Security Analysis: Second Edition

Notes

By Theodor Tonca

A. Investment In High Grade Bonds & Preferred Stocks

1. Safety of Interest & Principal

The old idea of "permanent investments," exempt from change and free from care, is no doubt permanently gone. Our studies lead us to conclude, however, that by sufficiently stringent standards of selection and reasonably frequent scrutiny thereafter the investor should be able to escape most of the serious losses that have distracted him in the past, so that his collection of interest and principal should work out at a satisfactory percentage evening times of depression. Careful selection must include a due regard to future prospects, but we do not consider that the investor need be clairvoyant or that he must confine himself to companies that hold forth exceptional promise of expanding profits. These remarks relate to (really) high-grade preferred stocks as well as to bonds.

2. The Value of The Dollar

If the investor were certain that the purchasing power of the dollar is going to decline substantially, he undoubtedly should prefer common stocks or commodities to bonds.

B. Speculative Bonds & Preferred Stocks

The broad principles underlying the purchase of speculative senior issues remain, in our opinion, the same as they always were: (1) A risk of principal loss may not be offset by a higher yield alone but must be accompanied by a commensurate chance of principal profit; (2) it is generally sounder to approach these issues as if they were common stocks, but recognizing their limited claims, than it is to consider them as an inferior type of senior security. Pg. 25

- How the present practice of common-stock investors, including the investment trusts almost without exception, can properly be termed investment, in view of this virtual absence of controlling standards, is more than we can fathom. It would be far more logical and helpful to call it "speculation in stocks of strong companies." Certainly the results in the stock market of such "investment" have been indistinguishable from those of old-time speculation, except perhaps for the margin element.
- It was little short of nonsense for the stock market to say in 1937 that General Electric Company was worth \$1,870,000,000 and almost precisely a year later that it was worth only \$784,000,000. Certainly nothing had happened within twelve months' time to destroy more than half the value of this powerful enterprise, nor did investors even pretend to claim that the falling off in earnings from 1937 to 1938 had any permanent significance for the future of the company. General Electric sold at 647/8 because the

public was in an optimistic frame of mind and at 271/4 because the same people were pessimistic.

To speak of these prices as representing "investment values" or the "appraisal of investors" is to do violence either to the English language or to common sense, or both.

- It is our view that stock market timing cannot be done, with general success, unless the time to buy is related to an attractive price level, as measured by analytical standards. Similarly, the investor must take his cue to sell primarily not from so-called technical market signals but from an advance in the price level beyond a point justified by objective standards of value. It may be that within these paramount limits there are refinements of stock-market technique that can make for better timing and more satisfactory over-all results. Yet we cannot avoid the conclusion that the most generally accepted principle of timing—viz., that purchases should be made only after an upswing has definitely announced itself—is basically opposed to the essential nature of investment. Traditionally the investor has been the man with patience and the courage of his convictions who would buy when the harried or disheartened speculator was selling. If the investor is now to hold back until the market itself encourages him, how will he distinguish himself from the speculator, and wherein will he deserve any better than the ordinary speculator's fate?
- We have been led to the old principle that the investor should wait for periods of depressed business and market levels to buy representative common stocks, since he is unlikely to be able to acquire them at other times except at prices that the future may cause him to regret. On the other hand, the thousands of so-called "secondary companies" should offer at least a moderate number of true investment opportunities under all conditions, except perhaps in the heydey of a bull market. This wide but quite unpopular field may present the more logical challenge to the interest of the bona fide investor and to the talents of the securities analyst.

Chapter 1: The Scope & Limitations of Security Analysis

 ANALYSIS CONNOTES the careful study of available facts with the attempt to draw conclusions therefrom based on established principles and sound logic.

But in applying analysis to the field of securities we encounter the serious obstacle that investment is by nature not an exact science. The same is true, however, of law and medicine, for here also both individual skill (art) and chance are important factors in determining success or failure. Nevertheless, in these professions analysis is not only useful but indispensable, so that the same should probably be true in the field of investment and possibly in that of speculation.

- The functions of security analysis may be described under three headings: *descriptive*, *selective*, *and critical*.

Descriptive Function:

In its more obvious form, descriptive analysis consists of marshalling the important facts relating to an issue and presenting them in a coherent, readily intelligible manner.

A more penetrating type of description seeks to reveal the strong and weak points in the position of an issue, compare its exhibit with that of others of similar character, and appraise the factors which are likely to influence its future performance. Analysis of this kind is applicable to almost every corporate issue, and it may be regarded as an adjunct not only to investment but also to intelligent speculation in that it provides an organized factual basis for the application of judgment.

Selective Function

In its selective function, security analysis goes further and expresses specific judgments of its own. It seeks to determine whether a given issue should be bought, sold, retained, or exchanged for some other.

Examples of Analytical Judgments: In 1928 the public was offered a large issue of 6% noncumulative preferred stock of St. Louis-San Francisco Railway Company priced at 100. The record showed that in no year in the company's history had earnings been equivalent to as much as 11/2 times the fixed charges and preferred dividends combined. The application of well-established standards of selection to the facts in this case would have led to the rejection of the issue as insufficiently protected.

A contrasting example: In June 1932 it was possible to purchase 5% bonds of Owens-Illinois Glass Company, due 1939, at 70, yielding 11% to maturity. The company's earnings were many times the interest requirements—not only on the average but even at that time of severe depression. The bond issue was amply covered by current assets alone, and it was followed by common and preferred stock with a very large aggregate market value, taking their lowest quotations. Here, analysis would have led to the recommendation of this issue as a strongly entrenched and attractively priced investment.

Let us take an example from the field of common stocks. In 1922, prior to the boom in aviation securities, Wright Aeronautical Corporation stock was selling on the New York Stock Exchange at only \$8, although it was paying a \$1 dividend, had for some time been earning over \$2 a share, and showed more than \$8 per share in cash assets in the treasury. In this case analysis would readily have established that the intrinsic value of the issue was substantially above the market price. Again, consider the same issue in 1928 when it had advanced to \$280 per share. It was then earning at the rate of \$8 per share, as against \$3.77 in 1927. The dividend rate was \$2; the net-asset value was less than \$50 per share. A study of this picture must have shown conclusively that the market price represented for the most part the capitalization of entirely conjectural future prospects—in other words, that the intrinsic value was far less than the market quotation.

- From the foregoing examples it will be seen that the work of the securities analyst is not without concrete results of considerable practical value, and that it is applicable to a wide variety of situations. In all of these instances he appears to be concerned with the intrinsic value of the security and more particularly with the discovery of discrepancies between the intrinsic value and the market price. We must recognize, however, that intrinsic value is an elusive concept. In general terms it is understood to be that value which is justified by the facts, e.g., the assets, earnings, dividends, definite prospects, as distinct, let us say, from market quotations established by artificial manipulation or distorted by psychological excesses.
- But it is a great mistake to imagine that intrinsic value is as definite and as determinable as is the market price.

Hence this idea was superseded by a newer view, viz., that the intrinsic value of a business was determined by its earning power. But the phrase "earning power" must imply a fairly confident expectation of certain future results. It is not sufficient to know what the past earnings have averaged, or even that they disclose a definite line of growth or decline. There must be plausible grounds for believing that this average or this trend is a dependable guide to the future. Experience has shown only too forcibly that in many instances this is far from true. This means that the concept of "earning power," expressed as a definite figure, and the derived concept of intrinsic value, as something equally definite and ascertainable, cannot be safely accepted as a general premise of security analysis.

Example: To make this reasoning clearer, let us consider a concrete and typical example. What would we mean by the intrinsic value of J. I. Case Company common, as analyzed, say, early in 1933? The market price was \$30; the asset value per share was \$176; no dividend was being paid; the average earnings for ten years had been \$9.50 per share; the results for 1932 had shown a deficit of \$17 per share. If we followed a customary method of appraisal, we might take the average earnings per share of common for ten years, multiply this average by ten, and arrive at an intrinsic value of \$95. But let us examine the individual figures which make up this ten-year average. They are as shown in the table on page 24. The average of \$9.50 is obviously nothing more than an arithmetical resultant from ten unrelated figures. It can hardly be urged that this average is in any way representative of typical conditions in the past or representative of what may be expected in the future. Hence any figure of "real" or intrinsic value derived from this average must be characterized as equally accidental or artificial.

