

Part VII: Additional Aspects of Security Analysis. Discrepancies Between Price and Value

FOREWORD BY WARREN E. BUFFETT

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SECURITY ANALYSIS

◉ **SIXTH EDITION** ◉



**UPDATED WITH NEW COMMENTARY BY
SETH A. KLARMAN, JAMES GRANT,
BRUCE GREENWALD, AND OTHERS**

This chapter is from *Security Analysis*, which has withstood the test of time as well or better than any investment book ever published. Now the Sixth Edition updates the masters' ideas and adapts them for the 21st century's markets. This second edition, which was published in 1940 and still considered the definitive edition, has been updated by a dream team of some of today's leading value investors. Featuring a foreword by Warren E. Buffett (in which he reveals that he has read the 1940 masterwork "at least four times"), this new edition of *Security Analysis* will reacquaint you with the foundations of value investing—more relevant than ever in the tumultuous 21st century markets.

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PART VII
ADDITIONAL
ASPECTS OF
SECURITY ANALYSIS.
DISCREPANCIES
BETWEEN PRICE
AND VALUE

Introduction to Part VII
THE GREAT ILLUSION OF THE STOCK MARKET
AND THE FUTURE OF VALUE INVESTING
BY DAVID BARAMS

In value-investing circles, you meet many people who claim to have been inspired by what Benjamin Graham and David Dodd wrote in *Security Analysis*. Most are, at the very least, stretching the truth. A fair number of aspiring and practicing value investors may indeed have devoured *The Intelligent Investor*. But I would wager that few have actually dug deeply into *Security Analysis* and fewer still have read the classic cover to cover. I have to confess that although I had delved into various parts of *Security Analysis*, I had never read it from first page to last. So when I was asked to write an introduction to [Part VII](#), which comprises the last hundred pages of the book, it was time to do my homework. After more than 20 years as an investment professional, I finally read the value investors' equivalent of Deuteronomy. Entitled "Additional Aspects of Security Analysis. Discrepancies between Price and Value," [Part VII](#) covers a lot of ground: the valuation of warrants; the potential decrease in the value of a company's common stock when it issues options to management; the shortcomings of relative value analysis; and the greed of investment bankers. In the 75 years since the original edition was published, both the world at large and the financial markets have undergone cataclysmic change. Yet, as Graham and Dodd understood, how markets work, how companies are run, and how people—both investors and corporate managers—tend to act in certain situations never change.

The world likes to categorize things, including investing styles, in neat little boxes. So it is that the financial media frequently label market participants as "value," "growth," or "momentum" investors. That's all fine, but I can tell you that I've observed a great many investors over the years, and I've never seen a consistently successful one whose strategy was *not* based on a value approach—paying less for something than it is worth, either today or in the future. True, some people like to buy things that will grow and others are drawn to assets that beckon from the bargain counter, while still others like to engage in arbitrage activities, buying one thing and selling another to profit on the price differential, or spread. But every successful investor I've ever known makes a calculation that compares an asset's purchase price to its present or future value.

Whatever their approach, countless investors have used the principles laid out in *Security Analysis* to uncover bargains. Scads of people have become wealthy doing so, including many of the contributors to this revised edition, not to mention all the people who were smart enough to buy Berkshire Hathaway years ago. Their success is a testament to value investing's glorious past. But what about its future? Is the road ahead bright and prosperous? Or is it bleak and beggarly? Are there more people practicing Ben Graham's underlying principles than there are bargains for them to find? Is there just too much money chasing a finite supply of bargains? Or might a serious security analyst still be able to prosper over time?

I am optimistic about the future of value investing. To be sure, there are many bright and savvy people in the financial markets employing Graham and Dodd's techniques, but the markets themselves have grown exponentially. The chunk of capital being invested by the value-investing crowd is a small percentage of the overall capitalization of global financial markets. Having observed the markets for more than two decades, my sense is that, rather than a glut of Graham and Dodd acolytes picking through scarce opportunities to find a place for their cash, money is ever more prone to sloshing around in giant waves, flowing from one fad to the next. If anything, it seems that the people controlling these mega-sums have become less intelligent and less sophisticated over time. The last decade alone has brought incredible extremes in valuation, starting in 1999 and 2000 with the high-altitude Internet bubble that was followed in short order by the utter collapse of the tech market. In the summer of 2002, we witnessed a tremendous corporate debt meltdown. But soon, these excessively low valuations were pushed off the front pages by the most generous and lax lending standards of all time. Now, as I write this introduction, the mortgage market is imploding, creating perhaps yet another new set of opportunities. That we've seen the last of these extreme swings seems doubtful.

What is driving this manic phenomenon? The explanation is something I call the "Great Illusion of the Stock Market." Investing looks easy, particularly in a world of inexpensive software and online trading. Buying a stock is no more difficult than buying a book on Amazon.com. And because a great many people *have* gotten wealthy in the stock market, lots of others have come to believe that anyone can get rich with very little effort. They are wrong. All the people I know who've built wealth in the stock market have worked very hard at it. Graham and Dodd understood the effort it took to be successful in the market. They

wrote:

Since we have emphasized that analysis will lead to a positive conclusion only in the exceptional case, it follows that many securities must be examined before one is found that has real possibilities for the analyst. By what practical means does he proceed to make his discoveries? Mainly by hard and systematic work. (p. 669)

So, yes, you can get rich buying and selling stocks, but, as the authors well knew, it takes hard work and patience. Nevertheless, the Great Illusion persists, maybe because, like Woody Allen's film character Zelig, the market is a chameleon that changes its appearance to suit the times. Sometimes, it shows up as a tech stock bubble. Other times, it manifests itself as a ludicrously overvalued stock market as seen in the late 1980s in Japan. In a current incarnation, a raft of financial institutions across America are trying to emulate the success of David Swensen and his colleagues who manage Yale University's endowment by allocating large percentages of the capital to "alternative investment managers."

But the Great Illusion is just that—an illusion. If you want to get wealthy in the financial markets, you'll need to engage in "hard and systematic work." And for that, many sections of [Part VII](#) of *Security Analysis* are still essential. Given the drastic changes in the world since the book first appeared, it should come as no surprise that some of the material is no longer relevant for today's investor, and these shortcomings bear mentioning. So as we take a quick tour through this part, I'll point out some deficiencies along with the authors' nuggets of wisdom that still ring true.

One of the shortcomings shows up early in the first chapter of [Part VII](#), in Chapter 46, "Stock-option Warrants," which is on the accompanying CD. This chapter may well be the most dated. When the book was first published, the derivatives market was still in its infancy. Fischer Black and Myron Scholes had not yet developed their famous formula for valuing stock options, and the products that now pervade the financial markets—options, interest rate futures, swaps, swaptions, and so on—were not fixtures in the financial markets. Chapter 46 homes in on stock warrants, one of the few derivative securities available at that time. The authors make some good points with their few specific examples, but their analysis is not sophisticated enough for today's world.

Take their example of Barnsdall Oil warrants. Graham and Dodd correctly

conclude that these warrants were undervalued because the market priced them at their intrinsic value. It's not terribly relevant in today's world because such mispricing wouldn't last long. Besides pointing out the obvious—it's better to own a warrant trading at its intrinsic value than to own the underlying stock—Graham and Dodd note the leverage inherent in warrants and options. This analysis is good as far as it goes, but it just doesn't go far enough. The authors were able to identify that the Barnsdall Oil warrants were mispriced relative to the common stock, but they weren't able to provide the reader with an intellectual framework or the tools needed to value the warrants properly.

I should make it clear that just because an asset is overvalued or undervalued, it's not necessarily a good idea to try to capitalize on that mispricing. If the derivatives market fully understands the misvaluation of the underlying security, there is no particular edge to owning the derivative. However, if the market undervalues the derivatives on a mispriced security or group of securities, the odds to the derivative investor can be *very* favorable. In effect, the investor benefits from the double leverage of two mispriced securities—the underlying *and* the derivative. Although such a situation doesn't arise often, it can be particularly profitable. The ability to capture the compound mispricings can lead to extraordinary profits.

Perhaps the most famous example of this phenomenon occurred in the late 1980s, when the Japanese stock market rose to greater and greater heights, ultimately reaching an absurd level of overvaluation. While some believed that this was a “new era” in which Japan would economically dominate the world, value investors took a different view, believing instead that it was simply a case of a financial bubble that would ultimately correct itself. On Wall Street, there was a growing and widespread understanding that the Japanese stock market would eventually decline to more reasonable and rational levels, which spelled opportunity for those able to capitalize on what promised to be a dramatic price movement.

Against this backdrop, options sellers were, amazingly, willing to offer puts on the Nikkei Index at a remarkably cheap price. I remember asking the brokers who sold these options, “Who is taking the other side of these trades?” “European institutions,” they said, which is the standard reply of Wall Street brokers who don't want to tell you what's really going on. In the end, it turned out that much of the exposure was held by Japanese financial institutions that were so confident their market would never go down that they wrote these

multiyear contracts and took the entire premium into income immediately. Ultimately, the Japanese market collapsed, and my then employer, along with many other U.S. investors, profited handsomely as the puts soared in value.

More recently, the derivatives market in asset-backed securities of subprime mortgages offered a similarly distorted risk-reward equation in the form of credit default swaps (CDSs). These securities are a series of puts on bonds backed by subprime mortgages on residential property. When the bonds were issued, they were viewed by both investors and the rating agencies as safe (that is, investment grade) because of the assumptions about how these mortgages would perform. However, some astute investors realized that the underlying collateral was much riskier and subject to far more downside than the buyers originally assumed when they purchased CDSs on subprime bonds and indexes. When the subprime market collapsed in 2007, some of these securities increased in value more than 50 or 60 times the amount at risk. Every trade always has two sides, so it helps if you can figure out the thought process of the person on the opposite side of the trade. Warren Buffett once wrote: “If you’ve been in the poker game for 30 minutes and you don’t know who the patsy is, you’re the patsy.”

“Work It Out”

Like Graham and Dodd, my own initial approach to the derivatives market was rather simplistic, and I well remember the day my young eyes were opened to the perils and pitfalls of my naiveté.

It was the early 1980s and I was just starting out on Wall Street. Derivatives were still a mostly nascent market, and stock options were among the first of these instruments to attract much attention. Like Graham and Dodd and many others on the Street, I grasped the leveraged nature of stock options and how they could be used to magnify the gains (or losses) of an individual stock position. But my knowledge beyond the basics was scant. I was working in the risk arbitrage department of a firm that did a lot of options arbitrage. And although I didn’t yet understand what that meant, I did understand that the guys sitting next to me were making a lot of money doing it. What is more, they seemed to come in just before the market opened, left promptly right after the market closed, and never even glanced at the *Wall Street Journal*, preferring instead to read the gossipy *New York Post*. My curiosity was aroused. So one day I asked Ira, the head of the firm, to explain to me what he did. The two-

minute conversation that followed forever changed the way I looked at derivatives and profoundly affected the way I've approached unfamiliar areas in finance and business ever since.

Ira pointed to a stock (I can't remember which one, although it could easily have been IBM since, in those days, the sun on Wall Street literally rose and set on whatever IBM was doing) and asked me this question: "What if you buy the \$35 calls, sell the \$40 calls, buy the \$40 puts, and sell the \$35 puts all at the same time?" My first thought was, "You've got a mess," but I didn't say that. I simply looked baffled. Seeing my confusion, he said, "Work it out. What's it worth at expiration?" After a few minutes with pencil and paper, I looked up, still a bit confused, and said, "It's always worth \$5." "Right," he said. But still the light did not flicker in my brain until Ira asked, "What if you could buy it for \$4.50?" Bingo! I finally got it. Even though I was new to Wall Street, I had done enough arbitrage to understand what Ira was saying. Typically, the most liquid option contracts are those with expiration dates relatively close by; which means that if you could buy this "box," as it is called, consisting of two pairs of options for \$4.50, you would make a guaranteed 11% on your money in less than six months.

It was my turn to pose a question. "Can you really buy them for \$4.50?" I asked. "Sometimes," he said. And then I realized who had been the proverbial patsy in the poker game. It was me. By relying on Graham and Dodd's overly simplistic approach to the options market and not fully understanding the mathematics of the instruments in which I was investing, I didn't appreciate how the trade might look to the person on the other side. I was ripe for the picking, as they say. Perhaps my trades had been the other side of someone's buying a box for \$4.50. I realized that, in all likelihood, the guy on the other side was probably smarter than I was. Embarrassed by my own ignorance, I vowed to wade into new situations with a greater respect for those on the other side of the trade and with more humility about the limits of my own knowledge. Never again would I be the patsy. That approach has served me well throughout my career.

Unlike the world in which Graham and Dodd lived and worked, today's security analyst is at a disadvantage without a good understanding of how option pricing models work and what their limitations are. Not only are derivatives pervasive in the financial markets but many corporations and investment entities use them for purposes both prudent and reckless.

As I continued to acquire experience and learned more about options and the models used to value them, I became aware of a major weakness in options theory. By and large, the academic work underpinning derivatives analysis, work that so many on Wall Street rely on, is predicated on the assumption that the markets are “efficient.” The authors of *Security Analysis* would have had a good time arguing with these academics. They understood that the underlying premise of efficiency is not always true, writing:

Evidently the processes by which the securities market arrives at its appraisals are frequently illogical and erroneous. These processes, as we pointed out in our first chapter, are not automatic or mechanical but psychological, for they go on in the minds of people who buy and sell. (p. 669)

Ahead of their time when it came to the question of market efficiency, Graham and Dodd weren't able to foresee a need for the more complex mathematical relationships pointed out by my boss. They looked only at the relationship between the derivative security and the underlying instrument, which made for a somewhat primitive method of warrant analysis. Nevertheless, they did possess a keen understanding of how option and warrant issuance can affect the future value of the issuing company's common stock. In fact, they understood it better than many of today's accountants and Wall Street analysts. In a subsection entitled “A Dangerous Device for Diluting Stock Values,” the authors write,

The public's failure to comprehend that all the value of option warrants is derived at the expense of the common stock has led to a practice that would be ridiculous if it were not so mischievous. (p. 653 on accompanying CD)

Those words could just as easily have been penned any time in the last decade, as some of the compensation schemes recently adopted at certain corporations have been shortchanging shareholders by masking the dilutive impact and inflating the income statement.

Until recently, companies recorded no expense on their income statements for the cost of options issued to management and directors. A couple of years ago, the rules were changed, and Generally Accepted Accounting Principles (GAAP) began requiring companies to use one of several methods to value the cost of their stock options. It's a big improvement over the prior practice of recording

no expense, but the methods mandated by GAAP are the same as those used by analysts to value derivatives not issued by the company. Clearly, something is amiss. There is a huge difference between derivative contracts with third parties that do not result in more shares being issued and company-issued options that increase the number of its shares outstanding in the future, thereby diluting the interests of the current stockholders. Long-term shareholders need to fully appreciate the impact of these options issued by corporations to management; otherwise they'll find themselves short-changed in the years to come.

Beware of the Investment Bankers!

Moving on to [Chapter 47](#), “Cost of Financing and Management,” Graham and Dodd might more aptly have named it, “Beware of the Investment Bankers!” As the saying goes, “The more things change, the more they stay the same.” Or, as a friend once told me with regard to conflicts of interest on Wall Street, “Where there’s no conflict, there’s no interest.” The reader will find it interesting to learn about ancient abuses at the hands of investment bankers, while the folks at Goldman Sachs and Morgan Stanley may shed a few tears of nostalgia when they read about the good old days of 20% underwriting spreads on the likes of American Bantam Car Corporation Convertible Preference Stock. But the last page of the chapter really stands out for its enduring relevance. Graham and Dodd wrote,

The relaxation of investment bankers’ standards in the late 1920s, and their use of ingenious means to enlarge their compensation, had unwholesome repercussions in the field of corporate management. Operating officials felt themselves entitled not only to handsome salaries but also to a substantial participation in the profits of the enterprise. . . . But it may not be denied that devious and questionable means were frequently employed to secure these large bonuses to the management without full disclosure of their extent to the stockholders. . . . With publicity given to this compensation, we believe that the self-interest of stockholders may be relied on fairly well to prevent it from passing all reasonable limits. (p. 642)

So many of the recent excesses—from the Internet bubble to the leveraged buyout craze to the subprime mortgage fiasco—bear more than a passing resemblance to the shenanigans Graham and Dodd described years ago. And while the pair probably would not have been surprised at some of the excessive

compensation at the corporate level, they likely would have been shocked that these excesses reached into the management of the New York Stock Exchange itself. Today's investors would do well to view Wall Street with at least the same degree of reproach and skepticism our authors exhibited in their writings.

Jumping ahead, [Chapter 50](#), “Discrepancies between Price and Value,” and [Chapter 51](#), “Discrepancies between Price and Value (Continued),” are among the gems of [Part VII](#), and anyone interested in investing should read them. They provide the reader with a useful list of dos and don'ts, places to look for value, and traps to avoid, illustrated by examples from the 1930s. Many of us have a tendency to romanticize the past, and when investors engage in such fond reminiscence, they often speak wistfully of Graham's era. Oh, for a return to the days when stocks sold at seven times earnings and less than working capital! And I must admit that when I read the Group A list in [Chapter 50](#), I, too, felt a twinge of envy. How easy it must have been to be an investor in the late 1930s!

But wait a minute, I thought. I've encountered numerous opportunities in my own lifetime that would have made Graham green with envy. The truth is that, from time to time, financial markets present opportunities to buy assets that have remarkable risk-reward characteristics. It can be described only as the best of all worlds when an investor has the chance to make a decent amount of money in the worst case and oodles in the best case. My personal list begins with the Management Assistance Liquidating Trust—perhaps my first true value investment—and includes Public Service of New Hampshire 18% second mortgage bonds trading at par; Executive Life Muni GICs trading at 25 cents on the dollar in the wake of a trial court judge's decision later declared on appeal to have “no basis in law or reason”; and Gentiva common stock, a spin-off resulting from a merger that was trading at about a third of its working capital.

Around the same time Ira was enlightening me about the options market, my friend Chris Stavrou introduced me to Management Assistance Liquidating Trust when he faxed me the 10-Q, adorned with his handwritten notes. As he walked me through, I could see exactly what he saw: a stock trading at \$2 that was worth \$4. What's more, the company was now obligated to pay out to shareholders all the proceeds from the sale of its assets. Knowing that this was a certain double, I promptly sold all my other holdings and put 100% of my assets (all \$10,000 worth) into this one stock. My only regret is that I didn't buy any for my company because I was afraid my boss, who was on vacation at the time, would disapprove of the investment.

One of the most recent and spectacular sets of opportunities occurred in mid-2002, amid the epic meltdown in the corporate bond market. Bargains were there for the taking—left, right, and center. Corporate bond market investors that year had stories galore. Mine was the AES 10.25% Senior Subordinated Notes, which traded as low as 15 cents on the dollar. At that price, the *current yield* was close to 66%. AES was a complex company with assets all over the world. Furthermore, it was financed in a nontraditional way with a combination of project-specific debt as well as corporate debt of different levels of seniority. The high degree of leverage combined with the complexity of the asset base caused the market to be concerned that the company would be forced into bankruptcy. Our analysis led us to the conclusion that there was more than sufficient value and cash flow to cover the debt. As it turned out, we were correct. These bonds never missed a payment and were called at par within a year of hitting their lows. Talk about a windfall! Surely, Ben Graham would have marveled at the bond market’s temporary insanity in the summer of 2002.

As I continued reading through [Part VII](#), I was particularly and delightedly struck by the authors’ use of the English language. Their ability to express ideas cogently and clearly has seldom been matched in the field of finance, with the exception of perhaps their best and most famous student, Warren Buffett. After all, it was Graham and Dodd who created the parable of a manic Mr. Market, the gentleman who may be your friend or your enemy but who is someone whose advice you should never accept. A great example of their effective use of language is found in the discussion of the shortcomings of “market analysis.”

