. Jennings, to be issued over his name, he read it carefully, then put it down saying, "This is technically correct. I think it would stand up in court. But the most knowledgeable people in the oil

industry would know that that is not quite the way things are. I don't ever want to say anything that those who know the most can question. Let's try a different approach." He did not say it to impress anyone. No one else was in the room with us. And until now I have never told the story publicly. But it set a standard of integrity in high places that has long outlived him.

A second reason why it is advisable to avoid investments in any organization whose management is even suspected of moral obtuseness is that there are so many ways of making the worse appear the better reason, of putting a false face on corporate actions and results. The accounting profession is in the throes of self-examination because of widely varying methods of reporting earnings from the same operations. If professional accountants find it hard to agree on what is right, how can the investor, lacking the qualifications of a certified public accountant, hope to penetrate the devious maze that can be created by a morally bankrupt though legally circumspect corporate management?

Man is the creature most difficult to keep in jail because man makes the jail. What one man can make another man can un make. No matter what laws are passed, no matter how big the SEC, there will always be men able to hoodwink and defraud others. The best defense against them is to run away from them as fast as possible at the first hint of sharp practice. With more than 50,000 different stocks available to investors in this country, it is not only unnecessary but downright stupid to buy into a company run by men of doubtful integrity.

A third benefit of ethical investing is that when we do it we avoid the trap of buying stocks with the hope and intention of selling them to someone else not quite as brilliant as we are (at a substantially higher price, of course). Basically this is the bigger fool theory of investing. Anyone who adopts it runs the risk of not being able to find a bigger fool.

"Buy stocks as if you knew all markets would be closed for the next ten years," I used to urge my staff. Back in the days when performance was the name of the game such a comment may have convicted me of senility. I still think the idea has merit. If we buy stocks because we believe in them, expecting to hold them for the rest of our lives, the chances are good that others will come to appreciate them too. Then, if some day we do decide to sell them, they will appeal to the wisest buyers—a market that is always liquid.

Please remember that in all these comments I am talking about investing to make money. Trading is fun. Like playing bridge or poker for high stakes, it can take your mind off your more intransigent troubles. But for most people it is a blind alley leading off the way to wealth.

Since most of us want the material good things of life, it seems obvious that to get a great deal more than the average share of them we must somehow put ourselves beyond competition of those who will settle for the average. This is as true for corporations as for individuals. As in racing, the difference between first prize and second or third place is wide.

Know-how is a competition reducer. The longer it takes to learn how to do what your company is doing, the fewer competitors will be around to do it for less. Diligence is another competition reducer. So is integrity, and in fact most of the copybook virtues, provided always that what we have learned so arduously to do so well is something other people really want us to do for them.

Will your investment be a success? Ask yourself how the supply of firms who can do what yours can do compares with the demand. If many want your company's products or services and only your company can supply them, you are made. The only unregulated monopoly which is in the public interest is the possession of unequaled knowledge, talent, or skills. To become that kind of a monopolist can be everyone's goal. The beauty of it is that one does not have to reach the goal to win. Marked progress toward it will be counted success in most communities.

To make the biggest gains, to find your 100-to-one investment, don't buy companies whose sole goal is to make money. In life the straight line is not the shortest distance between two points. For whosoever will save his life shall lose it: but whosoever will lose his life for my sake, the same shall save it.

Bet on men and organizations fired by zeal to meet human wants and needs, imbued with enthusiasm over solving mankind's problems. Good intentions are not enough, but when combined with energy and intelligence the results make it unnecessary to seek profits. They come as a serendipity dividend on a well-managed quest for a better world.

CHAPTER XVI

The Almighty Ego vs. the Almighty Dollar

Egonomics is the art of judging every issue, making each decision, on the basis of what it will do for your ego. Sure, it is human nature to be selfish, but the true egonomist is never unselfish. Even when he appears to be, he has calculated the public relations or advertising value of his seeming generosity and sensed a bargain. To him objectivity is heresy. All that matters is his place in the business and social pecking order—his ego.

The story of the school boy illustrates how an egonomist's mind works.

"What's two plus two?" his teacher asked.

"Am I buying or selling?" the pupil replied.

What has egonomics to do with investing? A very great deal. I don't like it and I wish it were not so. But as my realistic former partner, Hardwick Stires, puts it, "This is the way things are. If you can't abide it, you can shoot yourself."

Let us start at the top, with the men who manage the corporations in which we invest. Do they put egonomics ahead of economics? How can we tell?

The last thing to do is to ask them. It might be your last chance to ask them anything. Anyway, what they do speaks so loudly we can't hear what they say—not if we are thoughtful observers.

The corporate egonomist thinks more of making his company bigger than of making it profitable. He spends the stockholders' money to make himself loom larger in the industry, rather than to increase the company's earning power. When you see a company year after year earning a low rate of return on its invested capital *and* still increasing its capital expenditures "to improve its competitive position," the chances are there's an egonomist high in the corporate woodpile. When you see a company paying more

attention to its corporate headquarters than to its sales and profit margins, holler or sell out. Egonomist termites are at work.

Already I can hear growls from those who believe corporations must assume a larger social responsibility. So do I. But I want my companies to do it *in addition to* making money, *not instead of.*

In a free society those who direct the investment of the people's money into ventures showing far below average rates of return on the capital required are sabotaging our economy, whether they know it or not. Under our economic system, profit margins and rates of return on invested capital should act as thermostats, calling for more investment when profit margins are high and less, or none at all, when they are low. To persist in plowing new money into an industry with a long-term record of low profit margins and subnormal rates of return on invested capital is to misdirect the use of materials and manpower. Some companies ought to quit, and some managements ought to let them quit. Few ever have quit before they had to. So long as the executive suite is warm, why go out into the cold? If the stockholder is dissatisfied, let him get out.

And get out you should when you see your company re-investing its retained earnings year after year less profitably than you could use the money yourself. You want an example? For good hunting try the steel industry.

Here are the figures on U.S. Steel, the industry leader, for the last ten years:

	Return on Invested Capital	Return on Equity
1970	4.2%	4.1%
1969	5.4	6.1
1968	6.0	7.3
1967	4.6	5.2
1966	6.1	7.6
1965	6.5	7.3
1964	5.8	6.5
1963	5.1	5.6
1962	4.2	4.5

1961	4.7	5.3
1960	8.0	9.1

Return on invested capital in 1970 would have been twice as high if the money could have been invested in bonds.

I am no expert on the steel industry. As a layman I am not unsympathetic with the problems arising out of a high labor factor, strong unions, and imports of steel made abroad. But hope deferred maketh the heart sick. The challenge to management is to improve those figures promptly or to stop investing more of the shareholders' money in the business.