- Let us try to formulate a statement of the role of intrinsic value in the work of the analyst which will reconcile the rather conflicting implications of our various examples. The essential point is that security analysis does not seek to determine exactly what is the intrinsic value of a given security. It needs only to establish either that the value is adequate—e.g., to protect a bond or to justify a stock purchase—or else that the value is considerably higher or considerably lower than the market price. For such purposes an indefinite and approximate measure of the intrinsic value may be sufficient. To use a homely simile, it is quite possible to decide by inspection that a woman is old enough to vote without knowing her age or that a man is heavier than he should be without knowing his exact weight.
- This should indicate how flexible is the concept of intrinsic value as applied to security analysis. Our notion of the intrinsic value may be more or less distinct, depending on the particular case. The degree of indistinctness may be expressed by a very hypothetical "range of approximate value," which would grow wider as the uncertainty of the picture increased, e.g., \$20 to \$40 for Wright Aeronautical in 1922 as against \$30 to \$130 for Case in 1933. It would follow that even a very indefinite idea of the intrinsic value may still justify a conclusion if the current price falls far outside either the maximum or minimum appraisal.
- The Interborough issues are an example of a rather special group of situations in which analysis may reach more definite conclusions respecting intrinsic value than in the ordinary case. These situations may involve a liquidation or give rise to technical operations known as "arbitrage" or "hedging." While, viewed in the abstract, they are probably the most satisfactory field for the analyst's work, the fact that they are specialized in character and of infrequent occurrence makes them relatively unimportant from the broader standpoint of investment theory and practice.

Principle Obstacles To Success Of The Analyst:

Needless to say, the analyst cannot be right all the time. Furthermore, a conclusion may be logically right
but work out badly in practice. The main obstacles to the success of the analyst's work are threefold,
viz., (1) the inadequacy or incorrectness of the data, (2) the uncertainties of the future, and (3) the

irrational behavior of the market.

- Future changes are largely unpredictable, and that security analysis must ordinarily proceed on the assumption that the past record affords at least a rough guide to the future. The more questionable this assumption, the less valuable is the analysis. Hence this technique is more useful when applied to senior securities (which are protected against change) than to common stocks; more useful when applied to a business of inherently stable character than to one subject to wide variations; and, finally, more useful when carried on under fairly normal general conditions than in times of great uncertainty and radical change.
- The third handicap to security analysis is found in the market itself. In a sense the market and the future present the same kind of difficulties. Neither can be predicted or controlled by the analyst, yet his success is largely dependent upon them both.
- This field of analytical work may be said to rest upon a twofold assumption: first, that the market price is frequently out of line with the true value; and, second, that there is an inherent tendency for these disparities to correct themselves. As to the truth of the former statement, there can be very little doubt—even though Wall Street often speaks glibly of the "infallible judgment of the market" and asserts that "a stock is worth what you can sell it for—neither more nor less."

The second assumption is equally true in theory, but its working out in practice is often most unsatisfactory. Under valuations caused by neglect or prejudice may persist for an inconveniently long time, and the same applies to inflated prices caused by over enthusiasm or artificial stimulants. The particular danger to the analyst is that, because of such delay, new determining factors may supervene before the market price adjusts itself to the value as he found it. In other words, by the time the price finally does reflect the value, this value may have changed considerably and the facts and reasoning on which his decision was based may no longer be applicable.

The analyst must seek to guard himself against this danger as best he can: in part, by dealing with those situations preferably which are not subject to sudden change; in part, by favoring securities in which the popular interest is keen enough to promise a fairly swift response to value elements which he is the first to recognize; in part, by tempering his activities to the general financial situation—laying more emphasis on the discovery of undervalued securities when business and market conditions are on a fairly even keel, and proceeding with greater caution in times of abnormal stress and uncertainty.

- In other words, the market is not a weighing machine, on which the value of each issue is recorded by an exact and impersonal mechanism, in accordance with its specific qualities. Rather should we say that the market is a voting machine, whereon countless individuals register choices which are the product partly of reason and partly of emotion.
- Let us assume that, through some equivalent of analysis, a roulette player is able to reverse the odds for a limited number of wagers, so that they are now 18 to 19 in his favor. If he distributes his wagers evenly over all the numbers, then whichever one turns up he is certain to win a moderate amount. This operation may be likened to an investment program based upon sound analysis and carried on under propitious general conditions.
- It is a matter of great moment to the analyst that the facts be fairly presented, and this means that he must be highly critical of accounting methods. Finally, he must concern himself with all corporate policies affecting the security owner, for the value of the issue which he analyzes may be largely dependent upon the acts of the management. In this category are included questions of capitalization setup, of dividend and expansion policies, of managerial compensation, and even of continuing or liquidating an unprofitable business.

Chapter 2: Fundamental Elements In The Problem Of Analysis

- The object of security analysis is to answer, or assist in answering, certain questions of a very practical nature. Of these, perhaps the most customary are the following: What securities should be bought for a given purpose? Should issue S be bought, or sold, or retained? In all such questions, four major factors may be said to enter, either expressly or by implication. These are:
 - 1. The security.
 - 2. The price.
 - 3. The time.
 - 4. The person.

The Person

Other personal characteristics that on occasion might properly influence the individual's choice of securities are his financial training and competence, his temperament, and his preferences. But however vital these considerations may prove at times, they are not ordinarily determining factors in analysis. Most of the conclusions derived from analysis can be stated in impersonal terms, as applicable to investors or speculators as a class.

The Time

Finally, nearly all security commitments are influenced to some extent by the current view of the financial and business outlook. In speculative operations these considerations are of controlling importance; and while conservative investment is ordinarily supposed to disregard these elements, in times of stress and uncertainty they may not be ignored. Security analysis, as a study, must necessarily concern itself as much as possible with principles and methods which are valid at all times—or, at least, under all ordinary conditions.

The Price

In the field of common stocks, the necessity of taking price into account is more compelling, because the danger of paying the wrong price is almost as great as that of buying the wrong issue. We shall point out later that the new-era theory of investment left price out of the reckoning, and that this omission was productive of most disastrous consequences.

The Security

An investment in the soundest type of enterprise may be made on unsound and unfavorable terms.

Our distinction between the character of the enterprise and the terms of the commitment suggests a question as to which element is the more important. Is it better to invest in an attractive enterprise on unattractive terms or in an unattractive enterprise on attractive terms? The popular view unhesitatingly prefers the former alternative, and in so doing it is instinctively, rather than logically, right. Over a long period, experience will undoubtedly show that less money has been lost by the great body of investors

through paying too high a price for securities of the best regarded enterprises than by trying to secure a larger income or profit from commitments in enterprises of lower grade.

- This distinction applies as well to the purchase of securities as to buying paints or watches. It results in two principles of quite opposite character, the one suitable for the untrained investor, the other useful only to the analyst.
 - 1. Principle for the untrained security buyer: Do not put money in a low-grade enterprise on any terms.
 - 2. Principle for the securities analyst: Nearly every issue might conceivably be cheap in one price range and dear in another.
- The analyst must pay respectful attention to the judgment of the market place and to the enterprises which it strongly favors, but he must retain an independent and critical viewpoint. Nor should he hesitate to condemn the popular and espouse the unpopular when reasons sufficiently weighty and convincing are at hand.

Qualitative & Quantitative Factors in Analysis

- Analyzing a security involves an analysis of the business.
- A less intensive analysis should be needed in selecting a high-grade bond yielding 3% than in trying to find a well-secured issue yielding 6% or an unquestioned bargain in the field of common stocks.

Quantitative Factors

It is convenient at times to classify the elements entering into an analysis under two headings: the quantitative and the qualitative. The former might be called the company's statistical exhibit. Included in it would be all the useful items in the income account and balance sheet, together with such additional specific data as may be provided with respect to production and unit prices, costs, capacity, unfilled orders, etc. These various items may be sub-classified under the headings:

- (1) Capitalization
- (2) Earnings and dividends
- (3) Assets and liabilities
- (4) Operating statistics.