It was also Graham and Dodd who coined the term “margin of safety,” which has special relevance for the investment professionals who contributed to this edition of the book. All of us are fundamental analysts who examine securities one at a time, weighing the risk and reward characteristics of each investment at a particular price. While we may, from time to time, have views on where the stock market is headed, we generally do not make bets on its direction. Our reasons are many, but I think Graham and Dodd said it best when they wrote in [Chapter 52](#):

In market analysis there are no margins of safety; you are either right or wrong, and if you are wrong, you lose money. (p. 703)

That really sums it up nicely, doesn’t it? Yet, all these years later, many investors are still consumed with formulating their own market view. Wall

Street's finest firms employ market strategists, and many investors, professional and otherwise, are eager to hear those views. This, I submit, is simply more evidence that the Great Illusion persists.

In the very last chapter, Graham and Dodd offer advice to different groups of market participants, among them the small investor, the well-heeled investor, and the institutional investor. How has their advice held up?

For the small investor interested in income, the authors felt that the only suitable investment was U.S. government savings bonds. The securities performed as promised, of course, but there were a couple of developments that Graham and Dodd did not and could not foresee. First and foremost were the ravaging effects of inflation in the late 1970s and early 1980s. The inflationary spiral ultimately led to higher interest rates and large losses for bond investors. Second was the expansion of the fixed income markets and the proliferation of innumerable fixed income securities that created opportunities for value investing in the bond market for those willing to sift through vast numbers of similar instruments in search of anomalous pricing.

Graham and Dodd advised profit-seeking investors, both large and small, to purchase securities trading below their intrinsic value, and they suggested that investors submit their analytical work for critique by others. In essence, they were recommending that investors should all become part-time security analysts. Writing in the aftermath of the 1929 crash and ensuing Great Depression, the prospect of the kind of financial market profitability we've seen in recent years was unimaginable. In today's hypercompetitive world, it may be possible to succeed as a part-time investor, but it's not something I'd recommend. And if you don't want to devote yourself full-time to researching investments, you're probably better off engaging some professional assistance.

The prolific pair also advised institutions to invest solely in fixed income investments, if doing so would fulfill their needs. Fortunately, for universities such as Harvard, Yale, and Princeton, men such as Jack Meyer, David Swensen, and Andy Golden didn't follow that advice. And because of it, those institutions have far more resources at their disposal today than they would have otherwise. Thanks to the insight and independent thinking of these individuals, their respective institutions all have endowments measured in the tens of billions that give them a huge and perhaps permanent competitive advantage over many of their less wealthy peers. Beyond any specific advice that Graham and Dodd

offered, the most important point investors should take away from *Security Analysis* is this: look at the numbers and think for yourself. All the great investors do, and that's what makes them great.

Interestingly enough, one group of investors was left out when Graham and Dodd were dispensing advice in the last chapter of *Security Analysis*. They had nary a word for all the young people starting out in financial careers that they undoubtedly hoped would bring them fortune and happiness, if not fame. To rectify that oversight, I offer a few last words of advice to this group. Many of my collaborators on this project are, like me, investment professionals who were once in your shoes—young, new to Wall Street, with little if any money in our bank accounts, but armed with energy, hope, and a good work ethic. We feel a particularly strong kinship with you. I think all of us would agree that we made a great career choice. And although we may initially have been motivated by the money, it's been a long time since the accumulation of wealth was the force that sends us into the office each day. We do what we do because we enjoy it. We relish the challenge, the stimulation, and the satisfaction that comes with finding the next bargain the market has to offer.

A number of years ago some professors at the University of Chicago concluded that Graham and Dodd had it all wrong. The market, they said, *was* efficient. In effect, they told aspiring analysts such as you: "Don't bother. Don't waste your time. The market is too efficient for you to be rewarded by your effort. Find something else to do with your life." For a long time, it was fashionable for people in financial circles to debate this topic, with the professors marshaling arguments in favor of their position and the practitioners insisting they were wrong, often pointing to the many aberrations that could not be explained by the academic theories.

Recently, the debate has died down, or perhaps it's just that the practitioners are too busy making money, too busy unearthing the next mis-priced security, to find the time to argue anymore. As rewarding as our careers have been, I think all of us would tell you that it's been a constant intellectual challenge to understand an ever-changing and increasingly global financial world in a competition that draws many exceptionally talented, bright, and hardworking entrants. But it is just such rigorous competition among colleagues and friends that brings out the best in us. I, for one, feel fortunate to have met so many intellectually curious, hardworking, and motivated people during my time on Wall Street.

And so, to the aspiring young analyst, I can tell you that the answer to the question of the market's efficiency or lack thereof is clear: The market is inefficient enough. "Enough for what?" you ask. Inefficient enough for me—and you—to find some great opportunities from time to time. Not every day or every week, but often enough. The Great Illusion persists, leaving plenty of opportunities for those who wish to do the hard, sometimes boring, and often tedious work of value investing. Happy hunting!

See accompanying CD for Chapter 46, "Stock-option Warrants."

Chapter 47

COST OF FINANCING AND MANAGEMENT

LET US CONSIDER IN MORE DETAIL the organization and financing of Petroleum Corporation of America, mentioned in the last chapter. This was a large investment company formed for the purpose of specializing in securities of enterprises in the oil industry. The public was offered 3,250,000 shares of capital stock at \$34 per share. The company received therefore a net amount of \$31 per share, or \$100,750,000 in cash. It issued to unnamed recipients—presumably promoters, investment bankers and the management—warrants, good for five years, to buy 1,625,000 shares of additional stock, also at \$34 per share.

This example is representative of the investment trust financing of the period. Moreover, as we shall see, the technique on this score that developed in boom years was carried over through the ensuing depression, and it threatened to be accepted as the standard practice for stock financing of all kinds of enterprises. But there is good reason to ask the real meaning of a set-up of this kind, first, with respect to what the buyer of the stock gets for his money, and second, with respect to the position occupied by the investment banking houses floating these issues.

Cost of Management; Three Items. A new investment trust—such as Petroleum Corporation in January 1929—starts with two assets: cash and management. Buyers of the stock at \$34 per share were asked to pay for the management in three ways, *viz.*:

1. By the difference between what the stock cost them and the amount received by the corporation.

It is true that this difference of \$3 per share was paid not to the management but to those underwriting and selling the shares. But from the standpoint of the stock buyer the only justification for paying more for the stock than the initial cash behind it would lie in his belief that the management was worth the difference.

2. By the value of the option warrants issued to the organizing interests. These warrants in essence entitled the owners to receive one-third of whatever appreciation might take place in the value of the enterprise over the next five

years. (From the 1929 view-point a five-year period gave ample opportunity to participate in the future success of the business.) This block of warrants had a real value, and that value in turn was taken out of the initial value of the common stock.

The price relationships usually obtaining between stock and warrants suggest that the 1,625,000 warrants would take about one-sixth of the value away from the common stock. On this basis, one-sixth of the \$100,750,000 cash originally received by the company would be applicable to the warrants, and five-sixths to the stock.

3. By the salaries that the officers were to receive, and also by the extra taxes incurred through the use of the corporate form.

Summarizing the foregoing analysis, we find that buyers of Petroleum Corporation shares were paying the following price for the managerial skill to be applied to the investment of their money:

1. Cost of financing (\$3 per share)	\$9,750,000
2. Value of warrants (1/6th of remaining cash)	about 16,790,000
3. Future deductions for managerial salaries, etc	?
Total	<u>\$26,540,000+</u>

The three items together may be said to absorb between 25 and 30% of the amount contributed by the public to the enterprise. By this we mean not merely a deduction of that percentage of future profits but an actual sacrifice of invested *principal* in return for management.

What Was Received for the Price Paid? Carrying the study a step farther, let us ask what kind of managerial skill this enterprise was to enjoy? The board of directors consisted of many men prominent in finance, and their judgment on investments was considered well worth having. But two serious limitations on the value of this judgment must here be noted. The first is that the directors were not obligated to devote themselves exclusively or even preponderantly to this enterprise. They were permitted, and seemingly intended, to multiply these activities indefinitely. Common sense would suggest that the value of their expert judgment to Petroleum Corporation would be greatly diminished by the fact that so many other claims were being made upon it at the same time.

A more obvious limitation appears from the Corporation's projected activities.

It proposed to devote itself to investments in a single field—petroleum. The scope for judgment and analysis was thereby greatly circumscribed. As it turned out, the funds were largely concentrated, first in two related companies—Prairie Pipe Line Company and Prairie Oil and Gas Company—and then in a single successor enterprise (Consolidated Oil Corporation). Thus Petroleum Corporation took on the complexion of a holding company, in which the exercise of managerial skill appears to be reduced to a minimum once the original acquisitions are made.¹

¹ The same logical objection to the payment of a large “managerial bonus,” in the form of option warrants to those organizing a holding company, may be urged against the set-up of Alleghany Corporation and United Corporation.

We are forced to conclude that financial schemes of the kind illustrated by Petroleum Corporation of America are unsatisfactory from the standpoint of the stock buyer. This is true not only because the total cost to him for management is excessive in relation to the value of the services rendered but also because the cost is not clearly disclosed, being concealed in good measure by the use of the warrant artifice.² (The foregoing reasoning does not rest in any way upon the fact that Petroleum Corporation’s investments proved unprofitable.³)

² In a series of “Notes” on the history of United Corporation financing by Sanford L. Schamus, in *Columbia Law Review* of May, June and November, 1937, the proposal was advanced that prospectuses issued under S.E.C. legislation should carry a tabulation showing the effect of the exercise of warrants on earnings and asset values. See November 1937 issue, pp. 1173–1174.

³ A review of the operations of Petroleum Corporation, published by the S.E.C. in May 1939, criticizes severely a number of deals in which the management was interested on the other side. After 1933 a unique turn was given to the status of Petroleum Corporation through acquisition of a large interest (39.8%) therein by Consolidated Oil. The two companies thus became the largest stockholders of each other, an extraordinary and highly objectionable situation. See Part 3, Chap. II (2d sec.), of the *Report of the S.E.C. on Investment Trusts and Investment Companies*.

Position of Investment Banking Firms in This Connection. The second line of inquiry suggested by this example is also of major importance. What is the

position occupied by the investment banking firms floating an issue such as Petroleum Corporation of America, and how does this compare with the practice of former years? Prior to the late 1920's, the sale of stock to the public by reputable houses of issue was governed by the following three important principles:

1. The enterprise must be well established and offer a record and financial exhibit adequate to justify the purchase of the shares at the issue price.

2. The investment banker must act primarily as the representative of the buyers of the stock, and he must deal at arm's-length with the company's management. His duty includes protecting his clients against the payment of excessive compensation to the officers or any other policies inimical to the stockholders' interest.

3. The compensation taken by the investment banker must be reasonable. It represents a fee paid by the corporation for the service of raising capital.

These rules of conduct afforded a clear line of demarcation between responsible and disreputable stock financing. It was an established Wall Street maxim that capital for a new enterprise must be raised from private sources.⁴ These private interests would be in a position to make their own investigation, work out their own deal and keep in close touch with the enterprise, all of which safeguards (in addition to the chance to make a large profit) were considered necessary to justify a commitment in any new venture. Hence the public sale of securities in a *new enterprise* was confined almost exclusively to "blue sky" promoters and small houses of questionable standing. The great majority of such flotations were either downright swindles or closely equivalent thereto by reason of the unconscionable financing charges taken out of the price paid by the public.

⁴ An apparent exception might be made sometimes in a case such as Chile Copper Company where the demonstrated presence of huge bodies of ore was regarded as justifying public financing to bring the mine into production. The sale of stock of the Lincoln Motor Company in 1920 was one of the few real exceptions to the rule as here stated. In this instance an unusually high personal reputation was behind the enterprise, but it resulted in disastrous failure.

Investment-trust financing, by its very nature, was compelled to contravene

these three established criteria of reputable stock flotations. The investment trusts were *new* enterprises; their management and their bankers were generally *identical*; the compensation for financing and management had to be determined solely by the recipients, without accepted standards of reasonableness to control them. In the absence of such standards, and in the absence also of the invaluable arm's-length bargaining between corporation and banker, it was scarcely to be hoped that the interests of the security buyer would be adequately protected. Allowance must be made besides for the generally distorted and egotistical views prevalent in the financial world during 1928 and 1929.

Developments since 1929. For a time it appeared that the demoralizing influence of investment-trust financing was likely to spread to the entire field of common-stock flotations and that even the leading banking houses were prepared to sell shares of new or virtually new commercial enterprises, without past records and on the basis entirely of their expected future earnings. (There were definite signs of this tendency in the beer-and liquor-stock flotations of 1933.) Fortunately, a reversal of sentiment has since taken place, and we find that the relatively few common-stock issues sponsored by the first-line houses are now similar in character and arrangements to those of former days.⁵

⁵ See, for example, the offerings of New Idea Company common in 1937, General Shoe Company common in 1938, Julius Garfinckel and Company in 1939.

However, there has been a fair amount of activity in the common-stock flotation field since 1933, carried on by houses of secondary size or standing. Most of these issues represent shares of new enterprises, which in turn tend to fall in whatever industrial group is easiest to exploit at the time. Thus in 1933 we had many gold-, liquor- and beer-stock flotations, and in 1938–1939 there was a deluge of airplane issues. The formation of new investment companies, on the other hand, appears to be a perennial industry. In surveying such common-stock flotations, the starting point must be the realization that the investment banker behind them is not acting primarily in behalf of his clients who buy the issue. For on the one side the new corporation is not an independent entity, which can negotiate at arm's-length with various bankers representing clients with money to invest, and on the other side, the banker is himself in part a promoter, in part a proprietor of the new business. In an important sense, he is raising funds from the public *for himself*.

New Role of Such Investment Bankers. More exactly stated, the investment banker who floats such issues is operating in a double guise. He makes a deal on his own behalf with the originators of the enterprise, and then he makes a separate deal with the public to raise from them the funds he has promised the business. He demands—and no doubt is entitled to—a liberal reward for his pains. But the very size of his compensation introduces a significant change in his relationship to the public. For it makes a very real difference whether a stock buyer can consider the investment banker as essentially his agent and representative or must view the issuing house as a promoter-proprietor-manager of a business, endeavoring to raise funds to carry it on.

When investment banking becomes identified with the latter approach, the interests of the general public are certain to suffer. The Securities Act of 1933 aims to safeguard the security buyer by requiring full disclosure of the pertinent facts and by extending the previously existing liability for concealment or misrepresentation. Although full disclosure is undoubtedly desirable, it may not be of much practical help except to the skilled and shrewd investor or to the trained analyst. It is to be feared that the typical stock buyer will neither read the long prospectus carefully nor understand the implications of all it contains. Modern financing methods are not far different from a magician's bag of tricks; they can be executed in full view of the public without its being very much the wiser. The use of stock options as part of the underwriter-promoter's compensation is one of the newer and more deceptive tricks of the trade.

Two examples of new enterprise financing, in 1936 and 1939, will be discussed in some detail, with the object of illustrating both the character of these flotations and the technique of analysis required to appraise them.⁶

⁶ In the 1934 edition we analyzed, at this point, the offering of stock in Mouquin, Inc. (liquor importers) made in September 1933 at \$6.75 per share. The facts showed that the public was asked to place a valuation of \$1,670,000 on an enterprise with physical assets of \$424,000 and no earnings record. The company passed out of existence in 1937, and the public's investment was wiped out.

Example A: American Bantam Car Corporation, July 1936. This offering consisted of 100,000 shares of 6% Cumulative Convertible Preference stock, sold to the public at \$10 per share, its par value. Each share was convertible into 3 shares of common stock. The "underwriters" received a gross commission of

\$2 per share, or 20% of the selling price; however, this compensation was for selling effort only, without any guarantee to take or place the shares.

The new company had acquired the plant of the American Austin Car Company, which had started out in 1929 with \$3,692,000 in cash capital and had ended in bankruptcy. The organizers of the Bantam enterprise bought in the Austin assets, subject to various liabilities, for only \$5,000. They then turned over their purchase, plus \$500 in cash, to the new company for 300,000 shares of its common stock. In other words, the entire common issue cost the promoters \$5,500 cash plus their time and effort.

The prospectus stated—what was an obvious fact—that the preference stock was “offered as a speculation.” That speculation could work out successfully only if the conversion privilege proved valuable, since the mere 6% return on a preferred stock was scarcely an adequate reward for the risk involved. (The character of the risk was shown clearly enough in the enormous losses of the predecessor company.) But note that before the conversion privilege could be worth anything, the common stock would have to sell for more than $\$3\frac{1}{3}$ per share—and in that case the \$5,500 *investment of the organizers would be worth over \$1,000,000*. In other words, before the public could make *any* profit, the organizers would have to multiply their stake 180 *times*.

Sequel. By June 30, 1939, the company had accumulated a deficit of \$750,000; it was compelled to borrow money from the R.F.C., and the preferred-stock holder no longer had any equity in current assets. The price of the preference stock declined to 3, but at the same time the common was quoted at $\frac{3}{4}$ bid. This meant (if the quoted price could be trusted) that, although the public had lost 70% of its investment, the organizers’ \$5,500 contribution had still a nominal market value of \$225,000.

Example B: Aeronautical Corporation of America, December 1939. This company offered to the public 60,000 shares of new common stock at \$6.25 per share. The “underwriters,” who made no firm commitment to take any shares, received on the sale of each share the following three kinds of compensation: (1) 90 cents in cash; (2) $\frac{1}{20}$ of a share of stock, ostensibly worth 31 cents, donated by the principal stockholders; (3) a warrant to buy $\frac{1}{2}$ share of stock at prices varying between \$6.25 and \$8.00 per share. If the common stock was fairly worth the \$6.25 offering price, these warrants were undoubtedly worth at least \$1 per share called for. This would mean an aggregate commission for selling

effort of \$2.34 per share, or more than one-third the amount paid over by the public.

The company had been in business since 1928 and had been manufacturing its light Aeronca planes since 1931. Its business had grown steadily from \$124,000 sales in 1934 to about \$850,000 sales in 1939. However, the enterprise had been definitely unprofitable to the end of 1938, showing an aggregate deficit at that time of over \$500,000 (including development expense written off). In 9½ months to October 15, 1939, it had earned \$50,000. Prior to this offering of new shares to the public there were outstanding 66,000 shares of stock, which had a net asset value of only \$1.28 per share. In addition to the warrants for 30,000 shares to be given the underwriters, there were like warrants for 15,000 shares in the hands of the officers.

There seemed strong reason to believe that the company occupied a favorable position in a growing industry. But analysis would show that the participation of the public in any future increase in earnings was seriously diluted in three different ways: by the cash selling expense subtracted from the price to be paid for the new stock, by the small tangible assets contributed by the original owners for their stock interest and by the warrants which would siphon off part of any increased value. To show the effect of this dilution, let us assume that the company proves so successful that its fair value is twice its tangible assets after completion of this financing—say, about \$1,000,000 as compared with \$484,000 of tangible assets. What could then be the value of the stock for which the public paid \$6.25? If there were no warrants outstanding, this value would be about \$8 per share on 126,000 shares. But allowing for a value of say \$2.00 per share for the warrants, the stock itself would be worth only \$7.25 per share. Hence even a very substantial degree of success on the part of this enterprise would add a mere 16% to the value of the public's purchase. Should things go the other way, a very large part of the investment would soon be dissipated.

Should the Public Finance New Ventures? Fairly complete observation of new-enterprise financing registered with the S.E.C. since 1933 has given us a pessimistic opinion as to its soundness and its economic value to the nation. The venturing of capital into new businesses is essential to American progress, but no substantial contribution to the upbuilding of the country has ever been made by new ventures *publicly* financed. Wall Street has always realized that the capital for such undertakings should properly be supplied on a private and personal basis—by the organizers themselves or people close to them. Hence the

sale of shares in new businesses has never been a truly reputable pursuit, and the leading banking houses will not engage in it. The less fastidious channels through which such financing is done exact so high an over-all selling cost—to *the public*—that the chance of success of the new enterprise, small enough at best, is thereby greatly diminished.

It is our considered view that the nation's interest would be served by amending the Securities Act so as to prohibit the public offering of securities of new and definitely unseasoned ventures. It would not be easy to define precisely the criteria of "seasoning,"—*e.g.*, size, number of years' operation without loss—and it may be necessary to vest some discretion on this score with the S.E.C. We think, however, that borderline and difficult cases will be relatively few in number (although our second example above belongs, perhaps, in this category). We should be glad to see the powers and duties of the S.E.C. diminished in many details of minor significance; but on this point of protecting a public incapable of protecting itself, our view leans strongly towards more drastic legislation.