More than thirty-five years ago Scudder, Stevens & Clark issued a brochure entitled "Monuments Rarely Pay Dividends."

"When a business begins to get stately," it said, "wise investors quietly get out from under. For monuments rarely pay dividends.

"Almost every great railroad has erected at least one vast and ridiculous mausoleum to the memory of departed earnings. Gloomy bank directors brood over past glories in auditoriums of noble architecture and kingly appointments. Just before it collapsed, an empire in textiles was completing a million-dollar golf course and a model village of baby palaces for executives. Splendid administration buildings of industrial plants commemorate the passing of dividends.

"A young business is always a risk. Nine out of ten disappear in less than six years. It offers no assurance that its product can make headway against competition and win for itself a lasting popular acceptance; that its financial structure will stand the shocks of dull years and unforeseen difficulties; or that its management will develop qualities of leadership. To invest money in such a concern is pure speculation.

"But now and then a business demonstrates that it has the power to live. It is a terror to competition, not a prey. It has mastered its market. Its production is guided by one of those rare geniuses able and determined to stay out in front—a man like Kettering. It is headed by a fighting man of courage, imagination and decision. A realist handles the money. It has a great organization of spirited youngsters who have tasted blood and liked it. It is in a new field unexhausted and promising many years of opportunity.

“To invest money in a business like that at the right time and right price is the way to accumulate wealth.

“But this building period of a business—this period of audacity, big ideas, swift attacks and great rewards—is too often followed by complacent lethargy The fighting leader becomes old, tired and arrogant. The inventive genius, as his vision dulls, grows intolerant of new ideas. The realist becomes greedy or mean and chokes further progress. The organization becomes softened by success and torn by the intrigues of middle-aged men ambitious for personal prestige and rewards.

“The last human emotion to die is pride. A man who has made something of his life, and whose creative days are past, seems to develop an urge to build something tangible, lasting and fine which will be evidence of his achievements. And a noble urge it is.

“So it is natural that an organization which has held together for years, dominated an industry and made money, should in time grow proud in the same way, and try to express its leadership and might in some physical thing that will endure.

“But that is just what a business cannot afford to do. Business is not an established thing—it is a movement, a progress. Its past means nothing—tomorrow is all that counts. It must not be anchored to old ideas, convictions or standards—or to pride.

“The biggest problem in business is not to grow old.

“A concern that is quick on its feet and resourceful can always whip one with stiff knees, no matter how powerful the latter may be.

“An old business is inclined to rely on precedent and tradition. It is impatient of change and often ignores ever-shifting popular taste. Its prestige becomes tarnished. The fine product becomes old fashioned. Dealers are less loyal and are attracted to livelier concerns. New generations come along to whom the old institution means nothing. Movement is slowed down to the static dignity of a monument and monuments rarely pay dividends.

“The investment of wealth can never rise above the level of guess work and hunches until there is an understanding of these hidden values of business. The investor should be influenced by only one factor—assurance that the company has the power to earn profits for a good many years. Financial statements give little indication of earning power. Piles of brick

and stone mean nothing. Profits are the reward of human spirit and high endeavor—of great leadership."

But there is more investor danger in egonomics than just profitless pomposity.

I once worked with two high executives in a great corporation. Both were able. But their treatment of associates and subordinates could hardly have differed more.

Bring an idea to the first man and he would improve on whatever good he saw in it and credit you for it.

Bring an idea to the second man and he would enlarge on whatever bad he saw in it and belittle you for it.

Naturally the first man received many more suggestions than the second man whose primary concern was demonstrating his intellectual superiority over his associates and subordinates. It would be hard to overestimate the cost of the second man to the company's esprit de corps.

Investment men have their special problems with egonomics. One is unwillingness to accept ideas other than their own. Another is to salve their own egos by reiterating the errors of others.

One of the secrets of the success of Hamilton M. Chase, for many years chief executive of the Scudder Special Fund with one of the best long-term records in the business, was his kindness. Never in the thirty years I have known him have I seen him remind an informant of a previous error in investment judgment.

If integrity is the investor's first non-statistical prerequisite for management (see *Profits in Ethics*, Chapter XV), I nominate psychological equanimity as the second.

How can an investor appraise management's psychological equanimity?

What I have in mind does not require the help of a psychiatrist and couch. There are many ways for a close reader of the financial press to detect managements motivated more by egonomics than by economics. One relates to depth of management. Is there more than one able man in the executive suite? Or does the head man hog the corporate spotlight? If so he may be straining not only to keep ahead of rivals but to re-assure himself that he is as great as his six-figure salary suggests he should be. Beware of the one-man company. It is only a heartbeat away from deep trouble. The

corporate spotlight hog hurts his company in another insidious way. His best men leave him because they know they will never get recognition for any achievements as long as he is around. He may have no difficulty filling their shoes with more servile types but some of the spark goes out of the organization.

Years ago I called on the chief executive of a company long since absorbed by another. In his huge but dimly lighted office he sat with his back to a window facing south, with the result that he could see me as though I were in a police lineup while I could make out only the outline of the figure before me. It did not matter. It did not take me thirty seconds to decide against investing money in a business whose chief executive felt he needed that kind of an advantage to cope with his fellow men, be they employes or outsiders. My judgment was right. The stock never proved cheap at any price.

An example of the opposite sort is that of John W. Hill, now eighty-one, founder and principal shareholder of Hill and Knowlton, Inc., the world's largest public relations firm. In a fiercely competitive business in which brains are nearly the sole asset, Mr. Hill for years has put his associates forward with corporate titles, client relationships, and public appearances. His aim, as he puts it, has been to surround himself with men more able than he, an aim that shows such managerial sagacity as to cast doubt on his ability to achieve it.

Some of my comments on egonomics may seem petty. But to the alert, a whiff of smoke can be louder than a fire alarm.

Clarence W. Barron, who owned the *Wall Street Journal* when I went to work there in 1927, relied heavily on his analysis of a man's actions. Sometimes, when interviewing a job applicant, Mr. Barron would ask the young man to clip a story out of that day's newspaper. If the applicant hacked out the clipping so clumsily that it had to be retrimmed before being filed, he got no further. In Mr. Barron's view the man was not only careless and wasteful, but unobservant and unintelligent ... if he had learned to keep his eyes on where the two scissor blades came together instead of on their points, he could have split the column rule on either side of the desired clipping, leaving adjoining stories intact.

CHAPTER XVII

No Inflation-Control Pill

MONEY

In the Orient I have often had to take off my shoes before entering holy places. In the Occident the presumption that no one—or at least no more than a dozen pundits—understands money suggests that the rest of us take off our heads before venturing into the subject.