Qualitative Factors

The qualitative factors, on the other hand, deal with such matters as the nature of the business; the relative position of the individual company in the industry; its physical, geographical, and operating characteristics; the character of the management; and, finally, the outlook for the unit, for the industry, and for business in general. Questions of this sort are not dealt with ordinarily in the company's reports. The analyst must look for their answers to miscellaneous sources of information of greatly varying dependability—including a large admixture of mere opinion.

The qualitative factors upon which most stress is laid are the nature of the business and the character of
the management. These elements are exceedingly important, but they are also exceedingly difficult
to deal with intelligently.

Our appreciation of the importance of selecting a "good industry" must be tempered by a realization that this is by no means so easy as it sounds. Somewhat the same difficulty is met with in endeavoring to select an unusually capable management. Objective tests of managerial ability are few and far from scientific. In most cases the investor must rely upon a reputation which may or may not be deserved. The most convincing proof of capable management lies in a superior comparative record over a period of time. But this brings us back to the quantitative data.

There is a strong tendency in the stock market to value the management factor twice in its calculations. Stock prices reflect the large earnings which the good management has produced, plus a substantial increment for "good management" considered separately. This amounts to "counting the same trick twice," and it proves a frequent cause of overvaluation.

In recent years increasing importance has been laid upon the trend of earnings. Needless to say, a record of increasing profits is a favorable sign. Financial theory has gone further, however, and has sought to estimate future earnings by projecting the past trend into the future and then used this projection as a basis for valuing the business. Because figures are used in this process, people mistakenly believe that it is "mathematically sound." But while a trend shown in the past is a fact, a "future trend" is only an assumption.

For security analysis does not assume that a past average will be repeated, but only that it supplies a rough index to what may be expected of the future. A trend, however, cannot be used as a rough index; it represents a definite prediction of either better or poorer results, and it must be either right or wrong.

- Analysis is concerned primarily with values which are supported by the facts and not with those which depend largely upon expectations. In this respect the analyst's approach is diametrically opposed to that of the speculator, meaning thereby one whose success turns upon his ability to forecast or to guess future developments. Needless to say, the analyst must take possible future changes into account, but his primary aim is not so much to profit from them as to guard against them. Broadly speaking, he views the business future as a hazard which his conclusions must encounter rather than as the source of his vindication.
- The analyst must penetrate beyond the mere figures and consider the inherent character of the two businesses. The chain-store grocery trade contained within itself many elements of relative stability, such as stable demand, diversified locations, and rapid inventory turnover. A typical large unit in this field, provided only it abstained from reckless expansion policies, was not likely to suffer tremendous fluctuations in its earnings.
- To sum up this discussion of qualitative and quantitative factors, we may express the dictum that the analyst's conclusions must always rest upon the figures and upon established tests and standards. These figures alone are not sufficient; they may be completely vitiated by qualitative considerations of an opposite import. A security may make a satisfactory statistical showing, but doubt as to the future or distrust of the management may properly impel its rejection. Again, the analyst is likely to attach prime importance to the qualitative element of stability, because its presence means that conclusions based on past results are not so likely to be upset by unexpected developments. It is also true that he will be far more confident in his selection of an issue if he can buttress an adequate quantitative exhibit with unusually favorable qualitative factors. But whenever the commitment depends to a substantial degree upon these qualitative factors—whenever, that is, the price is considerably higher than the figures alone would justify—then the analytical basis of approval is lacking. In the mathematical phrase, a satisfactory statistical exhibit is a necessary though by no means a sufficient condition for a favorable decision by

Chapter 3: Source of Information

It follows therefore that in any thoroughgoing study of an individual company, the analyst should consult
the original reports and other documents wherever possible, and not rely upon summaries or
transcriptions.

Chapter 4: Distinctions Between Investment & Speculation

- It would undoubtedly be a wholesome step to go back to the accepted idea of income as the central motive in investment, leaving the aim toward profit, or capital appreciation, as the typical characteristic of speculation. But it is doubtful whether the true inwardness of investment rests even in this distinction. Examining standard practices of the past, we find some instances in which current income was not the leading interest of a bona-fide investment operation. This was regularly true, for example, of bank stocks, which until recent years were regarded as the exclusive province of the wealthy investor. These issues returned a smaller dividend yield than did high-grade bonds, but they were purchased on the expectation that the steady growth in earnings and surplus would result in special distributions and increased principal value. In other words, it was the earnings accruing to the stockholder's credit, rather than those distributed in dividends, which motivated his purchase. Yet it would not appear to be sound to call this attitude speculative.
- The race-track gambler, betting on a "sure thing," is convinced that his commitment is safe. The 1929 "investor" in high-priced common stocks also considered himself safe in his reliance upon future growth to justify the figure he paid and more.
- The former purchased at price levels which he considered conservative in the light of experience; he was satisfied, from his knowledge of the institution's resources and earning power, that he was getting his money's worth in full. If a strong speculative market resulted in advancing the price to a level out of line with these standards of value, he sold his shares and waited for a reasonable price to return before reacquiring them.

Had the same attitude been taken by the purchaser of common stocks in 1928–1929, the term investment would not have been the tragic misnomer that it was. But in proudly applying the designation "blue chips" to the high-priced issues chiefly favored, the public unconsciously revealed the gambling motive at the heart of its supposed investment selections. These differed from the old-time bank-stock purchases in the one vital respect that the buyer did not determine that they were worth the price paid by the application of firmly established standards of value. The market made up new standards as it went along, by accepting the current price—however high—as the sole measure of value. Any idea of safety based on this uncritical approach was clearly illusory and replete with danger. Carried to its logical extreme, it meant that no price could possibly be too high for a good stock, and that such an issue was equally "safe" after it had advanced to 200 as it had been at 25.

- An investment operation is one which, upon thorough analysis, promises safety of principal and a satisfactory return. Operations not meeting these requirements are speculative.
- Certain implications of this definition are worthy of further discussion. We speak of an investment operation rather than an issue or a purchase, for several reasons. It is unsound to think always of investment character as inhering in an issue per se. The price is frequently an essential element, so that a

stock (and even a bond) may have investment merit at one price level but not at another. Furthermore, an investment might be justified in a group of issues, which would not be sufficiently safe if made in any one of them singly. In other words, diversification might be necessary to reduce the risk involved in the separate issues to the minimum consonant with the requirements of investment. (This would be true, in general, of purchases of common stocks for investment.)

In our view it is also proper to consider as investment operations certain types of arbitrage and hedging commitments which involve the sale of one security against the purchase of another. In these operations the element of safety is provided by the combination of purchase and sale. This is an extension of the ordinary concept of investment, but one which appears to the writers to be entirely logical.

It may be helpful to elaborate our definition from a somewhat different angle, which will stress the fact that investment must always consider the price as well as the quality of the security. Strictly speaking, there can be no such thing as an "investment issue" in the absolute sense, i.e., implying that it remains an investment regardless of price. In the case of high grade bonds, this point may not be important, for it is rare that their prices are so inflated as to introduce serious risk of loss of principal. But in the commonstock field this risk may frequently be created by an undue advance in price—so much so, indeed, that in our opinion the great majority of common stocks of strong companies must be considered speculative during most of the time, simply because their price is too high to warrant safety of principal in any intelligible sense of the phrase. We must warn the reader that prevailing Wall Street opinion does not agree with us on this point; and he must make up his own mind which of us is wrong.

Nevertheless, we shall embody our principle in the following additional criterion of investment:

An investment operation is one that can be justified on both qualitative and quantitative grounds.

It may be said, with some approximation to the truth, that investment is grounded on the past whereas speculation looks primarily to the future. But this statement is far from complete. Both investment and speculation must meet the test of the future; they are subject to its vicissitudes and are judged by its verdict. But what we have said about the analyst and the future applies equally well to the concept of investment. For investment, the future is essentially something to be guarded against rather than to be profited from. If the future brings improvement, so much the better; but investment as such cannot be founded in any important degree upon the expectation of improvement. Speculation, on the other hand, may always properly—and often soundly—derive its basis and its justification from prospective developments that differ from past performance.