Blue-sky Promotions. In the "good old days" fraudulent stock promoters relied so largely upon high pressure salesmanship that they rarely bothered to give their proposition any semblance of serious merit. They could sell shares in a mine that was not even a "hole in the ground" or in an invention the chief recommendation for which was the enormous profit made by Henry Ford's early partners. The victim was in fact buying "blue sky" and nothing else. Any one with the slightest business sense could have detected the complete worthlessness of these ventures almost at a glance; in fact, the glossy paper used for the prospectus was in itself sufficient to identify the proposition as fraudulent.

The tightening of federal and state regulations against these swindles has led to a different type of security promotion. Instead of offering something entirely worthless, the promoter selects a real enterprise that he can sell at much more than its fair value. By this means the law can be obeyed and the public exploited just the same. Oil and mining ventures lend themselves best to such stock flotations, because it is easy to instill in the uninitiated an exaggerated notion of their true worth. The S.E.C. has been concerning itself more and more seriously with endeavors to defeat this type of semifraud. In theory a promoter may offer something worth \$1 per share at \$5, provided he discloses all the facts and adds no false representations. The Commission is not authorized to pass upon the soundness of new securities or the fairness of their price (except in the case of

public-utility issues which come under the terms of the Public Utility Holding Company Act of 1935). Actually, it appears to be doing its best, by various pressures, to discourage and even prevent the more grossly inequitable offerings. But it is essential that the public recognize that the Commission's powers in this respect are severely limited and that only a sceptical analysis by the intending buyer can assure him against exploitation.

Promotional activities are attracted especially to any new industry that is in the public eye. Profits made by those first in the field, or even currently by the enterprise floated, can be given a fictitious guise of permanence and of future enhancement. Hence gross overvaluations can be made plausible enough to sell. In the liquor flotations of 1933 the degree of overvaluation depended entirely upon the conscience of the sponsors. Accordingly, the list of stock offerings showed all gradations from the thoroughly legitimate down to the almost completely fraudulent.⁷ A somewhat similar picture is presented by the aircraft flotations of 1938–1939. The public would do well to remember that whenever it becomes easy to raise capital for a particular industry, both the chances of unfair deals are magnified and the danger of overdevelopment of the industry itself becomes very real.

⁷ See Appendix Note 55, p. 792 on accompanying CD, relative to investors' experience with brewery-stock flotations of 1933.

Repercussions of Unsound Investment Banking. The relaxation of investment bankers' standards in the late 1920's, and their use of ingenious means to enlarge their compensation, had unwholesome repercussions in the field of corporate management. Operating officials felt themselves entitled not only to handsome salaries but also to a substantial participation in the profits of the enterprise. In this respect the investment-trust arrangements, devised by the banking houses for their own benefit, set a stimulating example to the world of "big business."

Whether or not it is proper for executives of a large and prosperous concern to receive annual compensation running into hundreds of thousands or even millions of dollars is perhaps an open question. Its answer will depend upon the extent to which the corporation's success is due to their unique or surpassing ability, and this must be very difficult to determine with assurance. But it may not be denied that devious and questionable means were frequently employed to secure these large bonuses to the management without full disclosure of their extent to the stockholders.

Stock-option warrants (or long-term subscription rights) to buy shares at low prices, proved an excellent instrument for this purpose—as we have already pointed out in our discussion of stockholder-management relationships. In this field complete and continued publicity is not only theoretically desirable but of practical utility as well. The legislation of 1933–1934 marks an undeniable forward step in this regard, since the major facts of managerial compensation must now be disclosed in registration statements and in annual supplements thereto (Form 10-K). With publicity given to this compensation, we believe that the self-interest of stockholders may be relied on fairly well to prevent it from passing all reasonable limits.

Chapter 48

SOME ASPECTS OF CORPORATE PYRAMIDING

PYRAMIDING IN CORPORATE finance is the creation of a speculative capital structure by means of a holding company or a series of holding companies. Usually the predominating purpose of such an arrangement is to enable the organizers to control a large business with the investment of little or no capital and also to secure to themselves the major part of its surplus profits and increased going-concern value. The device is most often utilized by dominant interests to “cash in” speculative profits on their holdings and at the same time to retain control. With the funds so provided, these successful captains of finance generally endeavor to extend their control over additional operating enterprises. The technique of pyramiding is well illustrated by the successive maneuvers of O. P. and M. J. Van Sweringen, which started with purchase of control of the then relatively unimportant New York, Chicago, and St. Louis Railroad and rapidly developed into a far-flung railroad “empire.”¹

¹ The complete story of how this pyramiding was effected is told in the *Hearings before the Committee on Banking and Currency, United States Senate*, 73d Congress, 1st Session, on Senate Resolution 84 of the 72d Congress and Senate Resolution 56 of the 73d Congress, Part 2, pp. 563–777, June 5 to 8, 1933—on “Stock Exchange Practices.” The story is also set forth in greater detail and with graphic portrayal in *Regulation of Stock Ownership in Railroads, Part 2*, pp. 820–1173 (House Report No. 2789, 71st Congress, 3d Session), especially the inserts at p. 878 thereof. For graphic and other presentation of the effects of pyramiding in the public-utility field see *Utility Corporations* (Sen. Doc. 92, 70th Congress, 1st Session, pt. 72-A), pp. 154–166.

Example: The Van Sweringen Pyramid. The original transaction of the Van Sweringens in the railroad field took place in 1916. It consisted of the purchase from the New York Central Railroad Company, for the sum of \$8,500,000, of common and preferred stock constituting control of the New York, Chicago, and St. Louis Railroad Company (known as the “Nickel Plate”). This purchase was financed by giving a note to the seller for \$6,500,000 and by a cash payment of \$2,000,000, which in turn was borrowed from a Cleveland bank. Subsequent

acquisitions of control of many other companies were effected by various means, including the following:

1. The formation of a private corporation for the purpose (*e.g.*, Western Corporation to acquire control of Lake Erie and Western Railroad Company, and Clover Leaf Corporation to acquire control of Toledo, St. Louis and Western Railroad Company—both in 1922).

2. The use of the resources of one controlled railroad to acquire control of others (*e.g.*, the New York, Chicago and St. Louis Railroad Company purchased large amounts of stock of Chesapeake and Ohio Railway and Pere Marquette Railway Company during 1923–1925).

3. The formation of a holding company to control an individual road, with sale of the holding company’s securities to the public (*e.g.*, Chesapeake Corporation, which took over control of Chesapeake and Ohio Railway Company and sold its own bonds and stock to the public, in 1927).

4. Formation of a general holding company (*e.g.*, Alleghany Corporation, chartered in 1929. This ambitious project took over control of many railroad, coal, and miscellaneous enterprises).

The report on the “Van Sweringen Holding Companies” made to the House of Representatives in 1930² includes an interesting chart showing the contrast between the control exercised by the Van Sweringens and their relatively small equity or financial interest in the capital of the enterprises controlled. On page 646 we append a summary of these data. The figures in Column A show the percentage of voting securities held or controlled by the Van Sweringens; the figures in Column B show the proportion of the “contributed capital” (bonds, stock, and surplus) actually owned directly or indirectly by them.

² House Report 2789, 71st Congress, 3d Session, Part 2, pp. 820–1173.

It is worth recalling that similar use of the holding company for pyramiding control of railroad properties had been made before the war—notably in the case of the Rock Island Company. This enterprise was organized in 1902. Through an intermediate subsidiary it acquired nearly all the common stock of the Chicago, Rock Island and Pacific Railway Company and about 60% of the capital stock of the St. Louis and San Francisco Railway Company. Against these shares the two holding companies issued large amounts of collateral trust bonds, preferred stock

and common stock. In 1909 the stock of the St. Louis and San Francisco was sold. In 1915 the Rock Island Company and its intermediate subsidiary both went into bankruptcy; the stock of the operating company was taken over by the collateral trust bondholders; and the holding company stock issues were wiped out completely.

Companies	A. Control, %	B. Equity, %
Holding companies:		
The Vaness Co.	80.0	27.7
General Securities Corp.	90.0	51.8
Geneva Corp.	100.0	27.7
Alleghany Corp.	41.8	8.6
The Chesapeake Corp.	71.0	4.1
The Pere Marquette Corp.	100.0	0.7
Virginia Transportation Corp.	100.0	0.8
The Pittston Co.	81.8	4.3
Railroad Companies:		
The New York, Chicago and St. Louis R.R. Co.	49.6	0.7
The Chesapeake and Ohio Railway Co.	54.4	1.0
Pere Marquette Railway Co.	48.3	0.6
Erie Railroad Co.	30.8	0.6
Missouri Pacific Railroad Co.	50.5	1.7
The Hocking Valley Railway Co.	81.0	0.2
The Wheeling and Lake Erie Railway Co.	53.3	0.3
Kansas City Southern Railway Co.	20.8	0.9

The ignominious collapse of this venture was accepted at the time as marking the end of “high finance” in the railroad field. Yet some ten years later the same unsound practices were introduced once again, but on a larger scale and with correspondingly severer losses to investors. It remains to add that the Congressional investigation of railroad holding companies instituted in 1930 had its counterpart in a similar inquiry into the finances of the Rock Island Company made by the Interstate Commerce Commission in 1914. The memory of the

financial community is proverbially and distressingly short.

Evils of Corporate Pyramiding. The pyramiding device is harmful to the security-buying public from several standpoints. It results in the creation and sale to investors of large amounts of unsound senior securities. It produces common stocks of holding companies which are subject to deceptively rapid increases in earning power in favorable years and which are invariably made the vehicle of wild and disastrous public speculation. The possession of control by those who have no real capital investment (or a relatively minor one) is inequitable³ and makes for irresponsible and unsound managerial policies. Finally the holding company device permits of financial practices that exaggerate the indicated earnings, dividend return, or “book value,” during boom times, and thus intensify speculative fervor and facilitate market manipulation. Of these four objections to corporate pyramiding, the first three are plainly evident, but the last one requires a certain amount of analytical treatment in order to present its various implications.

³ See Appendix Note 65, p. 820 on accompanying CD, for examples on this point.

Overstatement of Earnings. Holding companies can overstate their apparent earning power by valuing at an unduly high price the stock dividends they receive from subsidiaries or by including in their income profits made from the sale of stock of subsidiary companies.

Examples: The chief asset of Central States Electric Corporation was a large block of North American Company common on which regular stock dividends were paid. Prior to the end of 1929, these stock dividends were reported as income by Central States at the market value then current. As explained in our chapter on stock dividends, such market prices averaged far in excess of the value at which North American charged the stock dividends against its surplus and also far in excess of the distributable earnings on North American common. Hence the income account of Central States Electric gave a misleading impression of the earnings accruing to the company.

A transaction of somewhat different character but of similar effect to the foregoing was disclosed by the report of American Founders Trust for 1927. In November 1927 American Founders offered its shareholders the privilege of buying about 88,400 shares of International Securities Corporation of America

Class B Common at \$16 per share. International Securities Corporation was a subsidiary of American Founders, and the latter had acquired the Class B stock of the former at a cash cost of \$3.70 per share in 1926. American Founders reported net earnings for common stock in 1927 amounting to \$1,316,488, most of which was created by its own stockholders through their purchase of shares of the subsidiary as indicated above.⁴

⁴ In the three years 1928–1930 the American Founders group reported total net investment profits of about \$43,300,000; but all of this sum and more was derived from profits on intercompany transactions of the kind described above. See the S.E.C.'s Over-all Report on Investment Trusts, Part III, Chapter VI, Sections II and III, released February 12, 1940.

Distortion of Dividend Return. Just as a holding company's income may be exaggerated by reason of stock dividends received, so the dividend return on its shares may be distorted in the public's mind by payment of periodic stock dividends with a market value exceeding current earnings. People are readily persuaded also to regard the value of frequent subscription rights as equivalent to an income return on the common stock. Pyramided enterprises are prodigal with subscription rights, for they flow naturally from the succession of new acquisitions and new financing which both promote the ambitions of those in control and maintain speculative interest at fever heat—until the inevitable collapse.

The issuance of subscription rights sometimes gives the stock market an opportunity to indulge in that peculiar circular reasoning which is the joy of the manipulator and the despair of the analyst. Company A's stock is apparently worth no more than 25. Speculation or pool activity has advanced it to 75. Rights are offered to buy additional shares at 25, and the rights have a market value of, say, \$10 each. To the speculative fraternity these rights are practically equivalent to a special dividend of \$10. It is a bonus that not only justifies the rise to 75 but warrants more optimism and a still higher price. To the analyst the whole proceeding is a delusion and a snare. Whatever value the rights command is manufactured solely out of speculators' misguided enthusiasm, yet this chimerical value is accepted as tangible income and as vindication of the enthusiasm that gave it birth. Thus, with the encouragement of the manipulator, the speculative public pulls itself up by its bootstraps to dizzy heights of irrationality.

Example: Between August 1928 and February 1929 American and Foreign Power Company common stock advanced from 33 to 138^{7/8}, although paying no dividend. Rights were offered to the common stockholders (and other security holders) to buy second preferred stock with detached stock-purchase warrants. The offering of these rights, which had an initial market value of about \$3 each, was construed by many as the equivalent of a dividend on the common stock.

Exaggeration of Book Value. The exaggeration of book value may be effected in cases where a holding company owns most of the shares of a subsidiary and where consequently an artificially high quotation may readily be established for the subsidiary issue by manipulating the small amount of stock remaining in the market. This high quotation is then taken as the basis of figuring the book value (sometimes called the “break-up value”) of the share of the holding company. For an early example of these practices we may point to Tobacco Products Corporation (Va.) which owned about 80% of the common stock of United Cigar Stores Company of America. An unduly high market price seems to have been established in 1927 for the small amount of Cigar Stores stock available in the market, and this high price was used to make Tobacco Products shares appear attractive to the unwary buyer. The thoroughly objectionable accounting and stock dividend policies of United Cigar Stores, which we have previously discussed, were adjuncts to this manipulative campaign.

The most extraordinary example of such exaggeration of the book value is found, perhaps, in the case of Electric Bond and Share Company and was founded on its ownership of most of the American and Foreign Power Company warrants. The whole set-up seems to have been contrived to induce the public to pay absolutely fantastic prices without their complete absurdity being too apparent. A brief review of the various steps in this phantasmagoria of inflated values should be illuminating to the student of security Analysis.

First, American and Foreign Power Company issued in all 1,600,000 shares of common and warrants to buy 7,100,000 more shares at \$25. This permitted a price to be established for the common stock that generously capitalized its earnings and prospects but paid no attention to the existence of the warrants. The quotation of the common was aided by the issuance of rights, as explained above.

Second, the high price registered for the relatively small common-stock issue automatically created a correspondingly high value for the millions of warrants.

Third, Electric Bond and Share could apply these high values to its large holdings of American and Foreign Power common and its enormous block of warrants, thus setting up a correspondingly inflated value for its own common stock.

Exploitation of the Stock-purchase-warrant Device. The result of this process, at its farthest point in 1929, was almost incredible. The earnings available for American and Foreign Power common stock had shown the following rising trend (due in good part, however, to continuous new acquisitions):

Year	Earnings for common	Number of shares	Earned per share
1926	\$216,000	1,243,988	0.17
1927	856,000	1,244,388	0.69
1928	1,528,000	1,248,930	1.22
1929	6,510,000	1,624,357	4.01

On the theory that a “good public-utility stock is worth up to 50 times its current earnings,” a price of 199¼ per share was recorded for American and Foreign Power common. This produced in turn a price of 174 for the warrants. Hence, by the insane magic of Wall Street, earnings of \$6,500,000 were transmuted into a market value of \$320,000,000 for the common shares and \$1,240,000,000 for the warrants, a staggering total of \$1,560,000,000.

Since over 80% of the warrants were owned by Electric Bond and Share Company, the effect of these absurd prices for American and Foreign Power junior securities was to establish a correspondingly absurd breakup value for Electric Bond and Share common. This break-up value was industriously exploited to justify higher and higher quotations for the latter issue. In March 1929 attention was called to the fact that the market value of this company’s portfolio was equivalent to about \$108 per share (of new stock), against a range of 91 to 97 for its own market quotation. The implication was that Electric Bond and Share stock was “undervalued.” In September 1929 the price had advanced to 184½. It was then computed that the “break-up value” amounted to about 150, “allowing no value for the company’s supervisory and construction business.” The public did not stop to reflect that a considerable part of this “book value” was based upon an essentially fictitious market quotation for an asset that the company had received *for nothing* only a few years before (as a bonus with

American and Foreign Power Second Preferred stock).

This exploitation of the warrants had a peculiar vitality which made itself felt even in the depth of the depression in 1932–1933. Time having brought its usual revenge, the once dazzling American and Foreign Power Company had trembled on the brink of receivership, as shown by a price of only 15¼ for its 5% bonds. Nevertheless, in November 1933 the highly unsubstantial warrants still commanded an aggregate market quotation of nearly \$50,000,000, a figure that bore a ridiculous relationship to the exceedingly low values placed upon the senior securities. The following table shows how absurd this situation was, the more so since it existed in a time of deflated stock prices, when relative values are presumably subjected to more critical appraisal.

(000 OMITTED IN MARKET VALUE)

Issue	Amount outstanding	Price Nov. 1933	Total market value, 1933	Price Dec. 31, 1938	Total market value, 1938
5% Debentures	\$50,000	40	\$20,000	53	26,500
\$7 First Preferred shares	480	21	10,100	19 ⁷ / ₈	9,300
\$6 First Preferred shares	387	15	5,800	15	5,800
\$7 Second Preferred shares	2,655	12	31,900	9 ¹ / ₄	24,900
Common shares	1,850	10	18,500	3 ¹ / ₂	6,500
Warrants shares	6,874	7	48,100	1	6,900

By the end of 1938, as the table indicates, a good part of the absurdity had been corrected.

Some Holding Companies Not Guilty of Excessive Pyramiding.

To avoid creating a false impression, we must point out that, although pyramiding is usually effected by means of holding companies, it does not follow that all holding companies are created for this purpose and are therefore reprehensible. The holding company is often utilized for entirely legitimate purposes, *e.g.*, to permit unified and economical operations of separate units, to diversify investment and risk and to gain certain technical advantages of flexibility and convenience. Many sound and important enterprises are in

holding company form.

Examples: United States Steel Corporation is entirely a holding company; although originally there was some element of pyramiding in its capital set-up, this defect disappeared in later years. American Telephone and Telegraph Company is preponderantly a holding company, but its financial structure has never been subject to serious criticism. General Motors Corporation is largely a holding company.

A holding-company exhibit must therefore be considered on its merits. American Light and Traction Company is a typical example of the holding company organized entirely for legitimate purposes. On the other hand the acquisition of control of this enterprise by United Light and Railways Company (Del.) must be regarded as a pyramiding move on the part of the United Light and Power interests.

Speculative Capital Structure May Be Created in Other Ways.

It may be pointed out also that a speculative capital structure can be created without the use of a holding company.

Examples: The Maytag Company recapitalization, discussed in an earlier chapter, yielded results usually attained by the formation of a holding company and the sale of its senior securities. In the case of Continental Baking Corporation—to cite another example—the holding company form was not an essential part of the pyramided result there attained. The speculative structure was due entirely to the creation of large preferred issues by the parent company, and it would still have existed if Continental Baking had acquired all its properties directly, eliminating its subsidiaries. (As it happened, in 1938 this company took steps to acquire the assets of its chief subsidiaries, thus largely eliminating the holding-company form but retaining the speculative capital structure.)

Legislative Restraints on Pyramiding. So spectacular were the disastrous effects of the public-utility pyramiding of the 1920's that Congress was moved to drastic action. The Public Utility Holding Company Act of 1935 includes the so-called "death sentence" for many of the existing systems, requiring them ultimately to simplify their capital structures and to dispose of subsidiaries operating in noncontiguous territory. Formation of new pyramids is effectively blocked by requiring Commission approval for all acquisitions and all new

financing. Similar steps are in prospect to regulate present railroad holding companies and to prevent creation of new ones.⁵

⁵ See Senate Resolution 71 of the 74th Congress and 21 volumes of hearings thereon which have appeared to date (December 1939). See also Senate Report No. 180, 75th Congress, 1st Session, and Senate Report No. 25, pts. 1, 4 and 5, 76th Congress, 1st Session.