Now that so many democratic governments have assumed or accepted responsibility for the economic climate, the need for more widespread understanding of money is vital and urgent. For investors it has always been essential. An investment may increase in monetary value per se, as a lamb does when it grows into a sheep. Or an investment that does not itself change at all may increase in monetary value because the unit of measurement has shrunk.

To invest sensibly, we must try, however humbly, to answer these practical questions:

What gives money its value?

What changes it?

What can be done about it?

What is being done?

Without pretending to be one of the twelve who understand money, but with the audacity of a cat looking at a king, I venture these answers:

The value of money comes primarily from one or more of these three factors:

1. Inherent value
2. Taxes
3. Fiat, or price and wage controls.

Inherent value is the oldest.

The first money was valued for itself. This was true of gold, salt (from which comes our word salary), wampum, ivory, and the great hollow stones once used for money on the Island of Yap. Exchange of goods and services for such money was barter, but barter with a common denominator.

An essential characteristic of any money which depends for its worth on its inherent value is that it should take about as much work to produce an additional unit of that money as the additional unit will buy. The value of such money thus is sustained by the fact that additions to the supply cost as much as they are worth. There is no temptation to inflate because there is no profit in inflating—no chance to get something for nothing.

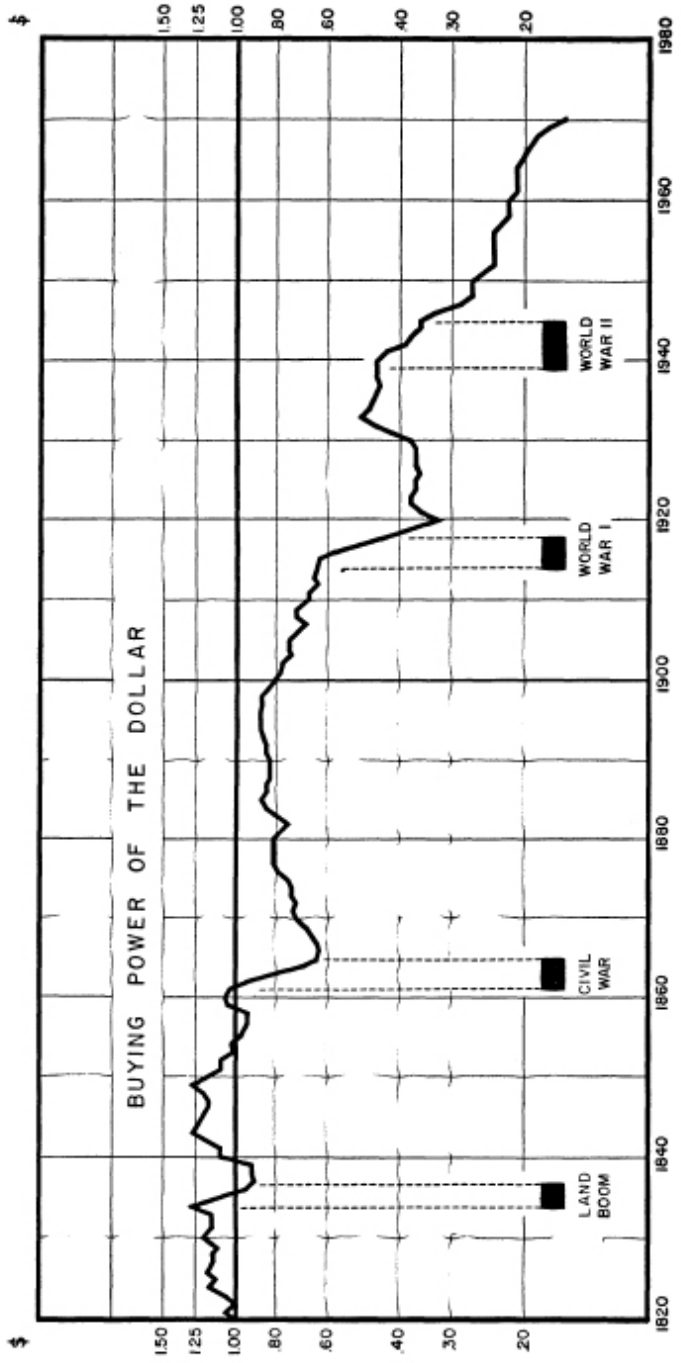
In the United States, inherent worth no longer plays any direct part in determining the value of our money. A five-dollar bill *is* five dollars. It doesn't promise anything. It is not redeemable in anything. Some of the older bills say "The United States will pay to the bearer on demand five dollars" but that promise can be met by handing the same bill back to you because it *is* five dollars.

Until recently only foreign central banks could get gold for their dollars. As they now know, even they could get it only so long as we felt like giving it to them. They used to get an ounce of gold for about $21. Until payments were suspended in 1971 they got an ounce of gold for $35—unless of course we chose to give them some of the newly created International Monetary Fund "paper gold." Under President Franklin D. Roosevelt our government changed the price of gold without getting anybody's permission and can do so again. So can any other sovereign, as so many of them have. Never forget that a sovereign government and a minor child are unable to make contracts binding on themselves.

It can be argued that what determines the value of money is what you can buy with it. But we are trying to understand what determines what you can buy with it. The buying power of money is a measure of its value, not a determinant of that value.

It can be argued that what determines the value of money is the supply of money relative to the demand for money. But we are trying to understand what determines the supply of money, and what determines the demand for money. It may help if we consider how our money looks to a German or a Japanese. It doesn't matter to them that a five dollar bill has no inherent

value, and cannot be exchanged for anything with inherent value, that is, it doesn't matter *if* they can buy something with it that they want and can't get —or can't get cheaper— somewhere else. They do not want and will not accept unlimited amounts of our money—only as much as they need to buy whatever they want to buy from us, including investments, of course. But it is the price and quality of our goods and services that determine how much of them other nations want to buy from us. To understand money we must try to understand what determines the price and quality of our goods and services.



YOUR MONEY WON'T BUY AS MUCH AS IT USED TO

This brings me to a second determinant of the value of money. That is taxes, or more accurately taxes relative to governmental spending. We could make four-leaf clovers pass for money if we could compel our countrymen

to pay their taxes with four-leaf clovers. We could raise or lower the value of four-leaf clovers by increasing or decreasing the taxes payable in four-leaf clovers relative to the supply of four-leaf clovers. Even if someone found a way to double the supply of four-leaf clovers, we could still keep the price steady if we raised taxes proportionately.

The point I am trying to make is that taxes can put value into an inherently worthless currency, even one without exchange value, if the tax take is large enough relative to the amount of the otherwise worthless currency issued.