Types of Investment

- 1. Business investment Referring to money put or held in a business.
- 2. Financial investment or Referring to securities generally.
- 3. Sheltered investment Referring to securities regarded as subject to small risk by reason of their prior claim on earnings or because they rest upon an adequate taxing power.
- 4. Analyst's investment Referring to operations that, upon thorough study, promise safety of principal and an adequate return.

Types of Speculation

- 1. Intelligent speculation The taking of a risk that appears justified after careful weighing of the pros and cons.
- 2. Unintelligent speculation Risk taking without adequate study of the situation.

A proposed purchase that cannot qualify as an "analyst's investment" automatically falls into the speculative category. But at times it may be useful to view such a purchase somewhat differently and to divide the price paid into an investment and a speculative component. Thus the analyst, considering General Electric common at its average price of \$38 in 1939, might conclude that up to, say, \$25 per share is justified from the strict standpoint of investment value. The remaining \$13 per share will represent the stock market's average appraisal of the company's excellent long-term prospects, including therein, perhaps, a rather strong psychological bias in favor of this outstanding enterprise. On the basis of such a study, the analyst would declare that the price of \$38 for General Electric includes an investment component of some \$25 per share and a speculative component of about \$13 per share.

If this is sound, it would follow that at a price of 25 or less, General Electric common would constitute an "analyst's investment" completely; but above that price the buyer should recognize that he is paying something for the company's very real speculative possibilities.

- The foregoing discussion suggests an amplification of what was said in Chap. 1on the concept of "intrinsic value," which was there defined as "value justified by the facts." It is important to recognize that such value is by no means limited to "value for investment"— i.e., to the investment component of total value—but may properly include a substantial component of speculative value, provided that such speculative value is intelligently arrived at. Hence the market price may be said to exceed intrinsic value only when the market price is clearly the reflection of unintelligent speculation.
- Generally speaking, it is the function of the stock market, and not of the analyst, to appraise the speculative factors in a given common-stock picture. To this important extent the market, not the analyst, determines intrinsic value.

Chapter 5: Classification of Securities

- Hence investors are led to believe that the very name "bond" must carry some especial assurance against loss. This attitude is basically unsound, and on frequent occasions is responsible for serious mistakes and loss. The investor has been spared even greater penalties for this error by the rather accidental fact that fraudulent security promoters have rarely taken advantage of the investment prestige attaching to the bond form. It is true beyond dispute that bonds as a whole enjoy a degree of safety distinctly superior to that of the average stock.

But this advantage is not the result of any essential virtue of the bond form; it follows from the circumstance that the typical American enterprise is financed with some honesty and intelligence and does not assume fixed obligations without a reasonable expectation of being able to meet them. But it is not the obligation that creates the safety, nor is it the legal remedies of the bondholder in the event of default. Safety depends upon and is measured entirely by the ability of the debtor corporation to meet its obligations.

The bond of a business without assets or earning power would be every whit as valueless as the stock of such an enterprise. Bonds representing all the capital placed in a new venture are no safer than common stock would be, and are considerably less attractive. For the bondholder could not possibly get more out of the company by virtue of his fixed claim than he could realize if he owned the business in full, free and clear.2 This simple principle seems too obvious to merit statement; yet because of the traditional association of the bond form with superior safety, the investor has often

been persuaded that by the mere act of limiting his return he obtained an assurance against loss.

Standard Securities Overview

- I. The bond pattern comprises:
- A. The unqualified right to a fixed interest payment on fixed dates.
- B. The unqualified right to repayment of a fixed principal amount on a fixed date.
 - C. No further interest in assets or profits, and no voice in the management.
 - II. The preferred-stock pattern comprises:
- A. A stated rate of dividend in priority to any payment on the common. (Hence full preferred dividends are mandatory if the common receives any dividend; but if nothing is paid on the common, the preferred dividend is subject to the discretion of the directors).
- B. The right to a stated principal amount in the event of dissolution, in priority to any payments to the common stock. C. Either no voting rights, or voting power shared with the common.
 - III. The common-stock pattern comprises:
- A. A pro rata ownership of the company's assets in excess of its debts and preferred stock issues.
- B. A pro rata interest in all profits in excess of prior deductions.
 - C. A pro rata vote for the election of directors and for other purposes. Bonds and preferred stocks conforming to the above standard patterns will sometimes be referred to as straight bonds or straight preferred stocks
 - The opposite situation is met when issues, senior in name, sell at such low prices that the junior securities can obviously have no real equity, i.e., ownership interest, in the company. In such cases, the low-priced bond or preferred stock stands virtually in the position of a common stock and should be regarded as such for purposes of analysis. A preferred stock selling at 10 cents on the dollar, for example, should be viewed not as a preferred stock at all, but as a common stock. On the one hand it lacks the prime requisite of a senior security, viz., that it should be followed by a junior investment of substantial value. On the other hand, it carries all the profit features of a common stock, since the amount of possible gain from the current level is for all practical purposes unlimited.
 - From the foregoing discussion the real character and purpose of our classification should now be more evident. Its basis is not the title of the issue, but the practical significance of its specific terms and status to the owner. Nor is the primary emphasis placed upon what the owner is legally entitled to demand, but upon what he is likely to get, or is justified in expecting, under conditions which appear to be probable at the time of purchase or analysis.

Pt. II Fixed Value Investments

Chapter 6: The Selection of Fixed Value Investments

- We have already stated that the fixed-value group includes:
 - 1. High-grade straight bonds and preferred stocks.
 - 2. High-grade privileged issues, where the value of the privilege is too remote to count as a factor in selection.
 - 3. Common stocks which through guaranty or preferred status occupy the position of a high-grade senior issue.
- By placing gilt-edged preferred stocks and high-grade bonds in a single group, we indicate that the same investment attitude and the same general method of analysis are applicable to both types. The very definite inferiority of the preferred stockholders' legal claim is here left out of account, for the logical reason that the soundness of the best investments must rest not upon legal rights or remedies but upon ample financial capacity of the enterprise.
- Instead of associating bonds primarily with the presumption of safety as has long been the practice—it would be sounder to start with what is not presumption but fact, viz., that a (straight) bond is an investment with limited return. In exchange for limiting his participation in future profits, the bondholder obtains a prior claim and a definite promise of payment, while the preferred stockholder obtains only the priority, without the promise. But neither priority nor promise is itself an assurance of payment. This assurance rests in the ability of the enterprise to fulfill its promise, and must be looked for in its financial position, record, and prospects. The essence of proper bond selection consists, therefore, in obtaining specific and convincing factors of safety in compensation for the surrender of participation in profits.
- Since the chief emphasis must be placed on avoidance of loss, bond selection is primarily a negative art. It is a process of exclusion and rejection, rather than of search and acceptance. In this respect the contrast with common-stock selection is fundamental in character. The prospective buyer of a given common stock is influenced more or less equally by the desire to avoid loss and the desire to make a profit. The penalty for mistakenly rejecting the issue may conceivably be as great as that for mistakenly accepting it. But an investor may reject any number of good bonds with virtually no penalty at all, provided he does not eventually accept an unsound issue. Hence, broadly speaking, there is no such thing as being unduly captious or exacting in the purchase of fixed-value investments. The observation that Walter Bagehot addressed to commercial bankers is equally applicable to the selection of investment bonds. "If there is a difficulty or a doubt the security should be declined.
- Four additional principles of more specific character which are applicable to the selection of individual issues:
 - I. Safety is measured not by specific lien or other contractual rights, but by the ability of the issuer to meet all of its obligations.