We may say with some confidence that the spectacle of the Van Sweringen debacle succeeding the Rock Island Company debacle is not likely to be duplicated in the future. The industrial field never offered the same romantic possibilities for high finance as were found among the rails and utilities, but it may well be that the ingenious talents of promoters and financial wizards will be directed towards the industrials in the future. The investor and the analyst should be on their guard against such new dazzlements.

Chapter 49
COMPARATIVE ANALYSIS OF COMPANIES
IN THE SAME FIELD

STATISTICAL COMPARISONS of groups of concerns operating in a given industry are a more or less routine part of the analyst's work. Such tabulations permit each company's showing to be studied against a background of the industry as a whole. They frequently bring to light instances of undervaluation or overvaluation or lead to the conclusion that the securities of one enterprise should be replaced by those of another in the same field.

In this chapter we shall suggest standard forms for such comparative analyses, and we shall also discuss the significance of the various items included therein. Needless to say, these forms are called "standard" only in the sense that they can be used generally to good advantage; no claim of perfection is made for them, and the student is free to make any changes that he thinks will serve his particular purpose.

FORM I. RAILROAD COMPARISON

A. Capitalization:

1. Fixed charges.*
2. Effective debt (fixed charges* multiplied by 22).
3. Preferred stock at market (number of shares \times market price).
4. Common stock at market (number of shares \times market price).
5. Total capitalization.
6. Ratio of effective debt to total capitalization.
7. Ratio of preferred stock to total capitalization.
8. Ratio of common stock to total capitalization.

B. Income Account:

9. Gross revenues.
10. Ratio of maintenance to gross.
11. Ratio of railway operating income (net after taxes) to gross.

12. Ratio of fixed charges* to gross.

* Or net deductions if larger.

13. Ratio of preferred dividends to gross.

14. Ratio of balance for common to gross.

C. Calculations:

15. Number of times fixed charges* earned.

15. I.P.† Number of times fixed charges* plus preferred dividends earned.

† I.P. for studying an investment preferred stock.

16. Earned on common stock, per share.

17. Earned on common stock, % of market price.

18. Ratio of gross to aggregate market value of common stock (9 4).

16. S.P.‡ Earned on preferred stock, per share.

‡ S.P. for studying a speculative preferred stock.

17. S.P. Earned on preferred stock, % of market price.

18. S.P. Ratio of gross to aggregate market value of preferred stock (9 3).

19. Credit or debit to earnings for undistributed profit or loss of subsidiaries (if important).

D. Seven-year average figures:

20. Earned on common stock, per share.

21. Earned on common stock, % of current market price of common.

20. S.P. Earned on preferred stock, per share.

21. S.P. Earned on preferred stock, % of current market price of preferred.

22. Number of times net deductions earned.

23. Number of times fixed charges earned.

22. I.P. Number of times net deductions plus preferred dividends earned.

23. I.P. Number of times fixed charges plus preferred dividends earned.

E. Trend figure:

24 to 30. Earned per share on common stock each year for past seven years.
(Where necessary, earnings should be adjusted to present capitalization.)

24. S.P. to 30. S.P. Same data for speculative preferred stock, if wanted.

F. Dividends:

31. Dividend rate on common.

32. Dividend yield on common.

31. P. Dividend rate on preferred.

32. P. Dividend yield on preferred.

Observations on the Railroad Comparison.¹ It has formerly been the custom to base earnings studies on the figures for the previous calendar years, with certain references to later interim reports. But since complete figures are now available month by month, it is more logical and effective practice to ignore the calendar-year division and to use instead the results for the twelve months to the latest date available. The simplest way to arrive at such a twelve months' figure is to apply the *change* shown for the current year to date to the results of the previous calendar year.

¹ Reference is made to earlier chapters for explanation of the terminology and the critical tests referred to in this discussion.

Example:

**GROSS EARNINGS OF PENNSYLVANIA RAILROAD SYSTEM FOR
12 MONTHS ENDED JUNE, 1939**

(1) 6 months to June 1939 (as reported)	\$189,623,000
(2) 6 months to June 1938 (as reported)	167,524,000
(3) Difference	+ 22,099,000
(4) Calendar year 1938	360,384,000
12 months to June 1939 (4 plus 3)	<u>\$382,483,000</u>

Our table includes a few significant calculations based on the seven-year average. In an intensive study, average results should be scrutinized in more detail. To save time, it is suggested that additional average figures be computed

detail. To save time, it is suggested that additional average figures be computed only for those roads which the analyst selects for further investigation after he has studied the exhibits in the "standard form." Whether the period of averaging should cover seven years or a longer or shorter time is largely a matter for individual judgment. In theory it should be just long enough to cover a full cyclical fluctuation but not so long as to include factors or results that are totally out of date. The six years 1934–1939 might well be regarded as a somewhat better criterion, for example, than the longer period 1933–1939.

Figures relating to preferred stocks fall into two different classes, depending on whether the issue is considered for fixed-value investment or as a speculative commitment. (Usually the market price will indicate clearly enough in which category a particular issue belongs.) The items marked "I.P." are to be used in studying an investment preferred stock, and those marked "S.P." in studying a speculative preferred. Where there are junior income bonds, the simplest and most satisfactory procedure will be to treat them in all respects as a preferred stock issue, with a footnote referring to their actual title. Such contingent bond interest will therefore be excluded from the net deductions or the fixed charges.

In this tabular comparison we follow the suggestion previously offered that the effective debt be computed by capitalizing the larger of net deductions or fixed charges. In using the table as an aid to the selection of senior issues for investment, chief attention will be paid to items 22 and 23 (or 22 "I.P." and 23 "I.P."), showing the average margin above interest (and preferred dividend) requirements. Consideration should be given also to items 6, 7 and 8, showing the division of total capitalization between senior securities and junior equity. (In dealing with bonds, the preferred stock is part of the junior equity; in considering a preferred stock for investment, it must be included with the effective debt.) Items 10 and 19 should also be examined to see if the earnings have been overstated by reason of inadequate maintenance or by the inclusion of unearned dividends from subsidiaries.

Speculative preferred stocks will ordinarily be analyzed in much the same way as common stocks, and the similarity becomes greater as the price of the preferred stock is lower. It should be remembered, however, that a preferred stock is always less attractive, logically considered, than a common stock making the same showing. For example, a \$6 preferred earning \$5 per share is intrinsically less desirable than a common stock earning \$5 per share (and with the same prior charges), since the latter is entitled to all the present and future equity, whereas the preferred stock is strictly limited in its claim upon the future

equity, whereas the preferred stock is strictly limited in its claim upon the future.

In comparing railroad common stocks (and preferred shares equivalent thereto), the point of departure is the percentage earned on the market price. This may be qualified, to an extent more or less important, by consideration of items 10 and 19. Items 12 and 18 will indicate at once whether the company is speculatively or conservatively capitalized, relatively speaking. A speculatively capitalized road will show a large ratio of net deductions to gross and (ordinarily) a small ratio of common stock at market value to gross. The converse will be true for a conservatively capitalized road.

Limitation upon Comparison of Speculatively and Conservatively Capitalized Companies in the Same Field. The analyst must beware of trying to draw conclusions as to the relative attractiveness of two railroad common stocks when one is speculatively and the other is conservatively capitalized. Two such issues will respond quite differently to changes for the better or the worse, so that an advantage possessed by one of them under current conditions may readily be lost if conditions should change.

Example: The example shown on p. 681 illustrates in a twofold fashion the fallacy of comparing a conservatively capitalized with a speculatively capitalized common stock. In 1922 the earnings of Union Pacific common were nearly four times as high in relation to market price as were those of Rock Island common. A conclusion that Union Pacific was “cheaper,” based on these figures, would have been fallacious, because the relative capitalization structures were so different as to make the two companies noncomparable. This fact is shown graphically by the much larger expansion of the earnings and the market price of Rock Island common that accompanied the moderate rise in gross business during the five years following.

The situation in 1927 was substantially the opposite. At that time Rock Island common was earning proportionately more than Union Pacific common. But it would have been equally fallacious to conclude that Rock Island common was “intrinsically cheaper.” The speculative capitalization structure of the latter road made it highly vulnerable to unfavorable development, so that it was unable to withstand the post-1929 depression.

Other Illustrations in Appendix. The practical approach to comparative analysis of railroad stocks (and bonds) may best be illustrated by the reproduction of several such comparisons made by one of the authors a number

of years ago and published as part of the service rendered to clients by a New York Stock Exchange firm. These will be found in Appendix Note 66 on accompanying CD. It will be observed that the comparisons were made between roads in approximately the same class as regards capitalization structure, with the exception of the comparison between Atchison and New York Central, in which instance special reference was made to the greater sensitivity of New York Central to changes in either direction.

COMPARISON OF UNION PACIFIC AND ROCK ISLAND COMMON STOCKS

Item	Union Pacific R.R.	Chicago, Rock Island, & Pacific Ry.
A. Showing the effect of general improvement:		
Average price of common, 1922	140	40
Earned per share, 1922	\$12.76	\$0.96
% earned on market price, 1922	9.1%	2.4%
Fixed charges and preferred dividends earned, 1922	2.39 times	1.05 times
Ratio of gross to market value of common, 1922	62%	419%
Increase in gross, 1927 over 1922	5.7%	12.9%
Earned per share of common, 1927	\$16.05	\$12.08
Increase in earnings on common, 1927 over 1922	26%	1,158%
Average price of common, 1927	179	92
Increase in average price, 1927 over 1922	28%	130%
B. Showing the effect of a general decline in business:		
Earned on average price, 1927	9.0%	13.1%
Fixed charges and preferred dividends earned, 1927	2.64 times	1.58 times
Ratio of gross to market value of common, 1927	51%	204%
Decrease in gross, 1933 below 1927	46%	54%
Earned on common, 1933	\$7.88	\$20.40(d)
Decrease in earnings for common, 1933 below 1927	51%	269%
Average price of common, 1933	97	6
Decrease in average price, 1933 below 1927	46%	93%

Note: In June 1933 trustees in bankruptcy were appointed for the Rock Island.

FORM II. PUBLIC-UTILITY COMPARISON

The public-utility comparison form is practically the same as that for railroads. The only changes are the following: Fixed charges (as mentioned in line 1 and elsewhere) should include subsidiary-preferred dividends. Line 2 should be called "Funded debt and subsidiary preferred stock," and these should be taken from the balance sheet. Items 22 and 22 I.P., relating to net deductions, are not needed. Item 10 becomes "ratio of depreciation to gross." An item, 10M, may be included to show "ratio of maintenance to gross" for the companies which publish this information.

Our observations regarding the use of the railroad comparison apply as well to the public-utility comparison. Variations in the depreciation rate are fully as important as variations in the railroad maintenance ratios. When a wide difference appears, it should not be taken for granted that one property is unduly conservative or the other not conservative enough, but a *presumption* to this effect does arise, and the question should be investigated as thoroughly as possible. A statistical indication that one utility stock is more attractive than another should not be acted upon until (among other qualitative matters) some study has been made of the rate situation and the relative prospects for favorable or unfavorable changes therein. In view of experience since 1933, careful attention should also be given to the dangers of municipal or federal competition.

FORM III. INDUSTRIAL COMPARISON (FOR COMPANIES IN THE SAME FIELD)

Since this form differs in numerous respects from the two preceding, it is given in full herewith:

A. Capitalization:

1. Bonds at par.
2. Preferred stock at market value (number of shares \times market price).
3. Common stock at market value (number of shares \times market price).
4. Total capitalization.
5. Ratio of bonds to capitalization.

6. Ratio of aggregate market value of preferred to capitalization.
7. Ratio of aggregate market value of common to capitalization.

B. Income Account (most recent year):

8. Gross sales.
9. Depreciation.
10. Net available for bond interest.
11. Bond interest.
12. Preferred dividend requirements.
13. Balance for common.
14. Margin of profit (ratio of 10 to 8).
15. % earned on total capitalization (ratio of 10 to 4).

C. Calculations:

16. Number of times interest charges earned.
16. I.P. Number of times interest charges plus preferred dividends earned.
17. Earned on common, per share.
18. Earned on common, % of market price.
17. S.P. Earned on preferred, per share.
18. S.P. Earned on preferred, % of market price.
19. Ratio of gross to aggregate market value of common.
19. S.P. Ratio of gross to aggregate market value of preferred.

D. Seven-year average:

20. Number of times interest charges earned.
21. Earned on common stock per share.
22. Earned on common stock, % of current market price. (20 I.P., 21 S.P. and 22 S.P.—Same calculation for preferred stock if wanted).

E. Trend figure:

22. Earned per share of common stock each year for past seven years

25. Earned per share of common stock each year for past seven years (adjustments in number of shares outstanding to be made where necessary).

23. S.P. Same data for speculative preferred issues, if wanted.

F. Dividends:

24. Dividend rate on common.

25. Dividend yield on common.

24. P. Dividend rate on preferred.

25. P. Dividend yield on preferred.

G. Balance sheet:

26. Cash assets.

27. Receivables (less reserves).

28. Inventories (less proper reserves).

29. Total current assets.

30. Total current liabilities.

30. N. Notes Payable (Including "Bank Loans" and "Bills Payable")

31. Net current assets.

32. Ratio of current assets to current liabilities.

33. Ratio of inventory to sales.

34. Ratio of receivables to sales.

35. Net tangible assets available for total capitalization.

36. Cash-asset-value of common per share (deducting all prior obligations).

37. Net-current-asset-value of common per share (deducting all prior obligations).

38. Net-tangible-asset-value of common per share (deducting all prior obligations). (36 S.P., 37 S.P., 38 S.P.—Same data for speculative preferred issues, if wanted).

H. Supplementary data (when available):

1. Physical output:

Number of units; receipts per unit; cost per unit; profit per unit; total capitalization per unit; common stock valuation per unit.

2. Miscellaneous:

For example: number of stores operated; sales per store; profit per store; ore reserves; life of mine at current (or average) rate of production.

Observations on the Industrial Comparison. Some remarks regarding the use of this suggested form may be helpful. The net earnings figure must be corrected for any known distortions or omissions, including adjustments for undistributed earnings or losses of subsidiaries. If it appears to be misleading and cannot be adequately corrected, it should not be used as a basis of comparisons. (Inferences drawn from unreliable figures must themselves be unreliable.) No attempt should be made to subject the depreciation figures to exact comparisons; they are useful only in disclosing wide and obvious disparities in the rates used. The calculation of bond-interest-coverage is subject to the qualification discussed in Chap. 17, with respect to companies that may have important rental obligations equivalent to interest charges.

Whereas the percentage earned on the market price of the common (item 18) is a leading figure in all comparisons, almost equal attention must be given to item 15, showing the percentage earned on total capitalization. These figures, together with items 7 and 19 (ratio of aggregate market value of common stock to sales and to capitalization), will indicate the part played by conservative or speculative capitalization structures among the companies compared. (The theory of capitalization structure was considered in Chap. 40.)

As a matter of practical procedure it is not safe to rely upon the fact that the earnings ratio for the common stock (item 18) is higher than the average for the industry, unless the percentage earned on the total capitalization (item 15) is also higher. Furthermore, if the company with the poorer earnings exhibit shows much larger sales-per-dollar-of-common-stock (item 19), it may have better speculative possibilities in the event of general business improvement.

The balance-sheet computations do not have primary significance unless they indicate either definite financial weakness or a substantial excess of current-asset-value over the market price. The division of importance as between the current results, the seven-year average and the trend is something entirely for the analyst's judgment to decide. Naturally, he will have the more confidence in any

suggested conclusion if it is confirmed on each of these counts.

Example of the Use of Standard Forms. An example of the use of the standard form to reach a conclusion concerning comparative values should be of interest. A survey of the common stocks of the listed steel producers in July 1938 indicated that Continental Steel had made a better exhibit than the average, whereas Granite City Steel had shown much smaller earning power. The two companies operated to some extent in the same branches of the steel industry; they were very similar in size, and the price of their common stocks was identical. In the tabulation presented on page 666 we supply comparative figures for these two enterprises, omitting some of the items on our standard form as immaterial to this analysis.

Comments on the Comparison. The use of five-year average figures for each item, presented along with those of the most recent twelve months, is suggested here because the subnormal business conditions in the year ended June 30, 1938 made it inadvisable to lay too great emphasis on the results for this single period. Granite City reports on calendar-year basis, whereas Continental used both a June 30 and a December 31 fiscal year during 1934–1938. However, the availability of quarterly or semiannual figures makes it a simple matter for the analyst to construct his average and 12 months' figures to end in the middle of the year.

Analysis of the data reveals only one point of superiority for Granite City Steel—the smaller amount of senior securities. But even this is not necessarily an advantage, since the relatively fewer shares of Continental common make them more sensitive to favorable as well as unfavorable developments. The exhibit for the June 1938 year, and five-year average, show a statistical superiority for Continental on each of the following important points:

- Earnings on market price of common stock.
- Earnings on total capitalization.
- Ratio of gross to market value of common. Margin of profit.
- Depreciation in relation to plant account.
- Working-capital position.
- Tangible asset values.
- Dividend return.
- Trend of earnings.

If the comparison is carried back prior to 1934, Granite City is found to have

enjoyed a marked advantage in the depression years from mid-1930 to mid-1933. During this time it earned and paid dividends while Continental Steel was reporting moderate losses. It is curious to observe that in the more recent recession the tables were exactly turned, and Continental Steel did very well while Granite City fared badly. Obviously the 1937–1938 results would command more attention than those in the longer past. Nevertheless, the thorough analyst would endeavor to learn as much as possible about the basic reasons underlying the change in the relative performance of the two companies.

Study of Qualitative Factors Also Necessary. Our last observation leads to the more general remark that conclusions suggested by comparative tabulations of this sort should not be accepted until careful thought has been given to the qualitative factors. When one issue seems to be selling much too low on the basis of the exhibit in relation to that of another in the same field, there may be adequate reasons for this disparity that the statistics do not disclose. Among such valid reasons may be a definitely poorer outlook or a questionable management. A lower dividend return for a common stock should not ordinarily be considered as a strong offsetting factor, since the dividend is usually adjusted to the earning power within a reasonable time.

Although overconservative dividend policies are sometimes followed for a considerable period (a subject referred to in Chap. 29), there is a well-defined tendency even in these cases for the market price to reflect the earning power sooner or later.

Relative popularity and relative market activity are two elements not connected with intrinsic value that nevertheless exert a powerful and often a continuing effect upon the market quotation. The analyst must give these factors respectful heed, but his work would be stultified if he always favored the more active and the more popular issue.

The recommendation of an exchange of one security for another seems to involve a greater personal accountability on the part of the analyst than the selection of an issue for original purchase. The reason is that holders of securities for investment are loath to make changes, and thus they are particularly irritated if the subsequent market action makes the move appear to have been unwise. Speculative holders will naturally gage all advice by the test of market results—usually immediate results. Bearing these human-nature factors in mind, the analyst must avoid suggesting common-stock exchanges to speculators (except possibly if accompanied by an emphatic disclaimer of

speculators (except possibly if accompanied by an emphatic disclaimer of responsibility for subsequent market action), and he must hesitate to suggest such exchanges to holders for investment unless the statistical superiority of the issue recommended is quite impressive. As an arbitrary rule, we might say that there should be good reason to believe that by making the exchange the investor would be getting at least 50% more for his money.