In the 1920s I saw this demonstrated in the Congo. The Belgian franc, while good money in western eyes, was worthless to the natives. They needed little or no clothing. Their women tended their gardens and flocks. Bananas grew wild. Why should a man go down a dark hole to sweat for money he didn't want or need? The problem was solved by a combination of taxes and induced exchange value. A poll tax was imposed for the privilege of breathing the fine air in the Congo. At the same time men were invited to bring their families to rent-free company compounds (villages) complete with company general merchandise stores. It wasn't long before some men were trading pigs to other men in exchange for money to pay their poll tax. Then came the pressure from the ladies for the finery on sale at the company store. Soon taxes were the least of the native man's financial problems, and the Belgian franc was as good as salt. I sometimes wonder if advertising doesn't do to us and for us what the company store did to and for those Congolese.

A third determinant of the value of money is fiat. What do I mean by that? Let me give you an example. Suppose I came unknown to any of you with a mask over my face and a submachine gun under my arm. Suppose I announced that I was buying watches and would pay a dollar for each of yours. And suppose I added that anyone who did not trade his watch for one of my dollars would be shot. If you thought I meant business, or if you even feared that I might mean business, some of you would sell me your watches. The difference between *selling* your watch *for a dollar* and surrendering it in a holdup *for nothing* is one of degree, not of principle. So is every other arrangement that compels us to part with goods or services for less than we think they are worth.

Fiat money is worth what we say it is because we are big enough and strong enough to make what we say stick. Price and wage controls are

resorts to fiat money. Under such controls people are compelled to accept bargains which they would reject in a free society. Initially those who rebel are seldom shot. They are taken to court. Historically, the shooting has come later, to put down revolt against the inequities of the system.

When a government abandons inherent value for its money, when that money's buying power plummets and the government lacks the will or the votes to impose enough taxes to check the decline, that government publicly confesses its political impotence and moral bankruptcy by imposing controls. The more bipartisan the decision to do so the sadder the state of the nation.

In wartime, controls may be condoned. If men can be drafted, why not money? In peace, controls are beyond the pale except as a temporary, emergency measure to cope with the runaway consequences of many years of governmental irresponsibility.

In one sense fiat is a factor even in the absence of controls. On every piece of paper money in your pocket are two phrases. One is "In God we trust." The other, sadly much more significant these days, says "This note is legal tender for all debts, public and private." What that means is that the creditor *must* accept payment in such notes whether he likes to or not. A creditor who lent dollars payable in gold of specified weight and fineness might otherwise refuse payment in notes redeemable in nothing.

Habit, or the rigidity of our social system, slows down changes in the purchasing power of money but does not determine its value. If by some magic you could cut the value of all money in half overnight, not all prices could double the next day because it would take time to adjust to the new price level. Until wages and prices were raised many people simply would be unable to pay twice as much as before for rent and food. Others, for a while, would accept money at the old value by force of habit. Ultimately the basic factors would prevail.

Internationally, so long as our Government continued able and willing to meet all central bank demands for gold—or its IMF equivalent—at $35 to the ounce, the inherent value of our money was assured. But foreign claims on our gold so far exceeded our reserves that maintenance of a reasonable balance of payments was imperative. This meant both that we must not price our exports out of foreign markets, nor unduly indulge our tastes for foreign goods and foreign travel. When for the first time since 1893 our imports for 1971 threatened to exceed our exports, the jig was up.

The Nixon Administration sought to stabilize the buying power of the dollar by balancing the budget and slowing down the money printing press. Interest rates and unemployment increased sharply. And prices continued to rise. To lower interest rates the Federal Reserve bought government securities—with printing press money. That was inflationary. To combat unemployment the Administration budgeted a huge deficit and proposed tax cuts. Those moves too were inflationary. To counter those effects the President invoked the wage and price freeze.

The situation recalls Victor Hugo's story. You may remember, the Good Lord created a mouse.

"What ho!" he cried. "I've made a mistake." So he created a cat to correct it. President Nixon's freeze is the cat. We can all join in praying that it does not grow into a man-eating tiger.

Basically the problem arises out of our desire as a people to do inflationary things without having inflation. So far no one has invented a pill to make that possible.

INFLATION

What causes and cures inflation?

Inflation is cheating.

It results solely from efforts to get something for nothing.

If the government did something for the poor—or for our military forces in Vietnam—by taking something equal from you and me, no inflation would result. The poor or the military would have more. You and I would have less. The balance between supply and demand would be unchanged.

When the government gives money to anyone for nothing without taking it from someone else for nothing, demand is increased relative to supply. Higher prices—what we call inflation—follow as night the day.

The problem and the remedy could not be simpler. If we stop trying to get something for nothing, we stop inflation.

Every dollar Congress votes to spend is a cheat unless Congress votes to raise that dollar by taxes, or our government borrows it from you and me. Good programs financed with printing press money simply rob Peter to pay Paul.

This does not mean that taxes should be increased to pay for every good program, or that the national debt can rise without limit. Taxes hurt. They hurt you and me who have to pay them. They reduce our ability to make productive investments, our ability to educate our children, our ability to provide for our old age. Borrowing money merely postpones taxes, and ultimately increases them.

Thus the benefits of each good program must be weighed against the harm inevitably done by the taxes required to pay for it. But the all important point is to weigh benefits against the tax cost at the time the benefits are voted. Otherwise the inescapable tax is collected in the form of higher prices.

Inflation *is* the crudest tax.

Not every effort to get something for nothing is inflationary. If I demand twice what I am being paid, the result may be simply that I am out of work. Even bank robbers and swindlers are not guilty of inflation. They transfer money from your account and mine to theirs. The total money supply is not affected by their nefarious activities.

But how about this cost-push inflation we hear so much about? Is organized labor guilty of inflation when it gets pay increases in excess of increases in productivity? Or are the employers the guilty parties for raising prices to cover the higher wages and then some?

The answer, of course, is that neither is to blame. If labor unions ask too much, their members will be out of work. If employers charge too much, their goods will not sell. That is economic theory, but we are seeing again the tragedy of the murder of a beautiful theory by a gang of brutal facts.

What has gone wrong?

First is the Employment Act of 1946. The stated policy of our government is to keep our people employed *regardless.*

Second is our failure as a self-governing people to distinguish between collective bargaining and coercion. I refer, of course, to some unions' assertion of their right to halt essential public services until they get what they want.

The issue is an old one. Thirty-five years ago, as editor of *Barron's,* I lunched with John L. Lewis, the head of the United Mine Workers. For hours Mr. Lewis tried to get me to see why sitdown strikes were a proper and necessary bargaining weapon for labor. It was nearly 4 P.M. when, still at the

luncheon table, ne brought down his fist and declared, “If 100 men in a power plant can pull the switches and paralyze a city, so much the better for their bargaining power. Can’t you see that?”