- II. This ability should be measured under conditions of depression rather than prosperity.
- III. Deficient safety cannot be compensated for by an abnormally high coupon rate.
- IV. The selection of all bonds for investment should be subject to rules of exclusion and to specific quantitative tests corresponding to those prescribed by statute to govern investments of savings banks.
- Attempts to increase yield at the expense of safety are likely to prove unprofitable.
- The proper theory of bond financing, however, is of quite different import. A reasonable amount of funded debt is of advantage to a prosperous business, because the stockholders can earn a profit above interest charges through the use of the bondholders' capital. It is desirable for both the corporation and the investor that the borrowing be limited to an amount which can safely be taken care of under all conditions. Hence, from the standpoint of sound finance, there is no basic conflict of interest between the strong corporation which floats bonds and the public which buys them.
- The above analysis of the course of industrial bond borrowing in the last 15 years is not irrelevant to the theme of this chapter, viz., the application of depression standards to the selection of fixed-value investments. Recognizing the necessity of ultra-stringent criteria of choice in the industrial field, the bond buyer is faced by a further narrowing of eligible issues due to the elimination of funded debt by many of the strongest companies. Clearly his reaction must not be to accept the issues of less desirable enterprises, in the absence of better ones, but rather to refrain from any purchases on an investment basis if the suitable ones are not available.
- It appears to be a financial axiom that whenever there is money to invest, it is invested; and if the owner cannot find a good security yielding a fair return, he will invariably buy a poor one. But a prudent and intelligent investor should be able to avoid this temptation, and reconcile himself to accepting an unattractive yield from the best bonds, in preference to risking his principal in second-grade issues for the sake of a large coupon return.
- This view, however, seems to us to bear little relation to the realities of bond investment. Security prices and yields are not determined by any exact mathematical calculation of the expected risk, but they depend rather upon the popularity of the issue. This popularity reflects in a general way the investors' view as to the risk involved, but it is also influenced largely by other factors, such as the degree of familiarity of the public with the company and the issue (seasoning) and the ease with which the bond can be sold (marketability).

It may be pointed out further that the supposed actuarial computation of investment risks is out of the question theoretically as well as in practice. There are no experience tables available by which the expected "mortality" of various types of issues can be determined.

In life insurance the relation between age and mortality rate is well defined and changes only gradually. The same is true, to a much lesser extent, of the relation between the various types of structures and the fire hazard attaching to them. But the relation between different kinds of investments and the risk of loss is entirely too indefinite, and too variable with changing conditions, to permit of sound mathematical formulation. This is particularly true because investment losses are not distributed fairly evenly in point of time, but tend to be concentrated at intervals, i.e., during periods of general depression. Hence the typical investment hazard is roughly similar to the conflagration or epidemic hazard, which is the exceptional and incalculable factor in fire or life insurance.

- The foregoing discussion leads us to suggest the principle that income return and risk of principal should be regarded as incommensurable. Practically speaking, this means that acknowledged risks of losing principal should not be offset merely by a high coupon rate, but can be accepted only in return for a corresponding opportunity for enhancement of principal, e.g., through the purchase of bonds at a substantial discount from par, or possibly by obtaining an unusually attractive conversion privilege.
- It would be sounder procedure to start with minimum standards of safety, which all bonds must be required to meet in order to be eligible for further consideration. Issues failing to meet these minimum requirements should be automatically disqualified as straight investments, regardless of high yield, attractive prospects, or other grounds for partiality.

But, essentially, bond selection should consist of working upward from definite minimum standards rather than working downward in haphazard fashion from some ideal but unacceptable level of maximum security.

Chapter 8, 9, 10, 11: Specific Standards for Bond Investment

 As a matter of practical policy, an individual bond buyer is likely to obtain fairly satisfactory results by subjecting himself to the restrictions which govern the investment of savings banks' funds. But this procedure cannot be seriously suggested as a general principle of investment, because the legislative provisions are themselves far too imperfect to warrant their acceptance as the best available theoretical standards.

New York Savings Bank Bond Investment Statute

- The specific requirements imposed by the statute upon bond investments may be classified under seven heads, which we shall proceed to enumerate and discuss:
 - 1. The nature and location of the business or government.
 - 2. The size of the enterprise, or the issue.
 - 3. The terms of the issue.
 - 4. The record of solvency and dividend payments.
 - 5. The relation of earnings to interest requirements.
 - 6. The relation of the value of the property to the funded debt.
 - 7. The relation of stock capitalization to the funded debt.

1. Nature & Location of the Business

It would seem a sounder principle, therefore, to require a stronger exhibit by the individual bond to
compensate for any weakness supposedly inherent in its class, rather than to seek to admit all bonds of
certain favored groups and to exclude all bonds of others.

An industrial bond may properly be required to show a larger margin of earnings over interest charges and a smaller proportion of debt to going-concern value than would be required of an obligation of a gas or electric enterprise. The same would apply in the case of traction bonds. In connection with the exclusion of water-company bonds by the New York statute, it should be noted that this group is considered by most other states to be on a par with gas, electric, and telephone obligations. There seems

to be no good reason for subjecting them to more stringent requirements than in the case of other types of public-service issues.

- Viewing objectively the history of foreign-bond investment in this country since it first assumed importance during the World War, it is difficult to escape an unfavorable conclusion on this point. In the final analysis, a foreign-government debt is an unenforceable contract. If payment is withheld, the bondholder has no direct remedy. Even if specific revenues or assets are pledged as security, he is practically helpless in the event that these pledges are broken.
- It is generally argued that a renewal of large-scale international lending is necessary to restore world
 equilibrium. More concretely, such lending appears to be an indispensable adjunct to the restoration and
 development of our export trade. But the investor should not be expected to make unsound commitments
 for idealistic reasons or to benefit American exporters.
- Of the five countries in the first or investment group, the credit of two, viz., France and Great Britain, was considered speculative in the preceding depression of 1921–1922. Out of 42 countries represented, therefore, only three (Canada, Holland, and Switzerland) enjoyed an unquestioned investment rating during the twelve years ending in 1932.
- In theory, bonds of a corporation, however prosperous, cannot enjoy better security than the obligations of the country in which the corporation is located. The government, through its taxing power, has an unlimited prior claim upon the assets and earnings of the business; in other words, it can take the property away from the private bondholder and utilize it to discharge the national debt. But in actuality, distinct limits are imposed by political expediency upon the exercise of the taxing power. Accordingly we find instances of corporations meeting their dollar obligations even when their government is in default.
- Foreign-corporation bonds have an advantage over governmental bonds in that the holder enjoys specific legal remedies in the event of nonpayment, such as the right of foreclosure. Consequently it is probably true that a foreign company is under greater compulsion to meet its debt than is a sovereign nation.

But it must be recognized that the conditions resulting in the default of government obligations are certain to affect adversely the position of the corporate bondholder. Restrictions on the transfer of funds may prevent the payment of interest in dollars even though the company may remain amply solvent. Furthermore, the distance separating the creditor from the property, and the obstacles interposed by governmental decree, are likely to destroy the practical value of his mortgage security. For these reasons the unfavorable conclusions reached with respect to foreign-government obligations as fixed-value investments must be considered as applicable also to foreign corporation bonds.

Size of The Enterprise or Issue

- The objections to bonds of undersized corporations apply also to tiny villages or microscopic townships, and the careful investor in municipal obligations will ordinarily avoid those below a certain population level.
- We believe that the following proposed requirements for minimum size, although by necessity arbitrarily taken, are in reasonable accord with the realities of sound investment:

Minimum Requirement of Size:

- Municipalities 10,000 population
- Public-utility enterprises \$2,000,000 gross

- Railroad systems \$3,000,000 gross
- Industrial companies \$5,000,000 gross
- These recommendations on the subject of minimum size do not imply that enormous dimensions are in themselves a guarantee of prosperity and financial strength. The biggest company may be the weakest if its bonded debt is disproportionately large. Moreover, in the railroad, public-utility, and municipal groups, no practical advantage attaches to the very largest units as compared with those of medium magnitude. Whether the gross receipts of an electric company are twenty millions or a hundred millions has, in all probability, no material effect on the safety of its bonds; and similarly a town of 75,000 inhabitants may deserve better credit than would a city of several millions.

It is only in the industrial field that we have suggested that the bonds of a very large enterprise may be inherently more desirable than those of middle-sized companies; but even here a thoroughly satisfactory statistical showing on the part of the large company is necessary to make this advantage a dependable one.