Variations in Homogeneity Affect the Values of Comparative Analysis. The dependability of industrial comparisons will vary with

**COMPARISON OF CONTINENTAL STEEL AND GRANITE CITY STEEL
(000 OMITTED, EXCEPT THOSE PER SHARE)**

Item	Continental Steel		Granite City Steel	
Market price of common, July 1938	17		17	
1. Bonds at par	\$1,202		\$1,618	
2. Preferred stock at market	2,450			
3. Common stock at market	3,410		6,494	
4. Total capitalization	7,062		8,112	
5. Ratio of common to total capitalization	48.3%		80.0%	
	Average of 5 years ended 6/30/38	Year ended 6/30/38	Average of 5 years ended 6/30/38	Year ended 6/30/38
8. Gross sales	\$15,049	\$13,989	\$8,715	\$8,554
9. Depreciation	500	445	390	459
10. Net available for bond interest	704	559	336	287(d)
11. Bond interest	81	67	(Est.) 18	(Est.) 54
12. Preferred dividends	179	171		
13. Balance for common	444	321	318	341(d)
14. Margin of profit	4.7%	4.0%	3.9%	(def.)
15. % earned on total capitalization	10.0	7.9%	4.1%	(def.)
16. Interest charges earned	8.7 times	8.3 times	18.7 times	(def.)
17. Earned on common, per share	\$2.29	\$1.60	\$1.20	\$0.89(d)

18. Earned on common, % of market price	13.5	9.4	7.1	(d)
19. Ratio of gross to market value of common	441.5%	409.8%	134.3%	131.8%
Trend figures:				
23. Earned per share by years:				
Year ended June 30, 1938	\$1.60		\$0.89(d)	
Year ended June 30, 1937	3.83	1.31		
Year ended June 30, 1936	2.67		1.49	
Year ended June 30, 1935	1.69		1.45	
Year ended June 30, 1934	1.66		2.65	
Dividends:				
24. Dividend rate on common		\$1.00		None
25. Dividend yield on common		5.9%		
Financial position (dates):				
		6/30/38		12/31/37
29. Total current assets		\$6,467		\$4,179
30. Total current liabilities		1,198		1,164
31. Net current assets		5,269		3,015
35. Net tangible assets for total capitalization		13,498		13,556

the nature of the industry considered. The basic question, of course, is whether future developments are likely to affect all the companies in the group similarly or dissimilarly. If similarly, then substantial weight may be accorded to the relative performance in the past, as shown by the statistical exhibit. An industrial group of this type may be called "homogeneous." But, if the individual companies in the field are likely to respond quite variously to new conditions, then the relative showing must be regarded as a much less reliable guide. A group of this kind may be termed "heterogeneous."

With certain exceptions for traffic and geographical variations, *e.g.*, in particular, the Pocohantas soft-coal carriers, the railroads must be considered a highly homogeneous group. The same is true of the larger light, heat and power utilities. In the industrial field the best examples of homogeneous groups are afforded by the producers of raw materials and of other standardized products in which the trade name is a minor factor. These would include producers of sugar, coal, metals, steel products, cement, cotton print cloths, etc. The larger oil companies may be considered as fairly homogeneous; the smaller concerns are

not well suited to comparison because they are subject to sudden important changes in production, reserves and relative price received. The larger baking, dairy and packing companies fall into fairly homogeneous groups. The same is true of the larger chain-store enterprises when compared with other units in the same subgroups, *e.g.*, grocery, five-and-ten-cent, restaurant, etc. Department stores are less homogeneous, but comparisons in this field are by no means far-fetched.

Makers of manufactured goods sold under advertised trade-marks must generally be regarded as belonging to heterogeneous groups. In these fields one concern frequently prospers at the expense of its competitors, so that the units in the industry do not improve or decline together. Among automobile manufactures, for example, there have been continuous and pronounced variations in relative standing. Producers of all the various classes of machinery and equipment are subject to somewhat the same conditions. This is true also of the proprietary drug manufacturers. Intermediate positions from this point of view are occupied by such groups as the larger makers of tires, of tobacco products, of shoes, wherein changes of relative position are not so frequent.²

² But significant changes do occur, of course. Note, for example, the phenomenal growth of Philip Morris, relative to its large competitors, the somewhat less spectacular development of

The analyst must be most cautious about drawing comparative conclusions from the statistical data when dealing with companies in a heterogeneous group. No doubt preference may properly be accorded in these fields to the companies making the best quantitative showing (if not offset by known qualitative factors)—for this basis of selection would seem sounder than any other—but the analyst and the investor should be fully aware that such superiority may prove evanescent. As a general rule, the less homogeneous the group the more attention must be paid to the qualitative factors in making comparisons.

More General Limitations on the Value of Comparative Analysis. It may be well once again to caution the student against being deluded by the mathematical exactitude of his comparative tables into believing that their indicated conclusions are equally exact. We have mentioned the need of considering qualitative factors and of allowing for lack of homogeneity. But beyond these points lie all the various obstacles to the success of the analyst that we presented in some detail in our first chapter. The technique of comparative analysis may

lessen some of the hazards of his work, but it can never exempt him from the vicissitudes of the future or the stubbornness of the stock market itself or the consequences of his own failure—often unavoidable—to learn all the important facts. He must expect to appear wrong often and to be wrong on occasion; but with intelligence and prudence his work should yield better over-all results than the guesses or the superficial judgments of the typical stock buyer.

Chapter 50

DISCREPANCIES BETWEEN PRICE AND VALUE

OUR EXPOSITION OF THE TECHNIQUE of security analysis has included many different examples of overvaluation and undervaluation. Evidently the processes by which the securities market arrives at its appraisals are frequently illogical and erroneous. These processes, as we pointed out in our first chapter, are not automatic or mechanical but psychological, for they go on in the minds of people who buy or sell. The mistakes of the market are thus the mistakes of groups or masses of individuals. Most of them can be traced to one or more of three basic causes: exaggeration, oversimplification or neglect.

In this chapter and the next we shall attempt a concise review of the various aberrations of the securities market. We shall approach the subject from the standpoint of the practical activities of the analyst, seeking in each case to determine the extent to which it offers an opportunity for profitable action on his part. This inquiry will thus constitute an amplification of our early chapter on the scope and limitations of security analysis, drawing upon the material developed in the succeeding discussions, to which a number of references will be made.

General Procedure of the Analyst. Since we have emphasized that analysis will lead to a positive conclusion only in the exceptional case, it follows that many securities must be examined before one is found that has real possibilities for the analyst. By what practical means does he proceed to make his discoveries? Mainly by hard and systematic work. There are two broad methods that he may follow. The first consists of a series of comparative analyses by industrial groups along the lines described in the previous chapter. Such studies will give him a fair idea of the standard or usual characteristics of each group and also point out those companies which deviate widely from the modal exhibit. If, for example, he discovers that a certain steel common stock has been earning about twice as much on its market price as the industry as a whole, he has a clue to work on—or rather a suggestion to be pursued by dint of a thoroughgoing investigation of all the important qualitative and quantitative factors relating to the enterprise.

The same type of methodical inquiry may be applied to the field of bonds and preferred stocks. The wide area of receivership railroad bonds can best be

explored by means of a comparative analysis of the showing of the bonds of roughly the same rank issued by, say, a dozen of the major carriers in trusteeship. Or a large number of public-utility preferred stocks could be listed according to: (1) their over-all dividend and interest coverage, (2) their stock-value ratio and (3) their price and yield. Such a simple grouping might indicate a few issues that either were well secured and returned more than the average or else were clearly selling too high in view of their inadequate statistical protection. And so on.

The second general method consists in scrutinizing corporate reports as they make their appearance and relating their showing to the market price of their bonds or stocks. These reports can be seen—in summary form, at least—in various daily papers; a more comprehensive presentation can be found in the daily corporation-report sheets of the financial services or weekly in the *Commercial and Financial Chronicle*. A quick glance at a hundred of such reports may reveal between five and ten that look interesting enough from the earnings or current-asset standpoint to warrant more intensive study.

Can Cyclical Swings of Prices Be Exploited? The best understood disparities between price and value are those which accompany the recurrent broad swings of the market through boom and depression. It is a mere truism that stocks sell too high in a bull market and too low in a bear market. For at bottom this is simply equivalent to saying that any upward or downward movement of prices must finally reach a limit, and since prices do not remain at such limits (or at any other level) permanently, it must turn out in retrospect that prices will have advanced or declined too far.

Can the analyst exploit successfully the repeated exaggerations of the general market? Experience suggests that a procedure somewhat like the following should turn out to be reasonably satisfactory:

1. Select a diversified list of leading common stocks, *e.g.*, those in the “Dow-Jones Industrial Average.”

2. Determine an indicated “normal” value for this group by applying a suitable multiplier to average earnings. The multiplier might be equivalent to capitalizing the earnings at, say, twice the current interest rate on highest grade industrial bonds. The period for averaging earnings would ordinarily be seven to ten years, but exceptional conditions such as occurred in 1931–1933 might suggest a different method, *e.g.*, basing the average on the period beginning in 1934, when

operating in 1939 or later.

3. Make composite purchases of the list when the shares can be bought at a substantial discount from normal value, say, at $\frac{2}{3}$ such value. Or purchases may be made on a scale downwards, beginning say, at 80% of normal value.

4. Sell out such purchases when a price is reached substantially above normal value, say, $\frac{1}{3}$ higher, or from 20% to 50% higher on a scale basis.

This was the general scheme of operations developed by Roger Babson many years ago. It yielded quite satisfactory results prior to 1925. But—as we pointed out in Chap. 37—during the 1921–1933 cycle (measuring from low point to low point) it would have called for purchasing during 1921, selling out probably in 1926, thus requiring complete abstinence from the market during the great boom of 1927–1929, and repurchasing in 1931, to be followed by a severe shrinkage in market values. A program of this character would have made far too heavy demands upon human fortitude.

The behavior of the market since 1933 has offered difficulties of a different sort in applying these mechanical formulas—particularly in determining normal earnings from which to compute normal values. It is scarcely to be expected that an idea as basically simple as this one can be utilized with any high degree of accuracy in catching the broad market swings. But for those who realize its inherent limitations it may have considerable utility, for at least it is likely on the average to result in purchases at intrinsically attractive levels—which is more than half the battle in common-stock investment.

“Catching the Swings” on a Marginal Basis Impracticable. From the ordinary speculative standpoint, involving purchases on margin and short sales, this method of operation must be set down as impracticable. The outright owner can afford to buy too soon and to sell too soon. In fact he must expect to do both and to see the market decline farther after he buys and advance farther after he sells out. But the margin trader is necessarily concerned with immediate results; he swims with the tide, hoping to gage the exact moment when the tide will turn and to reverse his stroke the moment before. In this he rarely succeeds, so that his typical experience is temporary success ending in complete disaster. It is the essential character of the speculator that he buys because he thinks stocks are going up not because they are cheap, and conversely when he sells. Hence there is a fundamental cleavage of viewpoint between the speculator and the securities analyst, which militates strongly against any enduringly satisfactory association

between them.

Bond prices tend undoubtedly to swing through cycles in somewhat the same way as stocks, and it is frequently suggested that bond investors follow the policy of selling their holdings near the top of these cycles and repurchasing them near the bottom. We are doubtful if this can be done with satisfactory results in the typical case. There are no well-defined standards as to when high-grade bond prices are cheap or dear corresponding to the earnings-ratio test for common stocks, and the operations have to be guided chiefly by a technique of gaging market moves that seems rather far removed from “investment.” The loss of interest on funds between the time of sale and repurchase is a strong debit factor, and in our opinion the net advantage is not sufficient to warrant incurring the psychological dangers that inhere in any placing of emphasis by the investor upon market movements.

Opportunities in “Secondary” or Little-known Issues. Returning to common stocks, although overvaluation or undervaluation of leading issues occurs only at certain points in the stock-market cycle, the large field of “nonrepresentative” or “secondary” issues is likely to yield instances of undervaluation at all times. When the market leaders are cheap, some of the less prominent common stocks are likely to be a good deal cheaper. During 1932–1933, for example, stocks such as Plymouth Cordage, Pepperell Manufacturing, American Laundry Machinery and many others, sold at unbelievably low prices in relation to their past records and current financial exhibits. It is probably a matter for individual preference whether the investor should purchase an outstanding issue like General Motors at about 50% of its conservative valuation or a less prominent stock like Pepperell at about 25% of such value.

The Impermanence of Leadership. The composition of the market-leader group has varied greatly from year to year, especially in view of the recent shift of attention from past performance to assumed prospects. If we examine the list during the decline of 1937–1938, we shall find quite a number of once outstanding issues that sold at surprisingly low prices in relation to their statistical exhibits.

Example: A startling example of this sort is provided by Great Atlantic and Pacific Tea Company common, which in 1929 sold as high as 494 and in 1938 as low as 36. Salient data on this issue are as follows:

Year ¹	Sales (000 omitted)	Net (000 omitted)	Earned per share of common	Dividend paid on common	Price range of common
1938	\$ 878,972	\$15,834	\$ 6.71	\$4.00	72-36
1937	881,703	9,119	3.50	6.25	117 ¹ / ₂ -45 ¹ / ₄
1936	907,371	17,085	7.31	7.00	130 ¹ / ₂ -110 ¹ / ₂
1935	872,244	16,593	7.08	7.00	140 -121
1934	842,016	16,709	7.13	7.00	150-122
1933	819,617	20,478	8.94	7.00	181 ¹ / ₂ -115
1932	863,048	22,733	10.02	7.00	168-103 ¹ / ₂
1931	1,008,325	29,793	13.40	6.50	260-130
1930	1,065,807	30,743	13.86	5.25	260-155
1929	1,053,693	26,220	11.77	4.50	494-162

¹ Year ended following Jan. 31, except price range.

The balance sheet of January 31, 1938, showed cash assets of 85 millions and net current assets of 134 millions. At the 1938 low prices, the preferred and common together were selling for 126 millions. Here, then, was a company whose spectacular growth was one of the great romances of American business, a company that was without doubt the largest retail enterprise in America and perhaps in the world, that had an uninterrupted record of earnings and dividends for many years—and yet was selling for less than its net current assets alone. Thus one of the outstanding businesses of the country was considered by Wall Street in 1938 to be worth less as a going concern than if it were liquidated. Why? First, because of chain-store tax threats; second, because of a recent decline in earnings; and, third, because the general market was depressed.

We doubt that a better illustration can be found of the real nature of the stock market, which does not aim to evaluate businesses with any exactitude but rather to express its likes and dislikes, its hopes and fears, in the form of daily changing quotations. There is indeed enough sound sense and selective judgment in the market's activities to create on most occasions some degree of correspondence between market price and ascertainable or intrinsic value. In particular, as was pointed out in Chap. 4, when we are dealing with something as elusive and nonmathematical as the evaluation of future prospects, we are generally led to

accept the market's verdict as better than anything that the analyst can arrive at. But, on enough occasions to keep the analyst busy, the emotions of the stock market carry it in either direction beyond the limits of sound judgment.

Opportunities in Normal Markets. During the intermediate period, when average prices show no definite signs of being either too low or too high, common stocks may usually be found that seem definitely under-valued on a statistical basis. These generally fall into two classes: (1) Those showing high current and average earnings in relation to market price and (2) those making a reasonably satisfactory exhibit of earnings and selling at a low price in relation to net-current-asset value. Obviously, such companies will not be large and well known, or else the trend of

GROUP A. COMMON STOCKS SELLING AT THE END OF 1938 OR 1939 AT LESS THAN 7 TIMES PAST YEAR'S EARNINGS AND ALSO AT LESS THAN NET CURRENT ASSET VALUE

Company	Year taken	Price Dec. 31	Earnings for year per share	Average earnings 1934-1938 or 1934-1939 per share	Net current asset value per share	Net tangible asset value per share
J. D. Adams Mfg.	1938	8	\$1.15	\$1.20	\$12.07	\$14.38
American Seating	1939	10 ¹ / ₄	1.82	1.75	11.42	23.95
Bunte Bros.	1938	10	2.10	2.14	12.84	27.83
Grand Union	1939	10	1.80	1.25	13.60†	20.00†
International Silver	1939	26 ³ / ₄	4.98	<i>def 0.10</i>	39.67	97.50
I. B. Kleinert	1938	8 ¹ / ₂	1.27	0.80	11.04	16.90
New Idea	1939	12 ¹ / ₈	2.18	1.78	13.44	16.02
*N. Y. Merchandise	1939	7 ³ / ₄	1.44	1.44	11.66	14.05
*Pacific Commercial	1938	11 ¹ / ₂	2.31	2.77	24.18	27.74
Seton Leather	1938	6 ¹ / ₄	1.38	0.94	8.38	11.27

* These stocks belong also in Group B.

† Partly estimated.

earnings will not have been encouraging. In the appended table are given a number of companies falling in each group as of the end of 1938 or 1939, at which times the market level for industrial stocks did not appear to be especially high or especially low.

**GROUP B. COMMON STOCKS SELLING AT THE END OF 1938 OR 1939 AT TWO-THIRDS,
OR LESS, OF NET CURRENT ASSET VALUE AND ALSO AT LESS THAN 12 TIMES
EITHER
PAST YEAR'S OR AVERAGE EARNINGS**

Company	Year taken	Price Dec. 31	Earnings for year per share	Average earnings 1934-1938 or 1934-1939 per share	Net current asset value per share	Net tangible asset value per share
Butler Bros.	1939	7	\$0.83	\$0.27	\$12.75	\$19.59
Ely & Walker	1939	18	2.30	1.83	41.60	48.51
Gilchrist	1939	4 ³ / ₄	0.70*	0.85*	13.85	17.39
Hale Bros. Stores	1939	14	1.81	2.00	22.13	28.14
Intertype	1939	8 ³ / ₄	0.55	0.82	19.77	22.35
Lee & Cady	1939	6	0.77	0.73	11.35	12.61
H. D. Lee Mercantile	1938	14	0.87	1.35	25.00	31.56
Manhattan Shirt	1938	11 ¹ / ₂	0.73	1.06	19.36	23.62
Reliance Mfg.	1939	12	1.69	0.94	18.97	22.21
S. Stroock	1939	9 ¹ / ₄	1.21	1.39	14.90	26.61

* Years ended following Jan 31.

It is not difficult for the assiduous analyst to find interesting statistical exhibits such as those presented in our table. Much more difficult is the task of determining whether or not the qualitative factors will justify following the quantitative indications—in other words, whether or not the investor may have sufficient confidence in the company's future to consider its shares a real bargain at the apparently subnormal price.

On this question the weight of financial opinion appears inclined to a generally pessimistic conclusion. The investment trusts, with all their facilities for discovering opportunities of this type, have paid little attention to them—partly, it is true, because they are difficult to buy and sell in the large quantities that the trusts prefer, but also because of their conviction that however good the statistical exhibit of a secondary company may be it is not likely to prove a profitable purchase *unless there is specific ground for optimism regarding its future.*

The main drawback of a typical smaller sized company is its vulnerability to a sudden and perhaps permanent loss of its earning power. Undoubtedly such adverse developments occur in a larger proportion of cases in this group than among the larger enterprises. As an offset to this we have the fact that the successful small company can multiply its value far more impressively than those which are already of enormous size. For example, the growth of Philip Morris, Inc., in market value from 5 millions in 1934 to 90 millions in 1939, accompanying a 1,200% increase in net earnings, would have been quite inconceivable in the case of American Tobacco. Similarly, the growth of Pepsi-Cola has far outstripped in percentage that of Coca-Cola; the same is true of General Shoe vs. International Shoe; etc.

But most students will try to locate the potential Philip Morris opportunities, by gaging future possibilities with greater or less care, and will then buy their shares even at a fairly high price—rather than make their commitments in a diversified group of “bargain issues” with only ordinary prospects. Our own experience leads us to favor the latter technique, although we cannot guarantee brilliant results therefrom under present-day conditions. Yet judging from observations made over a number of years, it would seem that investment in apparently undervalued common stocks can be carried on with a very fair degree of over-all success, provided average alertness and good judgment are used in passing on the future-prospect question—and provided also that commitments are avoided at times when the general market is statistically much too high. Two older examples of this type of opportunity are given here, to afford the reader some notion of former stock markets.

Florence Stove Common	Firestone Tire & Rubber Common
Price in Jan. 1935	Price in Nov. 1925
Dividend	Dividend
Earned per share:	Earned per share year ended Oct.:
1934	1925
1933	1924
1932	1923
1931	1922

* Earnings before contingency reserves were \$40.95 per share.

In these cases the market price had failed to reflect adequately the indicated earning power.

Market Behavior of Standard and Nonstandard Issues. A close study of the market action of common stocks suggests the following further general observations:

1. Standard or leading issues almost always respond rapidly to changes in their reported profits—so much so that they tend regularly to exaggerate marketwise the significance of year-to-year fluctuations in earnings.

2. The action of the less familiar issues depends largely upon what attitude is taken towards them by professional market operators. If interest is lacking, the price may lag far behind the statistical showing. If interest is attracted to the issue, either manipulatively or more legitimately, the opposite result can readily be attained, and the price will respond in extreme fashion to changes in the company's exhibit.