I answered with a question: “What is the difference between that and another 100 men behind machine guns at strategic street corners imposing their will on the city?”

At that Mr. Lewis rose and departed. I never saw him again. My question has never been answered.

The point, of course, is that if one’s head is held under water until he agrees, the agreement is extortion, not a bargain. And if the federal government is expected by the Employment Act of 1946 to validate extortionate wage increases by increasing the money supply so that employers can pay the otherwise economically unjustified higher wages, the circle is closed. More inflation is inevitable. How fast it comes depends only on how unrestrained are the demands of workers in crucial places. The wonder is not that they have asked so much. It is that they have not demanded more. All power corrupts. Absolute power corrupts absolutely, whether it is wielded by an employer or an employee.

Inflation, like sin, is likely to be with us a long time. When I asked the great historian, Arnold Toynbee, if he could cite a single instance from his study of all known civilizations wherein the value of a currency had increased over the long term, he replied, “No, that has never happened.”

The practical question is not whether we shall have inflation but how much, how fast. What does this mean to common stocks?

The short answer is that inflation makes stocks rise. Yet five years ago, on a visit to the Buenos Aires, Argentina, stock exchange, I was shown charts of the decline in the foreign exchange value of the peso superimposed on the decline in average prices of Argentine stocks. In the four preceding years stock prices had *fallen* faster than the value of Argentine money. But we need not go so far from home to make the point that inflation is not always bullish. On February 9, 1966, the Dow-Jones Industrial Average reached its record intraday high of 1,001. Nearly six years later, at the end of 1971, its intraday high was 895.

The correct answer to the question, “What does inflation mean to common stocks?” is: “Whatever inflation means to their earnings and dividends.”

Inflation is most bullish on common stocks when it follows a deep depression and is not generally expected. Rising demand for goods and services can be met by putting idle productive facilities to work. Labor is not yet anticipating further increases in living costs. And by the time more plant capacity is needed, rising construction costs have underwritten the profit margins of existing facilities.

But when inflation persists long enough so that everyone is aware of it, and when the rate of inflation becomes high enough to be a political liability for whoever is in power in Washington, it is no longer automatically beneficial to corporate earnings and may become detrimental to them.

This is where we are in America now. Some companies may still benefit from inflation but more and more will be hurt as controls proliferate. Far from guaranteeing rising profits for all, whether strong or weak, ably or poorly managed, inflation has reached the stage where it presents a challenge only the best can meet. Selectivity seems likely to be much more important in the 1970s than in the 1960s, and it was not unimportant then. I shall have more to say about the kinds of companies to choose in Chapter XXVIII, *Real Growth—How to Spot It and Evaluate It.*

INTEREST

Interest is the price of time. It measures the cost of having or doing now what we hope to be able to pay for later. Thus everything bought with borrowed money costs more than it would if bought for cash. That is true whether the borrower is a man or a woman, a company, a city, a state, or a nation.

The buyer of time takes on an obligation to return the borrowed property at some agreed date in the future, or on demand of the lender. Such obligations we call IOUs, debt, indebtedness, loans, mortgages, debentures, or bonds. They all mean essentially the same thing. For the right to have the money *now,* the borrower agrees to return it later besides paying for using it in the meantime. In principle there is little difference between “renting” money and renting an automobile In each case, you the borrower must promise to return what you borrow and pay the rent too.

There is nothing good or bad about debt and interest per se, despite the Puritanical injunction, “Neither a borrower nor a lender be.” Many people

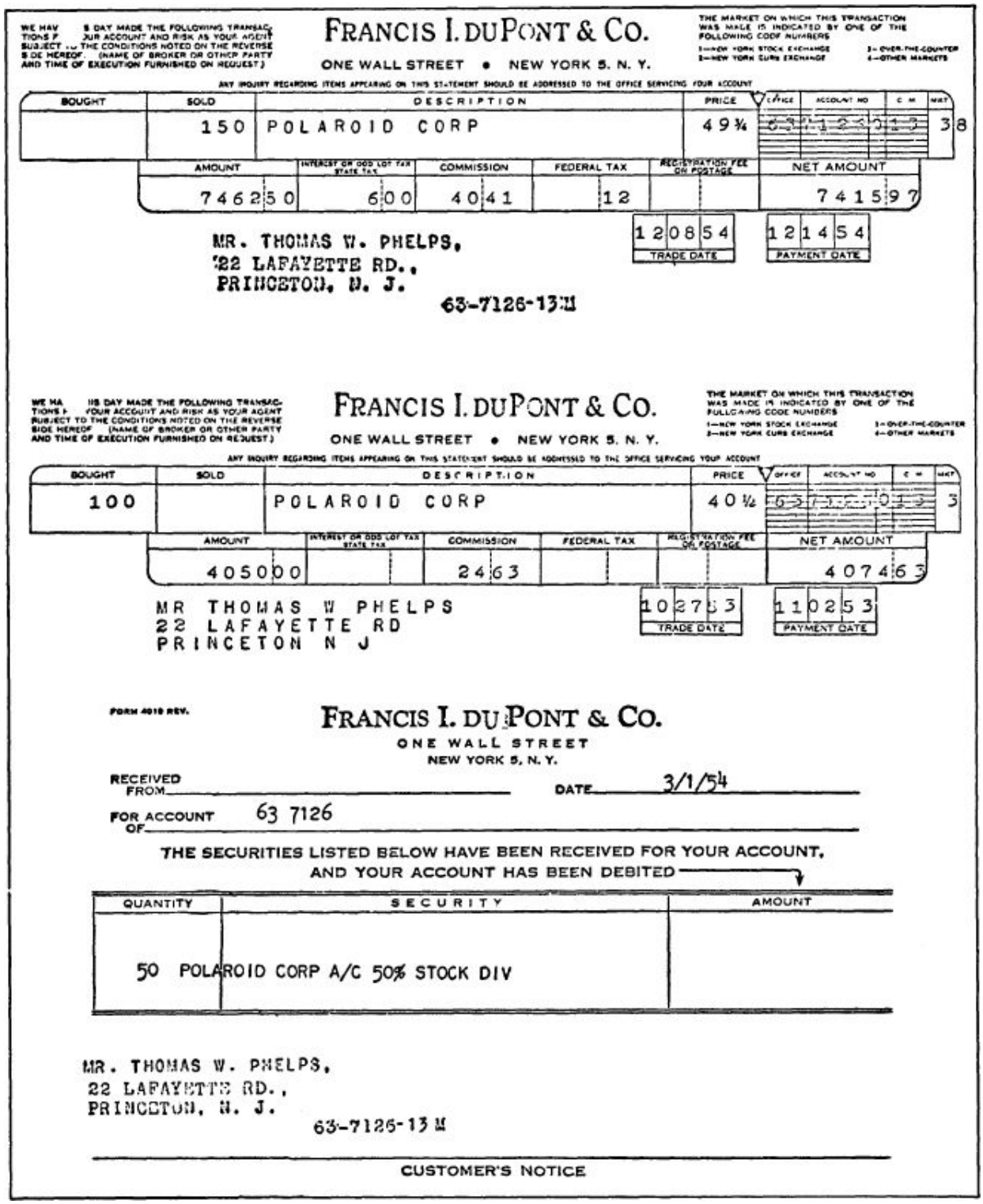
have been ruined by debt. Many others have made their fortunes with borrowed money. What makes the difference is simply whether the time bought is used profitably. To my mind it is just as bad a mistake for a businessman *not to borrow* when he could do so profitably as it is for him *to borrow* unprofitably. A businessman, did I say? I mean anyone.