Provisions of The Issue

There have been quite a number of cases in which investors have been willing to pay much higher prices for a short-term issue than for an equally secured long-term issue of the same company. In nearly every case this has proved a mistake—because either (1) the company's credit improved, in which case the distant maturity had a much greater rise in price, or else (2) the company was unable to pay off the short term issue at maturity.

My Note: As noted above, opt for the longer maturity bond if it is selling for less than the short maturity and the enterprise can pass strict quantitative tests of safety.

- Bonds purchased on an investment basis should have behind them a sufficiently long record of
 successful operation and of financial stability on the part of the issuer. New enterprises and those
 recently emerged from financial difficulties are not entitled to the high credit rating essential to justify a
 fixed-value investment. A similar disqualification would logically apply to states or municipalities which
 have failed to meet their obligations punctually at any time over a preceding period of years.
- The New York statute recognizes this criterion and gives it concrete expression as follows: Bonds of states other than New York are eligible if the state has not defaulted on interest or principal payments during the previous ten years. For municipalities outside New York State, the period is twenty-five years; for railroads, six years; for gas, electric, and telephone companies, eight years.
- The evidence given by the balance sheet and income account must be regarded as a more dependable clue to the soundness of an enterprise than is the record of dividend payments.
- The present-day investor is accustomed to regard the ratio of earnings to interest charges as the most important specific test of safety. It is to be expected therefore that any detailed legislation governing the selection of bond investments would be sure to include minimum requirements in respect to this cardinal factor
- In a previous chapter, however, we have emphasized the primary importance of a company's ability to meet all its fixed obligations, because insolvency resulting from default on a junior lien invariably reacts to the disadvantage of the prior-mortgage bondholders. An investor can be sure of his position only if the total-interest charges are well covered. Consequently, the conservative and therefore advisable way of calculating interest coverage should always be by the "total deductions method"; i.e., the controlling figure should be the number of times that all fixed charges are covered.

My Note: Total Deductions Method preferable to Cumulative Deductions Method & Prior Deductions Method for analyzing bond interest coverage.

- But our recommendation is that in applying any minimum requirement designed to test the company's strength, the total fixed charges should always be taken into account.
- We should recommend the following minimum requirements for the coverage of total fixed charges:

_	Public utilities	.13/4 times
_	Railroads	2 times
_	Industrials	.3 times

In our view, the only practical rigid application of a minimum-earnings standard must be to the average results over a period of time. A five year average, as prescribed by the statute in the case of public-utility bonds, would seem too short under many circumstances, and we should suggest a seven-year period as a more suitable normal standard. But this might be shortened somewhat to exclude clearly abnormal years.

My Note: I prefer to prescribe to a 10 year period as a standard (of earnings meeting min. requirements over fixed charges) for all corporate bonds.

- There are, of course, a number of other aspects of the earnings picture to which the investor would do
 well to pay attention. Among these are the trend, the minimum figure, and the current figure
- The practical method of dealing with elements of the latter type may be illustrated in this matter of the earning exhibit. The investor must demand an average at least equal to the minimum standard. In addition, he will be attracted by:
 - (a) a rising trend of profits
 - (b) an especially good current showing; and
 - (c) a satisfactory margin over interest charges in every year during the period studied.

If a bond is deficient in any one of these three aspects, the result should not necessarily be to condemn the issue but rather to exact an average earnings coverage well in excess of the minimum and to require closer attention to the general or qualitative elements in the situation. If the trend has been unfavorable, or the latest figure alone has been decidedly poor, the investor should certainly not accept the bond unless the average earnings have been substantially above the minimum requirement— and unless also he has reasonable grounds for believing that the downward trend or the current slump is not likely to continue indefinitely.

- It follows, therefore, that safety of principal, in the sense of maintenance of market value, is certain to be affected adversely in the case of long-term bonds by a sharp rise in the rate of interest. 11 Safety of principal of short-term debt may be affected adversely by such a rise in interest rates if the earnings coverage does not exceed our minimum by a comfortable margin.
- The practical conclusion must be that if the investor considers a rise in interest rates probable, he should not buy long-term low-coupon bonds, no matter how strong the company; and he should buy short-term issues only if earnings would cover a higher coupon rate with an adequate margin.

If, however, he is convinced that the low interest rates are here to stay, he may accept them in the same way as the higher rates were formerly accepted.

If he is undecided as to the future of interest rates, the best policy might seem to be to confine purchases to bonds of fairly short maturity (say not longer than ten years) and also to increase his earnings coverage requirement to offset the low coupon rate.

- In our earlier discussion (Chap. 6) we pointed out that the soundness of the typical bond investment depends upon the ability of the obligor corporation to take care of its debts, rather than upon the value of the property on which the bonds have a lien. This broad principle naturally leads directly away from the establishment of any general tests of bond safety based upon the value of the mortgaged assets, where this value is considered apart from the success or failure of the enterprise itself. Stating the matter differently, we do not believe that in the case of the ordinary corporation bond—whether railroad, utility, or industrial—it would be advantageous to stipulate any minimum relationship between the value of the physical property pledged (taken at either original or reproduction cost) and the amount of the debt.
- It follows that the holder of equipment-trust certificates has two separate sources of protection, the one being the credit and success of the borrowing railway, the other being the value of the pledged rolling stock. If the latter value is sufficiently in excess of the money loaned against it, he may be able to ignore the first or credit factor entirely, in the same way as a pawn-broker ignores the financial status of the individual to whom he lends money and is content to rely exclusively on the pledged property.
- It seems to us, however, that in a broad sense the values behind real estate mortgages are going-concern values; i.e., they are derived fundamentally from the earning power of the property, either actual or presumptive. In other words, the value of the pledged asset is not something distinct from the success of the enterprise (as is possibly the case with a railroad-equipment trust certificate), but is rather identical therewith.
- The method followed by these appraisals was the capitalization on a liberal basis of the rental expected to be returned by the property. By this means, a typical building which cost \$1,000,000, including liberal financing charges, would immediately be given an "appraised value" of \$1,500,000. Hence a bond issue could be floated for almost the entire cost of the venture so that the builders or promoters retained the equity (i.e., the ownership) of the building, without a cent's investment, and in many cases with a goodly cash profit to boot.3 This whole scheme of real estate financing was honeycombed with the most glaring weaknesses, and it is sad commentary on the lack of principle, penetration, and ordinary common sense on the part of all parties concerned that it was permitted to reach such gigantic proportions before the inevitable collapse.
- The rental income used in determining the appraised value was based on the rentals to be charged at the outset. But apartment-house tenants are accustomed to pay a substantial premium for space in a new building, and they consider a structure old, or at least no longer especially modern and desirable, after it has been standing a very few years. Consequently, under normal conditions the rentals received in the first years are substantially larger than those which can conservatively be expected throughout the life of the bond issue.
- The more usual real estate mortgage bond represents a participation in a first mortgage on a new apartment house or office building. In considering such offerings the investor should ignore the conventional "appraised values" submitted and demand that the actual cost, fairly presented, should exceed the amount of the bond issue by at least 50%. Secondly, he should require an estimated income account, conservatively calculated to reflect losses through vacancies and the decline in the rental scale as the building grows older. This income account should forecast a margin of at least 100% over interest charges, after deducting from earnings a depreciation allowance to be actually expended as a sinking fund for the gradual retirement of the bond issue. The borrower should agree to supply the bondholders with regular operating and financial statements.