Examples of Behavior of Nonstandard Issues. The following two examples will illustrate this diversity of behavior of nonrepresentative common stocks.

BUTTE AND SUPERIOR COPPER (ACTUALLY ZINC) COMPANY COMMON

Period	Earnings per share	Dividend per share	Price range
Year, 1914	\$ 5.21	\$ 2.25	44-24
1st quarter, 1915	4.27	0.75	50-36
2d quarter, 1915	7.73	3.25	80-45
3d quarter, 1915	10.13	5.75	73-57
4th quarter, 1915	11.34	8.25	75-59
Year 1915	\$33.47	\$18.00	80-36
Year 1916	30.58	34.00	105-42

These were extraordinarily large earnings and dividends. Even allowing for the fact that they were due to wartime prices for zinc, the market price showed none the less a striking disregard of the company's spectacular exhibit. The reason was lack of general interest or of individual market sponsorship.

Contrast the foregoing with the appended showing of the common stock of Mullins Body (later Mullins Manufacturing) Corporation.

Between 1924 and 1926 we note the characteristic market swings of a low-priced "secondary" common-stock issue. At the beginning of 1927 the shares were undoubtedly attractive, speculatively, at about 10, for the price was low in relation to the earnings of the three years previously. A substantial, but by no means spectacular, rise in profits during 1927-1928 resulted in a typical stock-market exploitation. The price advanced from 10 in 1927 to 95 in 1928 and fell back again to 10 in 1929.

Year	Earned per share	Dividend	Price range
1924	\$1.91	None	18-9
1925	2.47	None	22-13
1926	1.97	None	20-8
1927	5.13	None	79-10
1928	6.53	None	95-69
1929	2.67	None	82-10

A contrast of another kind is afforded by the behavior of the aircraft-manufacturing stocks in 1938-1939, as compared with that of war beneficiaries

in 1915–1918. The two following examples will illustrate the relationship between market price in 1938 and 1939 and actual performance at the time.

	Boeing Airplane Co.	Glenn L. Martin Co.
Date	December 1938	November 1939
Market value of company	\$25,270,000 (722,000 sh. @ 35)	\$49,413,000 (1,092,000 sh. @ 45 ¹ / ₄)
Sales 1938	2,006,000	12,417,000
Net 1938	555,000(<i>d</i>)	2,349,000
Sales, 9 months 1939	6,566,000	8,506,000
Net, 9 months 1939	2,606,000(<i>d</i>)	1,514,000
Tangible assets, Sept. 30, 1939	4,527,000	15,200,000

In these cases the market was evidently capitalizing the as yet unrealized profits from war orders as if they supplied a *permanent* basis of future earnings. The contrast between the Butte and Superior price-earnings ratio in 1915–1916 and that of these aircraft concerns in 1938–1939 is very striking.

Relationship of the Analyst to Such Situations. The analyst can deal intelligently and fairly successfully with situations such as Wright Aeronautical, Bangor and Aroostook, Firestone and Butte and Superior at the periods referred to. He could even have formed a worth-while opinion about Mullins early in 1927. But once this issue fell into market operators' hands it passed beyond the pale of analytical judgment. As far as Wall Street was concerned, Mullins had ceased to be a business and had become a symbol on the ticker tape. To buy it or to sell it was equally hazardous; the analyst could warn of the hazard, but he could have no idea of the limits of its rise or fall. (As it happened, however, the company issued a convertible preferred stock in 1928 which made possible a profitable hedging operation, consisting of the purchase of the preferred and the sale of the common.) Similarly with the airplane issues in 1939, the analyst could go no further than to indicate the obvious hazard that lay in treating as permanent a source of business that the whole world must necessarily hope was essentially temporary.

When the general market appears dangerously high to the analyst, he must be hesitant about recommending unfamiliar common stocks, even though they may seem to be of the bargain type. A severe decline in the general market will affect

seem to be of the bargain type. A severe decline in the general market will affect all stock prices adversely, and the less active issues may prove especially vulnerable to the effects of necessitous selling.

Market Exaggerations Due to Factors Other than Changes in Earnings:

Dividend Changes. The inveterate tendency of the stock market to exaggerate extends to factors other than changes in earnings. Overemphasis is laid upon such matters as dividend changes, stock split-ups, mergers and segregations. An increase in the cash dividend is a favorable development, but it is absurd to add \$20 to the price of a stock just because the dividend rate is advanced from \$5 to \$6 annually. The buyer at the higher price is paying out in advance all the additional dividends that he will receive at the new rate *over the next 20 years*. The excited responses often made to stock dividends are even more illogical, since they are in essence nothing more than pieces of paper. The same is true of split-ups, which create more shares but give the stockholder nothing he did not have before—except the minor advantage of a possibly broader market due to the lower price level.¹

¹ In the Atlas Tack manipulation of 1933 an effort was made to attract public buying by promising a split-up of the stock, 3 shares for 1. Obviously, such a move could make no real difference of any kind in the case of an issue selling in the 30s. The circumstances surrounding the rise of Atlas Tack from 1½ to 34¾ in 1933 and its precipitous fall to 10 are worth studying as a perfect example of the manipulative pattern. It is illuminating to compare the price-earnings and the price-assets relationships of the same stock prior to 1929.

Mergers and Segregations. Wall Street becomes easily enthusiastic over mergers and just as ebullient over segregations, which are the exact opposite. Putting two and two together frequently produces five in the stock market, and this five may later be split up into three and three. Such inductive studies as have been made of the results following mergers seem to cast considerable doubt upon the efficacy of consolidation as an aid to earning power.² There is also reason to believe that the personal element in corporate management often stands in the way of really advantageous consolidations and that those which are consummated are due sometimes to knowledge by those in control of unfavorable conditions ahead.

² See, for example, Arthur S. Dewing, “A Statistical Test of the Success of Consolidations,” published in *Quarterly Journal of Economics*, November

1921 and reprinted in his *Financial Policy of Corporations*, pp. 885–898, New York, 1926. But see Henry R. Seager and Charles A. Gullick, *Trust and Corporation Problems*, pp. 659–661, New York, 1929, and *Report of the Committee on Recent Economic Changes*, Vol. I, pp. 194 ff., New York, 1929.

The exaggerated response made by the stock market to developments that seem relatively unimportant in themselves is readily explained in terms of the psychology of the speculator. He wants “action,” first of all; and he is willing to contribute to this action if he can be given any pretext for bullish excitement. (Whether through hypocrisy or self-deception, brokerage-house customers generally refuse to admit they are merely gambling with ticker quotations and insist upon some ostensible “reason” for their purchases.) Stock dividends and other “favorable developments” of this character supply the desired pretexts, and they have been exploited by the professional market operators, sometimes with the connivance of the corporate officials. The whole thing would be childish if it were not so vicious. The securities analyst should understand how these absurdities of Wall Street come into being, but he would do well to avoid any form of contact with them.

Litigation. The tendency of Wall Street to go to extremes is illustrated in the opposite direction by its tremendous dislike of litigation. A lawsuit of any significance casts a damper on the securities affected, and the extent of the decline may be out of all proportion to the merits of the case. Developments of this kind may offer real opportunities to the analyst, though of course they are of a specialized nature. The aspect of broadest importance is that of receivership. Since the undervaluations resulting therefrom are almost always confined to bond issues, we shall discuss this subject later in the chapter in connection with senior securities.

Example: A rather striking example of the effect of litigation on common-stock values is afforded by the Reading Company case. In 1913 the United States government brought suit to compel separation of the company’s railroad and coal properties. The stock market, having its own ideas of consistency, considered this move as a dangerous attack on Reading, despite the fact that the segregation would in itself ordinarily be considered as “bullish.” A plan was later agreed upon (in 1921) under which the coal subsidiary’s stock was in effect to be distributed pro rata among the Reading Company’s common and preferred shareholders. This was hailed in turn as a favorable development, although in fact it constituted a victory for the government against the company.

Some common stockholders, however, objected to the participation of the preferred stock in the coal company “rights.” Suit was brought to restrict these rights to the common stock. Amusingly, but not surprisingly, the effect of this move was to depress the price of Reading common. In logic, the common should have advanced, since, if the suit were successful, there would be more value for the junior shares, and, if it failed (as it did), there would be no less value than before. But the stock market reasoned merely that here was some new litigation and hence Reading common should be “let alone.”

Situations involving litigation frequently permit the analyst to pursue to advantage his quantitative approach in contrast with the qualitative attitude of security holders in general. Assume that the assets of a bankrupt concern have been turned into cash and there is available for distribution to its bondholders the sum of, say, 50% net. But there is a suit pending, brought by others, to collect a good part of this money. It may be that the action is so far-fetched as to be almost absurd; it may be that it has been defeated in the lower courts, and even on appeal, and that it has now but a microscopic chance to be heard by the United States Supreme Court. Nevertheless, the mere pendency of this litigation will severely reduce the market value of the bonds. Under the conditions named, they are likely to sell as low as 35 instead of 50 cents on the dollar. The anomaly here is that a remote claim, which the plaintiff can regard as having scarcely any real value to him, is made the equivalent in the market to a heavy liability on the part of the defendant. We thus have a mathematically demonstrable case of undervaluations, and, taking these as a class, they lend themselves exceedingly well to exploitation by the securities analyst.

Examples: Island Oil and Transport 8% Notes. In June 1933 these notes were selling at 18. The receiver held a cash fund equivalent to about 45% on the issue, from which were deductible certain fees and allowances, indicating a net distributable balance of about 30 for the notes. The distribution was being delayed by a suit for damages that had been repeatedly unsuccessful in its various legal stages and was now approaching final determination. This suit was exerting an adverse effect upon the market value of the notes out of all proportion to its merits, a statement that is demonstrable from the fact that the litigation could have been settled by payment of a relatively small amount. After the earlier decisions were finally sustained by the higher courts, the noteholders received a distribution of \$290 per \$1,000 in April 1934. A small additional

distribution was indicated.³

³ A very similar situation existed in 1938 in connection with the various bond issues of National Bondholders Corporation, which was engaged in liquidating various properties and claims. These securities were selling at considerably less than the amount realizable for them in liquidation, chiefly because of certain suits involving a substantial cash fund. As in the Island Oil example, this litigation was in the last stages of appeal, and the decisions theretofore had all been favorable to the bondholders. Following the final decision the value of a typical issue advanced from 26 bid in 1938 to the equivalent of 41 bid in 1939.

A similar situation arose in the case of United Shipyards Corporation stock after ratification of the sale of its properties to Bethlehem Steel Company in 1938. Dissenting holders brought suit to set the sale aside on the ground that the price was grossly inadequate. The effect of this litigation was to hold down the price of the Class B common to 1¼ in January 1939, as against a realizable value of between 2½ to 3 if the sale was upheld. Obviously, if the suit had any merit, the stock should have been worth more rather than less than 2½; alternatively, if it had no merit, as seemed clear, then the shares were clearly worth twice their selling price. (A similar disparity existed in connection with the price of the Class A stock.)

Undervalued Investment Issues. Undervalued bonds and preferred stocks of investment caliber may be discovered in any period by means of assiduous search. In many cases the low price of a bond or preferred stock is due to a poor market, which in turn results from the small size of the issue, but this very small size may make for greater inherent security. The Electric Refrigeration Building Corporation 6s, due 1936, described in Chap. 26, are a good example of this paradox.

At times some specific development greatly strengthens the position of a senior issue, but the price is slow to reflect this improvement, and thus a bargain situation is created. These developments relate usually to the capitalization structure or to corporate relationships. Several examples will illustrate our point.

Examples: In 1923 Youngstown Sheet and Tube Company purchased the properties of Steel and Tube Company of America and assumed liability for the latter's General Mortgage 7s, due 1951. Youngstown sold a 6% debenture issue

at 99 to supply funds for this purchase. The following price relationship obtained at the time:

Company	Price	Yield, %
Youngstown Sheet and Tube Debenture 6s	99	6.02
Steel and Tube General 7s	102	6.85

The market failed to realize the altered status of the Steel and Tube bonds, and thus they sold illogically at a higher yield than the unsecured issue of the same obligor company. This presented a clear-cut opportunity to the analyst to recommend a purchase or an exchange.

In 1922 the City of Detroit purchased the urban lines of Detroit United Railway Company and agreed to pay therefor sums sufficient to retire the Detroit United Railway First 4½s, due 1932. Unusually strong protective provisions were inserted in the purchase contract which practically, if not technically, made the City of Detroit liable for the bonds. But, after the deal was consummated, the bonds sold at 82, yielding more than 7%. The bond market failed to recognize their true status as virtual obligations of the City of Detroit.

In 1924 Congoleum Company had outstanding \$1,800,000 of 7% preferred stock junior to \$2,890,000 of bonds and followed by 960,000 shares of common stock having an average market value of some \$48,000,000. In October of that year the company issued 681,000 additional shares of common for the business of the Nairn Linoleum Company, a large unit in the same field, with \$15,000,000 of tangible assets. The enormous equity thus created for the small senior issues made them safe beyond question, but the price of the preferred stock remained under par.

In 1927 Electric Refrigeration Corporation (now Kelvinator Corporation) sold 373,000 shares of common stock for \$6,600,000, making a total of 1,000,000 shares of common stock, with average market value of about \$21,000,000, coming behind only \$2,880,000 of 6% notes, due in 1936. The notes sold at 74, however, to yield 11%. The low price was due to a large operating deficit incurred in 1927, but the market failed to take into account the fact that the receipt of a much greater amount of new cash from the sale of additional stock had established a very strong backing for the small note issue.

These four senior issues have all been paid off at par or higher. (The

These four senior issues have all been paid off at par or higher. (The Congoleum-Nairn Preferred was called for payment at 107 in 1934.) Examples of this kind are convenient for the authors since they do not involve the risk of some later mischance casting doubt upon their judgment. To avoid loading the dice too heavily in our favor, we add another illustration which is current as this chapter is written.

A Current Example. Choctaw and Memphis Railroad Company First 5s, due 1949, were selling in 1939 at about 35, carrying more than 5 years' unpaid interest. They were a first lien on underlying mileage of the Chicago, Rock Island and Pacific System. The Rock Island had been reporting poor earnings since 1930, and all its obligations were in default. However, a segregation of the 1937 earnings by mortgage divisions showed that the Choctaw and Memphis mileage was very profitable and that its interest charges had been covered 2.6 times in that year even though the company had earned only \$2,700,000 toward total interest of \$14,080,000. Furthermore, the several reorganization plans presented up to 1939, including that of the I.C.C. examiner, had all provided for principal and back interest on this issue in full, although virtually the entire remaining bond structure was to be drastically cut down, and total interest charges were to be reduced to less than \$2,500,000 annually.

Assuming, as seemed inevitable, that the company was to be reorganized along the lines proposed, it was clear that these Choctaw and Memphis bonds would enjoy a very strong position, whether they were to be left undisturbed with their lien on a valuable mileage and their back interest paid off, or were to be given par for par in a new, small first mortgage on the entire system. This conclusion would be inescapable unless it were true that a railroad with minimum gross earnings of 65 millions could not be counted on to meet charges of 2½ millions annually—less than *one-fifth* its former burden.

Thus all the quantitative factors would seem to indicate strongly that the Choctaw and Memphis 5s were greatly undervalued at 35 and that *once the recapitalization was completed* the entrenched position of this issue should become manifest.⁴

⁴ See Appendix Note 67, p. 835 on accompanying CD, for text of the material in the 1934 edition relating to the Fox Film 6% Notes, due 1936, which in 1933 were selling at 75 to yield 20% to maturity.

Price-value Discrepancies in Receiverships. In Chap. 18, dealing with

reorganization procedure, we gave two diverse examples of disparities arising under a receivership: the Fisk Rubber case, in which the obligations sold at a ridiculously low price compared with the current assets available for them; and the Studebaker case, in which the price of the 6% notes was clearly out of line with that of the stock. A general statement may fairly be made that in cases where substantial values are ultimately realized out of a receivership, the senior securities will be found to have sold at much too low a price. This characteristic has a twofold consequence. It has previously led us to advise strongly against buying at investment levels *any* securities of a company that is likely to fall into financial difficulties; it now leads us to suggest that *after* these difficulties have arisen they may produce attractive analytical opportunities.

This will be true not only of issues so strongly entrenched as to come through reorganization unscathed (*e.g.*, Brooklyn Union Elevated 5s, as described in Chap. 2) but also of senior securities which are “scaled down” or otherwise affected in a readjustment plan. It seems to hold most consistently in cases where liquidation or a sale to outside interests results ultimately in a cash distribution or its equivalent.

Examples: Three typical examples of such a consummation are given herewith.

1. *Ontario Power Service Corporation First 5½s, Due 1950.* This issue defaulted interest payment on July 1, 1932. About this time the bonds sold as low as 21. The Hydro-Electric Commission of Ontario purchased the property soon afterwards, on a basis that gave \$900 of new debentures, fully guaranteed by the Province of Ontario, for each \$1,000 Ontario Power Service bond. The new debentures were quoted at 90 in December 1933, equivalent to 81 for the old bonds. The small number of bondholders not making the exchange received 70% in cash.

2. *Amalgamated Laundries, Inc., 6½s, Due 1936.* Receivers were appointed in February 1932. The bonds were quoted at 4 in April 1932. In June 1932 the properties were sold to outside interests, and liquidating dividends of 12½% and 2% were paid in August 1932 and March 1933. In December 1933 the bonds were still quoted at 4, indicating expectation of at least that amount in further distributions.

3. *Fisk Rubber Company First 8s and Debenture 5½s, Due 1941 and 1931.* Information regarding these issues was given in Chap. 18. Receivership was

announced in January 1931. In 1932 the 8s and 5½s sold as low as 16 and 10½ respectively. In 1933 a reorganization was effected, which distributed 40% in cash on the 8s and 37% on the 5½s, together with securities of two successor companies. The aggregate values of the cash and the new securities at the close of 1933 came close to 100% for the 8% bonds and 70% for the debenture 5½s.

Price Patterns Produced by Insolvency. Certain price patterns are likely to be followed during receivership or bankruptcy proceedings, especially if they are protracted. In the first place, there is often a tendency for the stock issues to sell too high, not only in relation to the price of the bond issues but also absolutely, *i.e.*, in relation to their probable ultimate value. This is due to the incidence of speculative interest, which is attracted by a seemingly low price range. In the case of senior issues, popular interest steadily decreases, and the price tends to decline accordingly, as the proceedings wear on. Consequently, the lowest levels are likely to be reached a short time before a reorganization plan is ready to be announced.

A profitable field of analytical activity should be found therefore in keeping in close touch with such situations, endeavoring to discover securities that appear to be selling far under their intrinsic value and to determine approximately the best time for making a commitment in them. But in these, as in all analytical situations, we must warn against an endeavor to gage too nicely the proper time to buy. An essential characteristic of security analysis, as we understand it, is that the time factor is a subordinate consideration. Hence our use of the qualifying word “approximately,” which is intended to allow a leeway of several months and sometimes even longer, in judging the “right time” to enter upon the operation.

Opportunities in Railroad Trusteeships. In the years following 1932 a large part of the country’s railroad mileage went into the hands of trustees. At the close of 1938 a total of 111 railway companies operating 78,016 miles (31% of the total railway mileage in the United States) were in the hands of receivers or trustees. This is the greatest mileage ever in the hands of the courts at any one time. Reorganization in every case has been long delayed, owing on the one hand to the complicated capital structures to be dealt with and on the other to the uncertainty as to future normal earnings. As a result the price of a great many issues fell to extremely low levels—which would undoubtedly have presented excellent opportunities for the shrewd investor, had it not been that the earnings of the railroads as a whole continued for some years to make disappointing

showings as compared with general business.

Viewing the situation about the end of 1939, it appeared that many of the first-mortgage liens on important mileage had fallen to lower levels than were warranted by anything but a most pessimistic view of the future of the carriers. Certainly, these issues were cheaper than the bonds and stocks of solvent roads, which sold for the most part at liberal prices in relation to their current exhibits and which in many cases would be in danger of insolvency if future conditions turned out as badly as the low price of trusteeships issues seemed to anticipate. The technique of analyzing issues of the latter group is covered on accompanying CD in Chap. 12 and in Appendix Note 66, page 821.