In 1954, to pay a doctor's bill, I sold 150 shares of Polaroid stock for $7,415.97. Here is the confirmation of the sale. Along with it is the confirmation of my purchase thirteen months earlier, and a notice of the receipt of a 50 percent stock dividend. If I had borrowed the money, as I certainly could have, at 8 percent compounded annually from then until now, my 1954 doctor's bill of $7,500 would have amounted to the staggering sum of $27,750 by the end of 1971. Being cautious by nature and upbringing I did not go into debt.

Was I prudent? My 150 shares of Polaroid stock would now be 7,200 shares valued in 1971 at $843,300. It cost me more than $800,000 to stay out of debt that time. Even if I had borrowed the money in 1954 at 30 percent interest compounded annually, the value of my Polaroid stock by 1971 would have been $200,000 more than I owed by then.

As skilled an investor as Bert Tripp (see Chapter XXIV) succumbed to similar conventional wisdom when he sold enough of his Xerox stock to pay for building his new home. He has the dubious satisfaction today of knowing that (1) his home is fully paid for, and (2) in terms of the present value of the Xerox stock he sold, the house cost him a million dollars.

God only knows how many of the early owners of the hundreds of stocks that have risen one hundredfold also sold them to keep out of debt. On a quiet evening in the country in midsummer I can hear them chanting,



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CUSTOMER'S NOTICE

If held for eighteen years the 100 shares of Polaroid bought for $4,074.63 on November 2, 1953, would have increased to 7,200 shares with a market value of $843,300 in 1971. To pay a doctor's bill they were sold for $7,415.97 on December 8, 1954. A 50 percent stock dividend paid in February of 1954 accounts for the extra fifty shares sold.

“Of all sad words of tongue or pen,

The saddest are these: It might have been.”

When any rule, formula, or program becomes a substitute for thought rather than an aid to thinking, it is dangerous and should be discarded. Too many of us have been raised on the idea that debt is evil, instead of being taught that it is one of the legitimate alternatives open to us in a free society. We have had to learn that the hard way. Debt may lead us to ruin or to riches. It all depends on whether we can make more on the borrowed money than the lender charges for its use.

Going into debt because one lacks the willpower to live within his income has ruined men and women for centuries, and doubtless will continue to do so for centuries to come. The temptation to indulge now, pay later, is almost as insidious as drugs. The basic fallacy of people who make “buy now, pay later” a way of life is that by so doing they actually cannot indulge themselves as much as the stalwarts who pay as they go. Here is how it works:

Two couples each have $500 a year to spend on vacations. The Smiths pay as they go. The Joneses do too, except that they took their first trip a year before they had the money. The second year, when they did have the $500 to get away from it all, paying for the first year’s trip took not only the $500 but $100 more for “finance charges.” Since the Joneses had only $500 for a vacation, all of which had been spent on the first year’s vacation, to go away the second year they had to borrow not only the $500 cost of the second vacation but also $100 unbudgeted finance charges on their first trip.

The third year, when the strait-laced Smiths were taking only their second $500 vacation the Joneses went on their third $500 outing. To do so they had to borrow the $500 again plus $220 to cover unbudgeted finance charges on their first two trips.

The fourth year the Joneses took their fourth $500 vacation, again borrowing the $500. In addition they owed $364 for finance charges on the first three trips.

By the end of the fourth year, when the Joneses were ready for their fifth $500 vacation, they found they owed not only $500 for their fourth trip but also $536.80 finance charges on their first four trips. The Smiths had had three $500 vacations and owed nothing.

At this point the Joneses got out of debt by staying home through the next *two* years, while the parsimonious Smiths continued to travel as usual. The self-indulgent Joneses thus ended up the sixth year with one less vacation trip than the self-denying Smiths, though both the Smiths and the Joneses had spent the same amount of money on their vacations.

By starting a year earlier than they can afford to, the Joneses of this world get four of everything for the price of five.

What each borrower should do is ask himself whether the time he is buying is worth the money. For a young person to borrow, if necessary, to get an education is usually very good business. So is purchase of needed tools by trained workmen. Loans make it feasible for each generation to start where its predecessor leaves off, by borrowing needed equipment instead of waiting the years required to save enough to buy it.

Inflation introduces some important additional factors into the matter of interest and debt.

Manufacturers who expect or fear that prices of needed equipment will be 20 percent higher a year from now will not hesitate to buy today even if they have to borrow money at 10 percent to do it. At the same time lenders demand compensation for anticipated declines in the purchasing power of their money. If you lend quarts and are paid back pints, you must have 100 percent interest just to stay even.

In general, the higher the rate of inflation the greater the cost of buying time—in other words, the higher the interest rate. One of the most pathetic delusions of our day is the politically popular idea that the government can make interest rates low in a free society while continuing to inflate the money supply. Neither lenders nor borrowers are stupid enough to let that happen. Lenders would sense a loss, borrowers a bargain. Lenders would charge more. Borrowers would gladly pay it. As Lincoln said, you can’t fool all the people all the time.

Carried to its ultimate extreme, as it was in Germany in the 1920s, inflation makes everyone try to become a borrower in self-defense. Only by buying now and paying later can the individual protect himself against the swift erosion of the purchasing power of money. The resulting rush of would-be borrowers aggravates the demand for money at the same time lenders are raising their rates to protect themselves against the expected further decline in its value. Under such conditions there is no theoretical

limit to how high interest rates can go. Governmental efforts to hold down the cost of borrowed money by printing more of it are as futile as trying to drown a fire with gasoline.