- Issues termed "first-leasehold mortgage bonds" are in actuality second mortgages. They are issued against buildings erected on leased land and the ground rent operates in effect as a first lien or prior charge against the entire property. In analyzing such issues the ground rent should be added to the bond-interest requirements to arrive at the total interest charges of the property. Furthermore, it should be recognized that in the field of real estate obligations the advantage of a first mortgage over a junior lien is much more clean-cut than in an ordinary business enterprise.
- Real estate loans should not be made on buildings erected for a special or limited purpose, such as hotels, garages, etc. Commitments of this kind must be made in the venture itself, considered as an individual business. From our previous discussion of the standards applicable to a high grade industrial-bond purchase, it is difficult to see how any bond issue on a new hotel, or the like, could logically be bought on a straight investment basis. All such enterprises should be financed at the outset by private capital, and only after they can show a number of years of successful operation should the public be offered either bonds or stock therein.
- If we are studying balance-sheet figures, therefore, we can look either at the net assets or at the stock
 equity to determine the indicated coverage or margin above the principal amount of the debt.
- There is, of course, no objection to the application of this stock-equity test (based on book figures) to both railroad and public-utility obligations, as an added precaution, either regularly or in special cases where there is reason to doubt the reliability of the earnings record as a measure of the future ability to meet bond interest. If this test is applied, it should be pointed out that a maximum ratio of 60% of debt to 40% of stock and surplus is proportionately more severe than a minimum earnings ratio of 13/4 times interest charges. It would be more consistent, therefore, to admit a bonded debt as high as 75% of the property value, or three times the amount of the stock and surplus.
- Our principal objection to the property-value criterion arises from the undoubted fact that the book valuations of fixed assets are highly unreliable as indications of the safety of a bond. But on the other hand we are convinced that a substantial margin of going-concern value over funded debt is not only important but even vitally necessary to assure the soundness of a fixed-value investment. Before paying standard prices for bonds of any enterprise, whether it be a railroad, a telephone company, or a department store, the investor must be convinced that the business is worth a great deal more than it owes.
- The utility of the market-price test in extreme cases is unquestionable. The presence of a stock equity with market value many times as large as the total debt carries a strong assurance of the safety of the bond issue,3 and conversely, an exceedingly small stock equity at market prices must call the soundness of the bond into serious question. The determination of the market value of the stock equity, and its comparison with the total amount of funded debt, is a well-established feature of bond analysis, and it was formerly included in bond-offering circulars (when the showing made was satisfactory). We recommend that this calculation be made a standard element in the procedure of bond selection, especially for industrial issues; and that minimum requirements under this heading be set up which will serve as a secondary quantitative test of safety.
- These assumptions would produce the following arithmetical relationship between the minimum interest coverage on the one hand and the stock-to-bond ratio on the other.

To place both tests on the same arithmetical basis, the stock-value ratio should really be expressed as the ratio of total capitalization (bonds at par plus stock at market) to bonds.

- It is true also, as a general rule, that no bond investment should be made if it requires the assumption that the common stock is selling too low at the time. If the investor is right in that judgment of the stock value, it would certainly be more profitable to buy the stock than the bonds. If he is wrong as to the stock value, he runs great risk of having made a poor bond purchase.
- A third function of the stock-value test may be to throw justifiable doubt on the complete accuracy of the
 reported earnings figures. In the case of the B.M.T. a careful study of the offering prospectus would have
 revealed a wide difference between depreciation and amortization charges as shown on the reports to
 security holders and as taken on the income tax returns.

SUMMARY OF MINIMUM QUANTITATIVE REQUIREMENTS SUGGESTED FOR FIXED-VALUE INVESTMENT

1. Size of obligor:

Municipalities: population	10,000
Public utilities: gross revenues	\$2,000,000
Railroads: gross revenues	3,000,000
Industrials: gross revenues	5,000,000

2. Interest coverage:

Public-utility bonds: (7-year average)	13 /4 times
Railroad bonds: (7-year average)	2 times
Industrial bonds: (7-year average)	3 times
Real estate bonds: (dependable estimate)	2 times

3. Value of property:

Real estate bonds: Fair value of property (based on actual sales in a non-inflated market) must be 50% more than the amount of the bond issue. Investment trust bonds: Similar ratio, using market value of assets.

4. Market value of the stock issues:

Public utilities	50% of the bonded debt
Railroads	662/3% of the bonded debt
Industrials	100% of the bonded debt

The selection of a fixed-value security for limited-income return should be, relatively, at least, a simple operation. The investor must make certain by quantitative tests that the income has been amply above the interest charges and that the current value of the business is well in excess of its debts. In addition, he must be satisfied in his own judgment that the character of the enterprise is such as to promise continued success in the future, or more accurately speaking, to make failure a highly unlikely occurrence.

- The measures of operating efficiency generally considered are the following (For Railroads):
- Operating Ratio
- Transportation Ratio
- Average Trainload and Carload
- Average Car Miles per Day
- Ratio of Empty Mileage to Total Mileage
- Fuel Consumption per Locomotive Mile.

The operating ratio is the ratio of all operating expenses, excluding taxes, to gross revenues. The transportation ratio applies only to those costs classified as "transportation expenses." In our opinion a more useful criterion than either of these would be the ratio to gross of all operating expenses except maintenance but including taxes. This might be called the "other operating-expense ratio." Maintenance outlays are separated because they are generally regarded as an indication of the liberality rather than the efficiency of the management.

Chapter 12,13: Other Factors in Bond Analysis

- Just what constitutes a public- utility enterprise may be the subject of some controversy. In its strict definition it would be any enterprise supplying an essential service to the public, subject to the terms of a franchise and to continuous regulation by the state. (While steam railroads are in fact a public-utility undertaking, it is convenient and customary to place them in a separate category.) From the investment standpoint, the most important idea associated with a public utility is that of stability, based first upon the rendering of an indispensable (and generally exclusive) service to a large number of customers, and, secondly, upon the legal right to charge a rate of compensation sufficient to yield a fair return on the invested capital.
- Depreciation reserves by telephone companies absorb a large percentage of gross receipts. In the case of the American Telephone and Telegraph System this percentage averages about 15%,19 and the same deduction was actually made by the chief subsidiary of the Utilities Service Company.
- In general, the analyst should refrain from elaborate computations or adjustments which are not needed to arrive at the conclusion he is seeking.
- The holder of preferred shares of an important operating subsidiary has to all intents and purposes a claim which is as fixed and enforceable on the system's earnings as have the owners of the parent company's bonds. But if the parent company becomes insolvent, then the owners of the underlying preferred issues no longer occupy the strategic position of bondholder, since they cannot compel the operating subsidiary to continue paying its preferred dividends.
- For reasons already explained, a company's statement of its fixed assets will not ordinarily carry much weight in determining the soundness of its bonds. But the current-asset position has an important bearing upon the financial strength of nearly all industrial enterprises, and consequently the intending bond purchaser should give it close attention. It is true that industrial bonds which meet the stringent tests already prescribed will in nearly every instance be found to make a satisfactory working-capital exhibit as well, but a separate check is nevertheless desirable in order to guard against the exceptional case.

- In examining the current-asset situation, an industrial bond buyer should satisfy himself on three counts, viz.:
 - 1. That the cash holdings are ample.
 - 2. That the ratio of current assets to current liabilities is a strong one.
 - 3. That the working capital bears a suitable proportion to the funded debt.
- It is not feasible to fix definite minimum requirements for any one of these three factors, especially since the normal working-capital situation varies widely with different types of enterprise. It is generally held that current assets should be at least double the current liabilities, and a smaller ratio would undoubtedly call for further investigation. We suggest an additional standard requirement for the ordinary industrial company, viz., that the working capital be at least equal to the amount of the bonded debt. This is admittedly an arbitrary criterion, and in some cases it may prove unduly severe. But it is interesting to note that in the case of every one of the industrial issues which maintained their investment rank market wise throughout 1932, the working capital exceeded the total of bonds.
- Note From Interpretation of Financial Statements (1937): The Working Capital (Current Assets Current Liabilities) available for each share of common stock is an interesting figure in common stock analysis.
- The growth or decline of the working capital position over a period of years is also worthy of the investor's attention