Chapter 51
DISCREPANCIES BETWEEN PRICE
AND VALUE (*Continued*)

THE PRACTICAL DISTINCTIONS drawn in our last chapter between leading and secondary common stocks have their counterpart in the field of senior securities as between seasoned and unseasoned issues. A seasoned issue may be defined as an issue of a company long and favorably known to the investment public. (The security itself may be of recent creation so long as the company has a high reputation among investors.) Seasoned and unseasoned issues tend at times to follow divergent patterns of conduct in the market, *viz.*:

1. The price of seasoned issues is often maintained despite a considerable weakening of their investment position.
2. Unseasoned issues are very sensitive to adverse developments of any nature. Hence they often fall to prices far lower than seem to be warranted by their statistical exhibit.

Price Inertia of Seasoned Issues. These opposite characteristics are due, in part at least, to the inertia and lack of penetration of the typical investor. He buys by reputation rather than by analysis and he holds tenaciously to what he has bought. Hence holders of long-established issues do not sell them readily, and even a small decline in price attracts buyers long familiar with the security.

Example: This trait of seasoned issues is well illustrated by the market history of the United States Rubber Company 8% Noncumulative Preferred. The issue received full dividends between 1905 and 1927. In each year of this period except 1924 there were investors who paid higher than par for this stock. Its popularity was based entirely upon its reputation and its dividend record, for the statistical exhibit of the company during most of the period was anything but impressive, even for an industrial bond, and hence ridiculously inadequate to justify the purchase of a noncumulative industrial preferred stock. Between the years 1922 and 1927, the following coverage was shown for interest charges and preferred dividends combined:

1922	1.20 times
1923	1.18 times
1924	1.32 times
1925	1.79 times
1926	1.00 times
1927	1.01 times

In 1928 the stock sold as high as 109. During that year the company sustained an enormous loss, and the preferred dividend was discontinued. Despite the miserable showing and the absence of any dividend, the issue actually sold at 92½ in 1929. (In 1932 it sold at 31/8.)¹

¹ A more recent example of the same kind is presented by Curtis Publishing 7% Preferred, which sold at 114 in 1936 and 109½ in 1937, despite an exceedingly inadequate showing of earnings (and tangible assets). The high price of many railroad bonds in those years, notwithstanding their unsatisfactory earnings exhibit, illustrates this point more broadly.

Vulnerability of Unseasoned Issues. Turning to unseasoned issues, we may point out that these belong almost entirely to the industrial field. The element of seasoning plays a very small part as between the various senior issues of the railroads; and in the public-utility group proper (*i.e.*, electric, manufactured gas, telephone and water companies) price variations will be found to follow the statistical showing fairly closely, without being strongly influenced by the factor of popularity or familiarity—except in the case of very small concerns.

Industrial financing has brought into the market a continuous stream of bond and preferred stock issues of companies new to the investment list. Investors have been persuaded to buy these offerings largely through the appeal of a yield moderately higher than the standard rate for seasoned securities of comparable grade. If the earning power is maintained uninterruptedly after issuance, the new security naturally proves a satisfactory commitment. But any adverse development will ordinarily induce a severe decline in the market price. This vulnerability of unseasoned issues gives rise to the practical conclusion that it is unwise to buy a *new* industrial bond or preferred stock for straight investment.

Since such issues are unduly sensitive to unfavorable developments, it would seem that the price would often fall too low and in that case they would afford

attractive opportunities to purchase. This is undoubtedly true, but there is great need of caution in endeavoring to take advantage of these disparities. In the first place, the disfavor accorded to unseasoned securities in the market is not merely a subjective matter, due to lack of knowledge. Seasoning is usually defined as an objective quality, arising from a demonstrated ability to weather business storms. Although this definition is not entirely accurate, there is enough truth in it to justify in good part the investor's preference for seasoned issues.

More important, perhaps, is the broad distinction of size and prominence that can be drawn between seasoned and unseasoned securities. The larger companies are generally the older companies, having senior issues long familiar to the public. Hence unseasoned bonds and preferred stocks are for the most part issues of concerns of secondary importance. But we have pointed out, in our discussion of industrial investments (Chap. 7), that in this field dominant size may reasonably be considered a most desirable trait. It follows, therefore, that in this respect unseasoned issues must suffer as a class from a not inconsiderable disadvantage.

Unseasoned Industrial Issues Rarely Deserve an Investment Rating. The logical and practical result is that unseasoned industrial issues can very rarely deserve an investment rating, and consequently they should only be bought on an admittedly speculative basis. This requires in turn that the market price be low enough to permit of a substantial rise; *e.g.*, the price must ordinarily be below 70.

It will be recalled that in our treatment of speculative senior issues (Chap. 26), we referred to the price sector of about 70 to 100 as the "range of subjective variation," in which an issue might properly sell because of a legitimate difference of opinion as to whether or not it was sound. It seems, however, that in the case of unseasoned industrial bonds or preferred stocks the analyst should not be attracted by a price level within this range, even though the quantitative showing be quite satisfactory. He should favor such issues only when they can be bought at a frankly speculative price.

Exception may be made to this rule when the statistical exhibit is extraordinarily strong, as perhaps in the case of the Fox Film 6% notes mentioned in the preceding chapter and described in Appendix Note 67, page 835 on accompanying CD. We doubt if such exceptions can prudently include any unseasoned industrial preferred stocks, because of the contractual weakness

of such issues. (In the case of Congoleum preferred, described above, the company was of dominant size in its field, and the preferred stock was not so much “unseasoned” as it was inactive marketwise.)

Discrepancies in Comparative Prices. Comparisons may or may not be odious, but they hold a somewhat deceptive fascination for the analyst. It seems a much simpler process to decide that issue *A* is preferable to issue *B* than to determine that issue *A* is an attractive purchase in its own right. But in our chapter on comparative analysis we have alluded to the particular responsibility that attaches to the recommendation of security exchanges, and we have warned against an overready acceptance of a purely quantitative superiority. The future is often no respecter of statistical data. We may frame this caveat in another way by suggesting that the analyst should not urge a security exchange unless either (1) the issue to be bought is attractive, regarded by itself, or (2) there is a definite contractual relationship between the two issues in question. Let us illustrate consideration (1) by two examples of comparisons taken from our records.

Examples: I. Comparison Made in March 1932.

Item	Ward Baking First 6s, due 1937. Price 85 ¹ / ₄ , yield 9.70%	Bethlehem Steel First & Ref. 5s, due 1942. Price 93, yield 5.90%
Total interest charges earned:		
1931	8.1 times	1.0 times
1930	8.2 times	4.3 times
1929	11.0 times	4.8 times
1928	11.2 times	2.7 times
1927	14.0 times	2.3 times
1926	14.5 times	2.6 times
1925	12.6 times	2.1 times
Seven-year average	11.4 times	2.8 times
Amount of bond issues	\$ 4,546,000	\$145,000,000*
Market value of stock issues (March '32 average)	12,200,000	116,000,000
Cash assets	3,438,000	50,300,000
Net working capital	3,494,000	116,300,000

* Including preferred stock.

** including guaranteed stock.

In this comparison the Ward Baking issue made a far stronger statistical showing than the Bethlehem Steel bonds. Furthermore, it appeared sufficiently well protected to justify an investment rating, despite the high return. The qualitative factors, although not impressive, did not suggest any danger of collapse of the business. Hence the bonds could be recommended either as an original purchase or as an advantageous substitute for the Bethlehem Steel 5s.

II. Comparison Made in March 1929.

Item	Spear & Co. (Furniture Stores) 7% First Preferred. Price 77, yielding 9.09%	Republic Iron & Steel 7% Preferred. Price 112, yielding 6.25%
(Interest and) preferred dividends earned:		
1928	2.4 times	1.9 times
1927	4.0 times	1.5 times
1926	3.0 times	2.1 times
1925	2.5 times	1.7 times
1924	4.7 times	1.1 times
1923	6.5 times	2.5 times
1922	4.3 times	0.5 times
Seven-year average	3.9 times	1.6 times
Amount of bond issues	None	\$32,700,000
Amount of (1st) preferred issue	\$ 3,900,000	25,000,000
Market value of junior issues	3,200,000*	62,000,000
Net working capital	10,460,000	21,500,000

* Includes Second Preferred estimated at 50.

In this comparison the Spear and Company issue undoubtedly made a better statistical showing than Republic Iron and Steel Preferred. Taken by itself, however, its exhibit was not sufficiently impressive to carry conviction of investment merit, considering the type of business and the fact that we were dealing with a preferred stock. The price of the issue was not low enough to

warrant recommendation on a fully speculative basis, *i.e.*, with prime emphasis on the opportunity for enhancement of principal. This meant in turn that it could not consistently be recommended in exchange for another issue, such as Republic Iron and Steel Preferred.

Comparison of Definitely Related Issues. When the issues examined are definitely related, a different situation obtains. An exchange can then be considered solely from the standpoint of the respective merits within the given situation; the responsibility for entering into or remaining in the situation need not be assumed by the analyst. In our previous chapters we have considered a number of cases in which relative prices were clearly out of line, permitting authoritative recommendations of exchange. These disparities arise from the frequent failure of the general market to recognize the effect of contractual provisions and often also from a tendency for speculative markets to concentrate attention on the common stocks and to neglect the senior securities. Examples of the first type were given in our discussion of price discrepancies involving guaranteed issues in Chap. 17. The price discrepancies between various Interborough Rapid Transit Company issues, discussed in Appendix Note 56 on accompanying CD, and between Brooklyn Union Elevated Railroad 5s and Brooklyn-Manhattan Transit Corporation 6s, referred to in Chap. 2, are other illustrations in this category.²

² The student is invited to consider the price relationships between Pierce Petroleum and Pierce Oil preferred and common in 1929; between Central States Electric Corporation 5½% bonds and North American Company common in 1934; between the common issues of Advance-Rumely Corporation and Allis-Chalmers Manufacturing Company in 1933; between Ventures, Ltd., and Falconbridge Nickel, and between Chesapeake Corporation and Chesapeake and Ohio Railway common stocks in 1939—as examples of disparities arising from ownership by one company of securities in another.

The illogical price relationships between a senior convertible issue and the common stock, discussed in Chap. 25 on accompanying CD, are examples of opportunities arising from the concentration of speculative interest on the more active junior shares. A different manifestation of the same general tendency is shown by the spread of 7 points existing in August 1933 between the price of American Water Works and Electric Company “free” common and the less active voting trust certificates for the same issue. Such phenomena invite not

only direct exchanges but also hedging operations.

A similar comparison could be made in July 1933 between Southern Railway 5% Noncumulative Preferred, paying no dividend and selling at 49, and the Mobile and Ohio Stock Trust Certificates, which were an obligation of the same road, bearing a perpetual guaranty of a 4% dividend and selling concurrently at 39¾. Even if the preferred dividend had been immediately resumed and continued without interruption, the yield thereon would have been no higher than that obtainable from the senior fixed-interest obligation. (In 1939 Southern Railway Preferred, still paying no dividend, sold at 35 against a price of about 40 for the Mobile and Ohio 4% certificates. At these prices the advantage still appeared clearly on the side of the guaranteed issue.)

Other and Less Certain Discrepancies. In the foregoing examples the aberrations are mathematically demonstrable. There is a larger class of disparities between senior and junior securities that may not be proved quite so conclusively but are sufficiently certain for practical purposes. As an example of these, consider Colorado Industrial Company 5s, due August 1, 1934, guaranteed by Colorado Fuel and Iron Company, which in May 1933 sold at 43, while the Colorado Fuel and Iron 8% Preferred, paying no dividend, sold at 45. The bond issue had to be paid off in full within 14 months' time, or else the preferred stock was faced with the possibility of complete extinction through receivership. In order that the preferred stock might prove more valuable than the bonds bought at the same price, it would be necessary not only that the bonds be paid off at par in little over a year but that preferred dividends be resumed and back dividends discharged within that short time. This was almost, if not quite, inconceivable.

In comparing nonconvertible preferred stocks with common stocks of the same company, we find the same tendency for the latter to sell too high, relatively, when both issues are on a speculative basis. Comparisons of this kind can be safely drawn, however, only when the preferred stock bears cumulative dividends. (The reason for this restriction should be clear from our detailed discussion of the disabilities of noncumulative issues in Chap. 15.) A price of 10 for American and Foreign Power Company common when the \$7 Cumulative Second Preferred was selling at 11 in April 1933 was clearly unwarranted. A similar remark may be made of the price of 21½ for Chicago Great Western Railroad Company common in February 1927, against 32½ for the 4% preferred stock on which dividends of \$44 per share had accumulated.

It is true that if extraordinary prosperity should develop in situations of this kind, the common shares might eventually be worth substantially more than the preferred. But even if this should occur, the company is bound to pass through an intermediate period during which the improved situation permits it to resume preferred dividends and then to discharge the accumulations. Since such developments benefit the preferred stock directly, they are likely to establish (for a while at least) a market value for the senior issues far higher than that of the common stock. Hence, assuming any appreciable degree of improvement, a purchase of the preferred shares at the low levels should fare better than one made in the common stock.

Discrepancies Due to Special Supply and Demand Factors. The illogical relationships that we have been considering grow out of supply and demand conditions that are, in turn, the product of unthinking speculative purchases. Sometimes discrepancies are occasioned by special and temporary causes affecting either demand or supply.

Examples: In the illogical relationship between the prices of Interboro Rapid Transit Company 5s and 7s in 1933, the operations of a substantial sinking fund, which purchased the 5s and not the 7s, were undoubtedly instrumental in raising the price of the former disproportionately. An outstanding example of this kind is found in the market action of United States Liberty 4¹/₄s during the postwar readjustment of 1921–1922. Large amounts of these bonds had been bought during the war for patriotic reasons and financed by bank loans. A general desire to liquidate these loans later on induced a heavy volume of sales which drove the price down. This special selling pressure actually resulted in establishing a lower price basis for Liberty Bonds than for high-grade railroad issues, which were, of course, inferior in security and at a greater disadvantage also in the matter of taxation. Compare the following simultaneous prices in September 1920.

Issue	Price	Yield
United States Liberty Fourth 4 ¹ / ₄ s, due 1938	84 ¹ / ₂	5.64%*
Union Pacific First 4s, due 1947	80	5.42%

* Not allowing for tax exemption.

This situation supplied an excellent opportunity for the securities analyst to advise exchanges from the old-line railroad issues into Liberty Bonds.

A less striking disparity appeared a little later between the price of these Liberty Bonds and of United States Victory 4¾s, due 1923. This state of affairs is discussed in a circular, prepared by one of the authors and issued at that time, a copy of which is given in Appendix Note 68 on accompanying CD, as an additional example of “practical security analysis.”

United States Savings Bonds Offer Similar Opportunity. For the investor of moderate means the disparity between United States government and corporate obligations has reappeared in recent years. The yield on United States Savings Bonds (available to any one individual to the extent of \$10,000 principal amount each year) is 2.90% on the regular compound-interest basis of calculation and 3.33% on a simple-interest basis. This yield is definitely higher than that returned by best-rated public-utility and industrial issues.³ In addition to their safety factor, which at present must clearly be set higher than that of any corporate issue, the United States Savings Bonds have the minor advantage of exemption from normal income tax and the major advantage of being redeemable *at the option of the holder* at any time, thus guaranteeing him against intermediate loss in market value.

³ The average yields for such bonds for the first 3 months of 1940, carrying A1 + ratings of Standard Statistics Company, were only 2.62% and 2.44%, respectively.

Chapter 52

MARKET ANALYSIS AND SECURITY ANALYSIS

FORECASTING SECURITY PRICES is not properly a part of security analysis. However, the two activities are generally thought to be closely allied, and they are frequently carried on by the same individuals and organizations. Endeavors to predict the course of prices have a variety of objectives and a still greater variety of techniques. Most emphasis is laid in Wall Street upon the science, or art, or pastime, of prophesying the immediate action of the “general market,” which is fairly represented by the various averages used in the financial press. Some of the services or experts confine their aim to predicting the longer term trend of the market, purporting to ignore day-to-day fluctuations and to consider the broader “swings” covering a period of, say, several months. A great deal of attention is given also to prophesying the market action of individual issues, as distinct from the market as a whole.

Market Analysis as a Substitute for or Adjunct to Security Analysis.

Assuming that these activities are carried on with sufficient seriousness to represent more than mere guesses, we may refer to all or any of them by the designation of “market analysis.” In this chapter we wish to consider the extent to which market analysis may seriously be considered as a substitute for or a supplement to security analysis. The question is important. If, as many believe, one can dependably foretell the movements of stock prices without any reference to the underlying values, then it would be sensible to confine security analysis to the selection of fixed-value investments only. For, when it comes to the common-stock type of issue, it would manifestly be more profitable to master the technique of determining when to buy or sell, or of selecting the issues that are going to have the greatest or quickest advance, than to devote painstaking efforts to forming conclusions about intrinsic value. Many other people believe that the best results can be obtained by an analysis of the market position of a stock in conjunction with an analysis of its intrinsic value. If this is so, the securities analyst who ventures outside the fixed-value field must qualify as a market analyst as well and be prepared to view each situation from both standpoints at the same time.

It is not within our province to attempt a detailed criticism of the theories and the technique underlying all the different methods of market analysis. We shall

confine ourselves to considering the broader lines of reasoning that are involved in the major premises of price forecasting. Even with this sketchy treatment it should be possible to reach some useful conclusions on the perplexing question of the relationship between market analysis and security analysis.

Two Kinds of Market Analysis. A distinction may be made between two kinds of market analysis. The first finds the material for its predictions exclusively in the past action of the stock market. The second considers all sorts of economic factors, *e.g.*, business conditions, general and specific; money rates; the political outlook. (The market's behavior is itself only one of these numerous elements of study.) The underlying theory of the first approach may be summed up in the declaration that "the market is its own best forecaster." The behavior of the market is generally studied by means of charts on which are plotted the movements of individual stocks or of "averages." Those who devote themselves primarily to a study of these price movements are known as "chartists," and their procedure is often called "chart reading."

But it must be pointed out that much present-day market analysis represents a combination of the two kinds described, in the sense that the market's action alone constitutes the predominant but not the exclusive field of study. General economic indications play a subordinate but still significant role. Considerable latitude is therefore left for individual judgment, not only in interpreting the technical indications of the market's action but also in reconciling such indications with outside factors. The "Dow theory," however, which is the best known method of market analysis, limits itself essentially to a study of the market's behavior. Hence we feel justified in dealing separately with chart reading as applied exclusively to stock prices.

Implication of the First Type of Market Analysis. It must be recognized that the vogue of such "technical study" has increased immensely during the past fifteen years. Whereas security analysis suffered a distinct loss of prestige beginning about 1927—from which it has not entirely recovered—chart reading apparently increased the number of its followers even during the long depression and in the years thereafter. Many sceptics, it is true, are inclined to dismiss the whole procedure as akin to astrology or necromancy, but the sheer weight of its importance in Wall Street requires that its pretensions be examined with some degree of care. In order to confine our discussion within the framework of logical reasoning, we shall purposely omit even a condensed summary of the

main tenets of chart reading.¹ We wish to consider only the implications of the general idea that a study confined to past price movements can be availed of profitably to foretell the movements of the future.

¹ For detailed statements concerning the theory and practice of chart reading the student is referred to: R. W. Shabacker, *Stock Market Profits*, B. C. Forbes, New York, 1934; Robert Rhea, "The Dow Theory," *passim*, *Barron's*, New York, 1932; H. M. Gartley, "Analyzing the Stock Market," a series of articles in *Barron's* beginning with the issue of Sept. 19, 1932 and ending with the issue of Dec. 5, 1932. See Appendix Note 69, p. 837 on accompanying CD, for a brief statement of the main tenets of the Dow theory.

Such consideration, we believe, should lead to the following conclusions:

1. Chart reading cannot possibly be a science.
2. It has not proved itself in the past to be a dependable method of making profits in the stock market.
3. Its theoretical basis rests upon faulty logic or else upon mere assertion.
4. Its vogue is due to certain advantages it possesses over haphazard speculation, but these advantages tend to diminish as the number of chart students increases.