The lesson of history is clear: Interest rates mirror inflation So long as there is any value left in a rotting currency, interest rates will reflect the expectations of both borrowers and lenders as to its further fall. Nothing can set aside the bloodless verdict of the market.

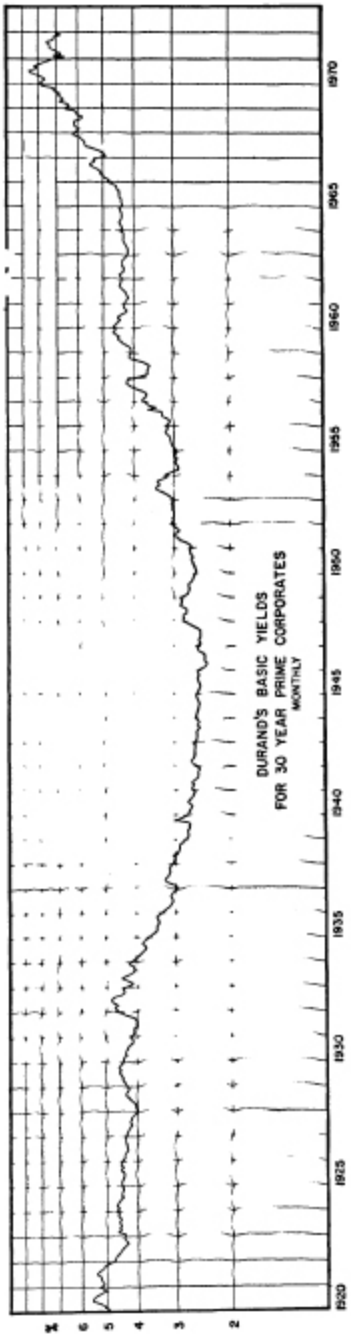
Not until money has become worthless do we see debtors pursuing their creditors and paying them off without mercy, as they did in Germany in the 1920s. Then comes a new currency.

Logically there is no more reason to think that interest rates are on a permanently high plateau now than there was reason in the 1940s to believe that interest rates then were on a permanently low plateau. (Actually many people did believe twenty-five years ago that interest rates would be permanently low. Why else would they have bought long-term bonds to yield 2-1/2 percent or less?)

As the accompanying chart shows, yields on call-protected, long-term, high-grade corporate bonds declined for twenty-five years from a 1921 high of nearly 6 percent to a 1946 low of less than 2-1/2 percent. After such a prolonged decline people who confuse memory with reasoning, as most of us do, are sure interest rates never will rise again.

But, as you can see, interest rates did rise from that point for more than twenty-four years to their May 1970 high when prime corporate bonds yielded about 8-1/2 percent. After such a prolonged rise people who confuse memory with reasoning, as most of us do, are sure interest rates never will fall again.

Actually the cost of borrowing money declines when interest rates relative to the assumed advantage of buying now rather than later dictate decisions to postpone spending, Accordingly interest rates can come down for either of two reasons: (1) Because they have reached a level which Overdiscounts the assumed advantage of buying now rather than later, or (2) Because the advantage of buying now rather than later has been reduced by a reduction in the rate of inflation, or by deterioration in the outlook for profits, or both.



THE PRICE OF INTEREST

To say that interest rates are on a permanently high plateau amounts to saying that the advantage of buying now rather than later is going to be high

permanently. Such a statement assumes: (1) A continued high rate of inflation, or (2) A permanently higher rate of return on invested capital than American industry has had in the past, or (3) Both.

Obviously if the rate of inflation can be slowed, the advantage of buying now rather than later is reduced, and hence the decision to postpone spending is made easier. Likewise obviously, if the outlook for profits deteriorates, whether because of foreign competition, overcapacity, taxes, or cost-price squeeze, the incentive to borrow to enter new businesses or expand existing ones will be reduced, and with it the demand for money.

Our needs for capital are great. But needs are not the same thing as effective demand. If we attempt to supply them with printing press money, there is danger the rate of inflation will accelerate. And it already has reached a level that clouds rather than brightens prospects for corporate profits. Levying taxes to meet these needs will simply transfer purchasing power from some people and some industries to other people and other industries. It provides no basis for assuming increased profitability for capital investment taken as a whole.

One of the worst occupational hazards of the investment business arises out of our extraordinary ability to rationalize whatever is, and our common inability to foresee what will be. Mere modesty should make us cautious about accepting as permanent a level of interest rates few were wise enough to see coming. It is easy to make assumptions that support expectations of permanently high interest rates. It is not so easy to support those assumptions.

BONDS VERSUS STOCKS

If you own stock in a company, you are a partner in the business. If you own a company's bonds, you are one of its creditors.

As a shareholder you own a piece of the business. As an owner you are entitled to your share of whatever it makes whenever the directors vote to distribute it. You are promised nothing.

As a creditor you are entitled to be paid whether the company makes any money or not. No one as yet has found a way to get blood out of a

stone, however -so a prudent bond buyer examines not only his rights but the issuing company's ability to live up to its bargain.

Paraphrasing Kipling's "East is East, and West is West, and never the twain shall meet," it used to be said before the great depression of 1929-32 that a bond man was a bond man, and a stock man was a stock man, and neither could operate successfully in the other's field. Actually it is about as unsound for a bond man not to know stocks as it is for an eye doctor to be totally ignorant of the rest of the human body. In a sense stocks are the buffers which protect bonds from the slings and arrows of outrageous fortune. A bond man who is sensitive to anemia in those buffers seldom is caught holding an issue that defaults. He sees trouble coming long before it affects payments on the senior securities. (Bonds are senior because their claims must be met before the stockholders can get anything.)

No matter how much a company prospers, all that its bondholders receive is the agreed interest and repayment of their principal when due. Since the bondholder thus is barred from sharing prosperity he would be foolish indeed to run the risk of sharing adversity. Weak companies ofttimes entice the unwary bond buyer by offering a higher interest rate than is obtainable on the best bonds. My own experience argues for buying nothing but the best bonds or the worst bonds, and avoiding all that lies in between. That may sound paradoxical, I know. But let me explain. The best bonds have such strong coverage of earnings and such substantial backing of assets as to make a default almost out of the question. As I recall it there were three bonds rated AAA in 1929 that were in default by 1932. But those were the exceptions that test the rule. They probably amounted to a tiny fraction of one per cent of all of the triple A bonds outstanding in 1929. Another depression like 1929-32 is highly improbable in any case. The world has changed since then.

The worst bonds are those in default, of course. Very often, as was the case with the Richfield Oil and Pan American Petroleum bonds mentioned earlier, defaulted bonds are given all or most of the company in the eventual reorganization. Thus when I buy bonds in default I am buying what I hope and expect will be the equity in the reorganized company. I am really buying a "stock" called a bond at what I think is a bargain price for the "stock."