1. *Chart Reading Not a Science and Its Practice Cannot Be Continuously Successful.* That chart reading cannot be a science is clearly demonstrable. If it were a science, its conclusions would be as a rule dependable. In that case everybody could predict tomorrow's or next week's price changes, and hence everyone could make money continuously by buying and selling at the right time. This is patently impossible. A moment's thought will show that there can be no such thing as a scientific prediction of economic events under human control. The very "dependability" of such a prediction will cause human actions that will invalidate it. Hence thoughtful chartists admit that continued success is dependent upon keeping the successful method known to only a few people.

2. Because of this fact it follows that there is no generally known method of chart reading that has been continuously successful for a long period of time.² If it were known, it would be speedily adopted by numberless traders. This very following would bring its usefulness to an end.

² Adherents of the Dow theory claim that it has been continuously successful for

a great many years. We believe this statement to be open to much doubt—turning, in part, on certain disputed interpretations of what the theory indicated on various key occasions.

3. *Theoretical Basis Open to Question.* The theoretical basis of chart reading runs somewhat as follows:

- a. The action of the market (or of a particular stock) reflects the activities and the attitude of those interested in it.
- b. Therefore, by studying the record of market action, we can tell what is going to happen next in the market.

The premise may well be true, but the conclusion does not necessarily follow. You may learn a great deal about the technical position of a stock by studying its chart, and yet you may not learn *enough* to permit you to operate profitably in the issue. A good analogy is provided by the “past performances” of race horses, which are so assiduously studied by the devotees of the race track. Undoubtedly these charts afford considerable information concerning the relative merits of the entries; they will often enable the student to pick the winner of a race; but the trouble is that they do not furnish that valuable information *often enough* to make betting on horse races a profitable diversion.

Coming nearer home, we have a similar situation in security analysis itself. The past earnings of a company supply a useful indication of its future earnings—useful, but not infallible. Security analysis and market analysis are alike, therefore, in the fact that they deal with data that are not conclusive as to the future. The difference, as we shall point out, is that the securities analyst can protect himself by a *margin of safety* that is denied to the market analyst.

Undoubtedly, there are times when the behavior of the market, as revealed on the charts, carries a definite and trustworthy meaning of particular value to those who are skilled in its interpretation. If reliance on chart indications were confined to those really convincing cases, a more positive argument could be made in favor of “technical study.” But such precise signals seem to occur only at wide intervals, and in the meantime human impatience plus the exigencies of the chart reader’s profession impel him to draw more frequent conclusions from less convincing data.

4. *Other Theoretical and Practical Weaknesses.* The appeal of chart reading to the stock-market trader is something like that of a patent medicine to an

incurable invalid. The stock speculator does suffer, in fact, from a well-nigh incurable ailment. The cure he seeks, however, is not abstinence from speculation but profits. Despite all experience, he persuades himself that these can be made and retained; he grasps greedily and uncritically at every plausible means to this end.

The plausibility of chart reading, in our opinion, derives largely from its insistence on the sound gambling maxim that losses should be cut short and profits allowed to run. This principle usually prevents sudden large losses, and at times it permits a large profit to be taken. The results are likely to be better, therefore, than those produced by the haphazard following of “market tips.” Traders, noticing this advantage, are certain that by developing the technique of chart reading farther they will so increase its reliability as to assure themselves continued profits.

But in this conclusion there lurks a double fallacy. Many players at roulette follow a similar system, which limits their losses at any one session and permits them at times to realize a substantial gain. But in the end they always find that the aggregate of small losses exceeds the few large profits. (This must be so, since the mathematical odds against them are inexorable over a period of time.) The same is true of the stock trader, who will find that the expense of trading weights the dice heavily against him. A second difficulty is that, as the methods of chart reading gain in popularity, the amount of the loss taken in unprofitable trades tends to increase and the profits also tend to diminish. For as more and more people, following the same system, receive the signal to buy at about the same time, the result of this competitive buying must be that a higher average price is paid by the group. Conversely, when this larger group decides to sell out at the same time, either to cut short a loss or to protect a profit, the effect must again be that a lower average price is received. (The growth in the use of “stop-loss orders,” formerly a helpful technical device of the trader, had this very effect of detracting greatly from their value as a protective measure.)

The more intelligent chart students recognize these theoretical weaknesses, we believe, and take the view that market forecasting is an *art* that requires talent, judgment, intuition and other personal qualities. They admit that no rules of procedure can be laid down, the automatic following of which will insure success. Hence the widespread tendency in Wall Street circles towards a composite or eclectic approach, in which a very thorough study of the market's performance is projected against the general economic background, and the

whole is subjected to the appraisal of experienced judgment.

The Second Type of Mechanical Forecasting. Before considering the significance of this injection of the judgment factor, let us pass on to the other type of mechanical forecasting, which is based upon factors outside of the market itself. As far as the general market is concerned, the usual procedure is to construct indices representing various economic factors, *e.g.*, money rates, carloadings, steel production, and to deduce impending changes in the market from an observation of a recent change in these indices.³ One of the earliest methods of the kind, and a very simple one, was based upon the percentage of blast furnaces in operation.

³ These indices may also be plotted on charts, in which case the forecasting takes on the aspect of chart reading. *Examples:* The A, B, and C lines of the *Harvard Economic Service* which were published in weekly letters from Jan. 3, 1922, to Dec. 26, 1931 (since continued through 1939 at less frequent intervals in *The Review of Economic Statistics*); also the single composite Index Line in the "Investment Timing Service" offered by Independence Fund of North America, Inc., in 1939.

This theory was developed by Col. Leonard P. Ayres of the Cleveland Trust Company and ran to the effect that security prices usually reached a bottom when blast furnaces in operation declined through 60% of the total and that conversely they usually reached a top when blast furnaces in operation passed through the 60% mark on the upswing in use thereof.⁴ A companion theory of Colonel Ayres was that the high point in bond prices is reached about 14 months subsequent to the low point in pig-iron production and that the peak in stock prices is reached about two years following the low point for pig-iron production.⁵

⁴ See *Bulletin of the Cleveland Trust Company*, July 15, 1924, cited by David F. Jordan, in *Practical Business Forecasting*, p. 203n, New York, 1927.

⁵ See *Business Recovery Following Depression*, a pamphlet published by the Cleveland Trust Company in 1922. The conclusions of Colonel Ayres are summarized on p. 31 of the pamphlet.

This simple method is representative of all mechanical forecasting systems, in that (1) it sounds vaguely *plausible* on the basis of *a priori* reasoning and (2) it

relies for its *convincingness* on the fact that it has “worked” for a number of years past. The necessary weakness of all these systems lies in the time element. It is easy and safe to prophesy, for example, that a period of high interest rates will lead to a sharp decline in the market. The question is, “How soon?” There is no scientific way of answering this question. Many of the forecasting services are therefore driven to a sort of pseudo-science, in which they take it for granted that certain time lags or certain coincidences that happened to occur several times in the past (or have been worked out laboriously by a process of trial and error), can be counted upon to occur in much the same way in the future.

Broadly speaking, therefore, the endeavor to forecast security-price changes by reference to mechanical indices is open to the same objections as the methods of the chart readers. They are not truly scientific, because there is no convincing reasoning to support them and because, furthermore, really scientific (*i.e.*, entirely dependable) forecasting in the economic field is a logical impossibility.

Disadvantages of Market Analysis as Compared with Security Analysis. We return in consequence to our earlier conclusion that market analysis is an art for which special talent is needed in order to pursue it successfully. Security analysis is also an art; and it, too, will not yield satisfactory results unless the analyst has ability as well as knowledge. We think, however, that security analysis has several advantages over market analysis, which are likely to make the former a more successful field of activity for those with training and intelligence. In security analysis the prime stress is laid upon protection against untoward events. We obtain this protection by insisting upon margins of safety, or values well in excess of the price paid. The underlying idea is that even if the security turns out to be less attractive than it appeared, the commitment might still prove a satisfactory one. In market analysis there are no margins of safety; you are either right or wrong, and, if you are wrong, you lose money.⁶

⁶ Viewing the two activities as possible professions, we are inclined to draw an analogous comparison between the law and the concert stage. A talented lawyer should be able to make a respectable living; a talented, *i.e.*, a “merely talented,” musician faces heartbreaking obstacles to a successful concert career. Thus, as we see it, a thoroughly competent securities analyst should be able to obtain satisfactory results from his work, whereas permanent success as a market analyst requires unusual qualities—or unusual luck.

The cardinal rule of the market analyst that losses should be cut short and

profits safeguarded (by selling when a decline commences) leads in the direction of active trading. This means in turn that the cost of buying and selling becomes a heavily adverse factor in aggregate results. Operations based on security analysis are ordinarily of the investment type and do not involve active trading.

A third disadvantage of market analysis is that it involves essentially a battle of wits. Profits made by trading in the market are for the most part realized at the expense of others who are trying to do the same thing. The trader necessarily favors the more active issues, and the price changes in these are the resultant of the activities of numerous operators of his own type. The market analyst can be hopeful of success only upon the assumption that he will be more clever or perhaps luckier than his competitors.

The work of the securities analyst, on the other hand, is in no similar sense competitive with that of his fellow analysts. In the typical case the issue that he elects to buy is not sold by some one who has made an equally painstaking analysis of its value. We must emphasize the point that the security analyst examines a far larger list of securities than does the market analyst. Out of this large list, he selects the exceptional cases in which the market price falls far short of reflecting intrinsic value, either through neglect or because of undue emphasis laid upon unfavorable factors that are probably temporary.

Market analysis seems easier than security analysis, and its rewards may be realized much more quickly. For these very reasons, it is likely to prove more disappointing in the long run. There are no dependable ways of making money easily and quickly, either in Wall Street or anywhere else.

Prophecies Based on Near-term Prospects. A good part of the analysis and advice supplied in the financial district rests upon the near-term business prospects of the company considered. It is assumed that, if the outlook favors increased earnings, the issue should be bought in the expectation of a higher price when the larger profits are actually reported. In this reasoning, security analysis and market analysis are made to coincide. The market prospect is thought to be identical with the business prospect.

But to our mind the theory of buying stocks chiefly upon the basis of their immediate outlook makes the selection of speculative securities entirely too simple a matter. Its weakness lies in the fact that the current market price already takes into account the consensus of opinion as to future prospects. And in many cases the prospects will have been given more than their just need of recognition.

When a stock is recommended for the reason that next year's earnings are expected to show improvement, a twofold hazard is involved. First, the forecast of next year's results may prove incorrect; second, even if correct, it may have been discounted or even overdiscounted in the current price.

If markets generally reflected only this year's earnings, then a good estimate of next year's results would be of inestimable value. But the premise is not correct. Our table on page 707 shows on the one hand the annual earnings per share of United States Steel Corporation common and on the other hand the price range of that issue for the years 1902–1939. Excluding the 1928–1933 period (in which business changes were so extreme as necessarily to induce corresponding changes in stock prices), it is difficult to establish any definite correlation between fluctuations in earnings and fluctuations in market quotations.

In Appendix Note 70 (on accompanying CD), we reproduce significant parts of the analysis and recommendation concerning two common stocks made by an important statistical and advisory service in the latter part of 1933. The recommendations are seen to be based largely upon the apparent outlook for 1934. There is no indication of any endeavor to ascertain the fair value of the business and to compare this value with the current price. A thorough-going statistical analysis would point to the conclusion that the issue of which the sale is advised was selling below its intrinsic value, just because of the unfavorable immediate prospects, and that the opposite was true of the common stock recommended as worth holding because of its satisfactory outlook.

We are sceptical of the ability of the analyst to forecast with a fair degree of success the market behavior of individual issues over the near-term future—whether he base his predictions upon the technical position of the market or upon the general outlook for business or upon the specific outlook for the individual companies. More satisfactory results are to be obtained, in our opinion, by confining the positive conclusions of the analyst to the following fields of endeavor:

1. The selection of standard senior issues that meet exacting tests of safety.
2. The discovery of senior issues that merit an investment rating but that also have opportunities of an appreciable enhancement in value.
3. The discovery of common stocks, or speculative senior issues, that appear to be selling at far less than their intrinsic value.

4. The determination of definite price discrepancies existing between related securities, which situations may justify making exchanges or initiating hedging or arbitrage operations.

A SUMMARY OF OUR VIEWS ON INVESTMENT POLICIES

If we transfer our attention, finally, from the analyst to the owner of securities, we may briefly express our views on what he may soundly do and not do. The following résumé makes some allowance for different categories of investors.

A. The Investor of Small Means. *1. Investment for Income.* In his case the only sensible investment for safety and accumulated income, under present conditions, is found in United States Savings Bonds. Other good investments yield little if any more, and they have not equal protection against both ultimate and intermediate loss. Straight bonds and preferred stocks ostensibly offering a higher return are almost certain to involve an appreciable risk factor. The various types of “savings plans” and similar securities offered by salesmen are full of pitfalls; the investor persuaded by their promise of liberal income to prefer them to United States Savings Bonds is very, very likely to regret his choice.

2. Investment for Profit. Four approaches are open to both the small and the large investor:

a. Purchase of representative common stocks when the market level is clearly low as judged by objective, long-term standards. This policy requires patience and courage and is by no means free from the possibility of grave miscalculation. Over a long period we believe that it will show good results.

b. Purchase of individual issues with special growth possibilities, when these can be obtained at reasonable prices in relation to actual accomplishment.

Where growth is *generally* expected, the price is rarely reasonable. If the basis of purchase is a confidence in future growth not held by the public, the operation may prove sound and profitable; it may also prove ill-founded and costly.

c. Purchase of well-secured privileged senior issues. A combination of really adequate security with a promising conversion or similar right is a

Year	Earned per share	Range of market price		
		High	Low	Average
1901	\$ 9.1	55	24	40
1902	10.7	47	30	39
1903	4.9	40	10	25
1904	1.0	34	8	21
1905	8.5	43	25	34
1906	14.3	50	33	42
1907	15.6	50	22	36
1908	4.1	59	26	48
1909	10.6	95	41	68
1910	12.2	91	61	76
1911	5.9	82	50	66
1912	5.7	81	58	70
1913	11.0	69	50	60
1914	0.3(d)	67	48	58
1915	10.0	90	38	64
1916	48.5	130	80	105
1917	39.2	137	80	109
1918	22.1	117	87	102
1919	10.1	116	88	102
1920	16.6	109	76	93
1921	2.2	87	70	79
1922	2.8	112	82	97
1923	16.4	110	86	98
1924	11.8	121	94	108
1925	12.9	139	112	126
1926	18.0	161	117	139
1927*	12.3	246	155	201
1927†	8.8	176	111	144
1928	12.5	173	132	153
1929	21.2	262	150	206
1930	9.1	199	134	167
1931	1.4(d)	152	36	99
1932	11.1(d)	53	21	37
1933	7.1(d)	68	23	46
1934	5.4(d)	60	29	45
1935	2.8(d)	51	28	40
1936	2.9	80	46	63
1937	8.0	127	49	88
1938	3.8(d)	71	38	55
1939	1.84	83	41	62

* Before allowing for 40% stock dividend.

† After allowing for 40% stock dividend.

rare but by no means unknown phenomenon. A policy of careful selection in this field should bring good results, provided the investor has the patience and persistence needed to find his opportunities.

d. Purchase of securities selling well below intrinsic value. Intrinsic value takes into account not only past earnings and liquid asset values but also future earning power, conservatively estimated—in other words, qualitative as well as quantitative elements. We think that since a large percentage of *all* issues nowadays are relatively unpopular, there must be many cases in which the market goes clearly and crassly astray, thus creating real opportunities for the discriminating student. These may be found in bonds, preferred stocks and common stocks.

In our view, the search for and the recognition of security values of the types just discussed are not beyond the competence of the small investor who wishes to practice security analysis in a nonprofessional capacity, although he will undoubtedly need better than average intelligence and training. But we think it should be a necessary rule that the nonprofessional investor submit his ideas to the criticism of a professional analyst, such as the statistician of a New York Stock Exchange firm. Surely modesty is not incompatible with self-confidence; and there is logic in the thought that unless a man is qualified to advise others professionally, he should not, unaided, prescribe for himself.

3. *Speculation.* The investor of small means is privileged, of course, to step out of his role and become a speculator. (He is also privileged to regret his action afterwards.) There are various types of speculation, and they offer varying chances of success:

a. Buying stock in new or virtually new ventures. This we can condemn unhesitatingly and with emphasis. The odds are so strongly against the man who buys into these new flotations that he might as well throw three-quarters of the money out of the window and keep the rest in the bank.

b. Trading in the market. It is fortunate for Wall Street as an institution that a small minority of people can trade successfully and that many others think they can. The accepted view holds that stock trading is like anything else; *i.e.*, with intelligence and application, or with good professional guidance, profits can be realized. Our own opinion is sceptical, perhaps jaundiced. We think that, regardless of preparation and method, success in trading is either accidental and

impermanent or else due to a highly uncommon talent. Hence the vast majority of stock traders are inevitably doomed to failure. We do not expect this conclusion to have much effect on the public. (Note our basic distinction between purchasing stocks at objectively low levels and selling them at high levels—which we term investment—and the popular practice of buying only when the market is “expected” to advance and selling when it is “due” to decline—which we call speculation.)

c. Purchase of “growth stocks” at generous prices. In calling this “speculation,” we contravene most authoritative views. For reasons previously expressed, we consider this popular approach to be inherently dangerous and increasingly so as it becomes more popular. But the chances of individual success are much brighter here than in the other forms of speculation, and there is a better field for the exercise of foresight, judgment and moderation.

B. The Individual Investor of Large Means. Although he has obvious technical advantages over the small investor, he suffers from three special handicaps:

1. He cannot solve his straight investment problem simply by buying nothing but United States Savings Bonds, since the amount that any individual may purchase is limited. Hence he must, perforce, consider the broader field of fixed-value investment. We believe that strict application of quantitative tests, plus reasonably good judgment in the qualitative area, should afford a satisfactory end result.

2. However, the extraneous problem of possible inflation is more serious to him than to the small investor. Since 1932 there has been a strong common-sense argument for *some* common-stock holdings as a defensive measure. In addition, a substantial holding of common stocks corresponds with the traditional attitude and practice of the wealthy individual.

3. The size of his investment unit is more likely to induce the large investor to concentrate on the popular and active issues. To some extent, therefore, he is handicapped in the application of the undervalued-security technique. However, we imagine that a more serious obstacle thereto will be found in his preferences and prejudices.

C. Investment by Business Corporations. We believe that United States government bonds, carrying exemption from corporate income taxes, are almost

the only logical medium for such business funds as may properly be invested for a term of years. (Under 1940 conditions short-time investment involves as much trouble as income.) It seems fairly evident, on the whole, that other types of investments by business enterprises—whether in bonds or in stocks—can offer an appreciably higher return only at risk of loss and of criticism.

D. Institutional Investment. We shall not presume to suggest policies for financial institutions whose business it is to be versed in the theory and practice of investment. The same might be said for philanthropic and educational institutions, since these generally have the benefit of experienced financiers in shaping their financial policies. But in order not to dodge completely a very difficult issue, we venture the following final observation: An institution that can manage to get along on the low income provided by high-grade fixed-value issues should, in our opinion, confine its holdings to this field. We doubt if the better performance of common-stock indexes over past periods will, in itself, warrant the heavy responsibilities and the recurring uncertainties that are inseparable from a common-stock investment program. This conclusion may perhaps be modified either if there is substantial unanimity of view that inflation must be guarded against or if the insufficiency of income compels search for a higher return. In such case those in charge may be warranted in setting aside a portion of the institution's funds for administration in other than fixed-value fields, in accordance with the canons and technique of security analysis.⁷

⁷ Yale University now follows a policy of investing part of its funds in "equities"—defined as common stocks and nonpaying senior issues. The percentage varies in accordance with a fixed formula, somewhat as follows: The initial proportion is 30% of the total fund. Whenever a rise in the market level advances this figure to 40%, one-eighth of each stock holding is switched into bonds. Conversely, whenever a decline in the market reduces the proportion to 15%, bonds are sold and one-third additional of each stock is bought. See address of Laurence G. Tighe, Associate Treasurer of Yale University entitled "Present Day Investment Problems of Endowed Institutions," delivered on February 14, 1940 before the Trust Division of the American Bankers Association. It was summarized in the *New York Sun* of February 20, 1940.