A worm, it has been said, is the only creature than cannot fall down. Defaulted bonds have that characteristic in common with worms. The worst has happened. They may stay in default for years pending reorganization or the issuing company may be liquidated but the holder of defaulted bonds rarely need fear than his morning newspaper will bring him bad tidings. Since the news about his holdings can hardly get worse he has what history has shown time and again to be an almost riskless speculation with substantial chance for eventual appreciation.

How about convertible bonds? These are bonds that may be exchanged for stock of the issuing company, usually at a price above the market at the time the bonds were issued. If the stock has a prolonged and substantial advance in price, the convertible bondholder profits by it. On the other hand if the company gets into trouble and its stock declines, the convertible bondholder usually continues to collect his interest and enjoys a somewhat protected position. The fact remains, however, that if the stock advances, the stockholder makes more money than the owner of the convertible bonds. And all too often, if the stock goes into a severe decline, the convertible bond declines substantially more than do the highest grade “straight” bonds, and sometimes it defaults.

Convertible bonds are useful for institutions restricted as to common stock purchases, and especially so when those institutions are advised by experts at spotting “out of line” prices. For the individual, convertible bonds sometimes permit avoidance of a decision as to whether to buy stocks or bonds Such escapism often is expensive in comparison with what could have been achieved by correct decision.

Why should anyone buy bonds when the country is suffering from inflation? The answer is that interest rates are the result of supply and demand. Lenders charge, and borrowers pay, rates which reflect not only the rental value of money but also anticipated rates of decline in its purchasing power. Theoretically, if the rental value of money is 4 percent and if inflation is expected to continue at the rate of 4 percent a year, interest rates will be around 8 percent. When bonds of the highest quality afford yields that cover both the rental value of money and the anticipated rate of inflation the buyer stands to profit if the actual rate of inflation proves to be less than expected.

In the last two or three years, some bond buyers have been motivated by a belief that a 5 percent or 6 percent annual decline in the purchasing power of the dollar is about as high a rate of inflation as America's social structure can and will tolerate. Hence when the best fully taxable bonds were selling to yield 9 percent and more, and the best tax-exempt bonds were selling to yield 7 percent and more, those people bought in the expectation that something—they knew not what—would be done to check inflation before it got much worse. Whether the Nixon "freeze" proves successful or not, it at least justified those bond buyers' expectation that America would not take continued 6 percent inflation lying down.

Bond prices for the highest grade issues simply reflect changing interest rates. For example, a 6 percent bond due in twenty years will sell at par ($1,000) when the general level of interest rates is 6 percent. Should the general level of interest rates rise to 8 percent that same bond will sell at about 80 ($800 a bond), at which price the buyer gets a current yield of 7-1/2 percent and a yield to maturity of just over 8 percent. Yield to maturity is the yield calculated by allowing year by year for the present value of the $200 "extra" to be received twenty years hence. Remember we are talking about the highest grade issues. With them the buyer assumes that at maturity he will receive not just the $800 he has paid but the $1,000 face amount of the bond.

If interest rates should drop to 4 percent in the next five years that same top grade 6 percent bond which sold at $80 in an 8 percent money market could be expected to sell at $122 ($1,220 a bond), a price advance of more than 50 percent. From 1971 levels, depending on the assumptions you make as to the unknowable future, bonds could show greater capital gains than the average stock.

One thing to watch out for, of course, is call protection. Companies issuing bonds naturally and properly seek to have their cake and eat it too. Hence they offer bonds with high interest rates to attract buyers when everyone else is paying high interest rates, yet they reserve the right to pay off the bonds and issue new ones in case interest rates decline. You may own a bond paying 9 percent and due in 1990, but if it is callable in three years, don't count on it any longer than that. If interest rates generally should drop to 6 percent by 1975— certainly not an impossibility though this is not a forecast—your 9 percent bond probably will be called (paid off) and you will have to reinvest the money at the then "going rate" of 6

percent. Many bonds are not callable for long periods—ten-year call protection is not uncommon, and even longer call protection is available at times. A rule to bear in mind is that callable bonds will be called if it is to your disadvantage.

How can we compare stocks with bonds? Suppose we buy for $50 a stock earning $1 a share and growing at the rate of 20 percent a year. Suppose it pays only stock dividends, re-investing all earnings in the business. Suppose at the time of our purchase we could have bought call-protected, prime corporate bonds to yield 8 percent.

How long will it be before our stock is earning 8 percent on our purchase price? The answer is between seven and eight years, if growth continues at 20 percent a year.

But even if we are confident that growth will continue that long at that rate, we face other unanswered questions before we can be confident the stock is the better buy.

One of those questions is: “What will prime bonds be yielding seven or eight years from now?” If yields have dropped to 4 percent and if the bond we could have bought to yield 8 percent is callable or matures in ten years, our bond alternative becomes much less attractive than before.

Another question we must answer before deciding whether we should buy the stock at fifty times earnings is how many times earnings we expect the stock to sell seven or eight years from now. If our stock’s earnings quadruple as we expect, but the stock then sells 12-1/2 times earnings, our investment will have produced neither capital gain nor income. Clearly the 8 percent bonds would have been the better buy.

If our stock’s earnings quadruple and the stock then sells at twenty-five times earnings, our stock will have doubled in price. A doubling in price in seven or eight years is equivalent to a yield of 10 percent compounded annually. On this assumption, the stock would be a better buy than the bond yielding 8 percent.

If the price-earnings ratio holds at 50, the stock will sell for four times our purchase price to show a gain of 20 percent a year. Those are crucial “ifs”.

Taxes and income requirements also enter into the calculations. An individual in the 50 percent federal income tax bracket would surrender half

of his 8 percent bond yield to the tax collector. A pension fund could keep and reinvest all of it.

An individual in the 50 percent tax bracket needing 4 percent a year income for current expenses would thus spend and pay in taxes his entire yield from the 8 percent bond. If he bought the growth stock and sold enough to give him 4 percent of his *cost* each year, after capital gains taxes, how he made out would depend on the market price of the stock at the time of each sale. There is no way to tell in advance what that might be. We do know, however, that fixed annual drafts on principal are dollar averaging in reverse. This means selling the most stock when prices are low and the least when prices are high.

If these examples seem tedious and complicated, I can assure you they are simple compared with the actual investment problems encountered every day. All I am trying to show is the impossibility of proving in advance, mathematically, how any investment will work out. The bigger your computer, the more sophisticated your program, the more varied the assumptions you can evaluate. But when all is said and done, the future is still unknown, and always will be. That is why making assumptions and figuring the odds are crucial to investment success.