Chapter 14: The Theory of Preferred Stocks

- The directors are legally required to represent the interests of all stockholders impartially, but since in fact they are most often elected by the common stockholders they tend to act primarily in the latter's behalf. Directors have also grown accustomed to consider the interests of the enterprise itself, as an entity apart from the interests of its owners—i.e., the stockholders—and they frequently pursue policies with the apparent purpose and result of strengthening the corporation at the actual expense of its proprietors. This paradoxical viewpoint may perhaps be explained in part by the customary close connection between corporate directors and the salary-drawing officers.
- Whatever the reason or justification may be, the fact remains that preferred stockholders are subject to
 the danger of interruption of dividend payments under conditions which would not seriously threaten the
 payment of bond interest. This means that the form of the preferred stockholder's contract will often
 entail a real disadvantage.
- To present a broader view of this question, we revert to our previous discussion of bonds with varying degrees of safety, in which we arrived at the principle that risk and income return are at bottom incommensurable. If this statement is valid for bonds, it must apply with equal force to preferred stocks. This means that it is not sound procedure to purchase a preferred stock at an investment price (e.g., close to par) when the presence of a substantial risk to principal is recognized, but when this risk is expected to be offset by an attractive dividend return. It would follow from this principle that the only preferred stock which can properly be bought for investment would be one which in the purchaser's opinion carries no appreciable risk of dividend suspension.
- What must be the qualifications of such a preferred stock? In the first place, it must meet all the

minimum requirements of a safe bond. In the second place, it must exceed these minimum requirements by a certain added margin to offset the discretionary feature in the payment of dividends; i.e., the margin of safety must be so large that the directors may always be expected to declare the dividend as a matter of course. Thirdly, the stipulation of inherent stability in the business itself must be more stringent than in the case of a bond investment, because a company subject to alternations between large profits and temporary losses is likely to suspend preferred dividends during the latter periods even though its average earnings may far exceed the annual requirements.

- We are led therefore, to the final conclusion that not only are sound preferred stocks exceptional but in a certain sense they must be called anomalies or mistakes, because they are preferred issues which should really be outstanding as bonds. Hence the preferred stock form lacks basic justification, from an investment standpoint, in that it does not offer mutual advantages to both the issuer and the owner. Wherever the issuing business derives a real benefit from its discretionary right to suspend dividends, then the owner does not possess a fixed-value investment. And conversely, when the issue is a high-grade one, then the issuer derives no such benefit.
- The deduction that it is better to buy preferred stocks without rather than with bonds ahead of them is undoubtedly sound, since the latter group is clearly more vulnerable to adverse developments. But in our view the methods followed in this investigation are open to certain objections that greatly diminish the practical value of its other conclusions.8 One feature of the study, however, deserves particular comment. The detailed figures show in striking fashion that the stability of nearly every preferred stock considered was directly dependent upon an increase in the value of the common stock. The preferred stockholder had a satisfactory investment only while the common stock was proving a profitable speculation. As soon as any common stock declined in market value below the original price, the preferred shares did likewise.
- An investment subject to such conditions is clearly unwise. It is a case of: "Heads, the common stockholder wins; tails, the preferred stockholder loses." One of the basic principles of investment is that the safety of a security with limited return must never rest primarily upon the future expansion of profits. If the investor is positive that this expansion will take place, he should obviously buy the common stock and participate in its profits. If, as must usually be the case, he cannot be so certain of future prosperity, then he should not expose his capital to a risk of loss (by buying the preferred stock) without compensating opportunities for enhancement.

MINIMUM AVERAGE-EARNINGS COVERAGE

For investment For investment Class of preferred stocks

- Public utilities 2 times fixed charges plus preferred dividends
- Railroads 21/2 times fixed charges plus preferred dividends
- Industrials 4 times fixed charges plus preferred dividends

Minimum current stock-value ratio

For investment Class of preferred stocks

- Public utilities \$1₁½ bonds and preferred to \$1 junior stock
- Railroads \$1 bonds and preferred to \$1 junior stock

- Industrials \$1 bonds and preferred to \$11/2 junior stock
- The inherent unwisdom of subjecting investment selection to hard and fast rules of a qualitative character. In our view, the presence of bonds senior to a preferred stock is a fact which the investor must take carefully into account, impelling him to greater caution than he might otherwise exercise; but if the company's exhibit is sufficiently impressive the preferred stock may still be accorded an investment rating.
- The real point is that where a company has both bonds and preferred stock the preferred stock can be safe enough only if the bonds are much safer than necessary. Conversely, if the bonds are only just safe enough, the preferred stock cannot be sound.
- As a point of practical investment policy we should suggest that no matter how impressive may be the
 exhibit of a noncumulative preferred stock, it would be better to select a cumulative issue for purchase in
 order to enjoy better protection in the event of unexpected reverses.
- An outstanding record for a long period in the past, plus strong evidence of inherent stability, plus the
 absence of any concrete reason to expect a substantial change for the worse in the future, afford probably
 the only sound basis available for the selection of a fixed-value investment.

Chapter 16: Income Bonds & Guaranteed Securities

- The technique of analyzing an income-bond exhibit is identical with that for a preferred stock.
 Computations of earnings on the issue taken separately must, of course, be rigorously avoided, although such calculations are given by the statistical agencies.
 - We suggest that the minimum earnings coverage recommended in the preceding chapter for preferred stocks be required also for income bonds when selected as fixed-value investments.
- Needless to say, the value of any guaranty depends strictly upon the financial condition of the guarantor.
 If the guarantor has nothing, the guaranty is worthless.
- "Not the terms but the facts determine investment performance."
- It would seem good policy for investors, therefore, to favor bonds of this type, which carry the guaranty
 of a number of substantial enterprises, in preference to the obligations of a single company.

Chapter 17: Guaranteed Securities

- But the problem remains whether or not these rentals should be treated, in whole or in part, as the equivalent of fixed charges. To some extent, certainly, they are identical rather with fixed "overhead"—e.g., depreciation, taxes, general expense—which it has not been found feasible to add in with bond interest for the purpose of figuring a margin of safety. One type of solution is obvious: If the company meets the earnings test, even after adding rents paid to bond interest, the rent situation need not worry the investor.
- When the guaranteed security is outstanding against a separately operated property, its standing may
 depend either on its own results or on those of the guarantor. Hence the issue need be required to pass

only one of three alternative tests, based on (1) earnings of issuing company, independent of the guarantee; or (2) combined earnings and charges of the issuing and guarantor companies; or (3) earnings of guarantor company applied to its own charges plus its guarantees.

These examples suggest that just as investors are prone to underestimate the value of a guaranty by a strong company, they sometimes make the opposite mistake and attach undue significance to the fact that a company is controlled by another. From the standpoint of fixed-value investment, nothing of importance may be taken for granted. Hence a subsidiary bond should not be purchased on the basis of the showing of its parent company, unless the latter has assumed direct responsibility for the bond in question. In other cases the exhibit of the subsidiary itself can afford the only basis for the acceptance of its bond issues.

Chapter 18, 19, 20: Protective Covenants & Remedies of Senior Security Holders

- The contract between a corporation and the owners of its bonds is contained in a document called the indenture or deed of trust. The corresponding agreements relating to the rights of preferred stockholders are set forth in the Articles, or Certificate, of Incorporation. These instruments usually contain provisions designed to prevent corporate acts injurious to senior security holders and to afford remedies in case of certain unfavorable developments.
- Despite these undoubted reforms in reorganization technique, we shall be bold enough to venture the assertion that the ideal protective procedure for bondholders may often be found along other and simpler lines. In our opinion—given a sufficiently simple debt structure—the best remedy for all injuries suffered by bondholders is the immediate vesting in them of voting control over the corporation, together with an adequate mechanism to assure the intelligent exercise of such control. In many cases the creditors would then be able to marshal the company's resources and earnings for their own protection in such a way as to avoid recourse to expensive and protracted judicial proceedings.
- In the case of bonds or notes issued under a reorganization plan it is sometimes provided that their claim shall be junior to that of present or future bank loans. This is done to facilitate bank borrowings which otherwise could be effected only by the pledging of receivables or inventories as security.
- The provisions for maintaining working capital at a certain percentage of bonded debt, and for a certain ratio of current assets to current liabilities, are by no means standardized. They appear only in industrial bond indentures. The required percentages vary, and the penalties for nonobservance vary also. In most cases the result is merely the prohibition of dividends until the proper level or ratio of working capital is restored. In a few cases the principal of the bond issue may be declared due.
 - This criterion should ordinarily be set up in the indenture itself, so that the bondholder will be entitled to the maintenance of a satisfactory ratio throughout the life of the issue and to an adequate remedy if the figure declines below the proper point.
- We have previously advanced and discussed the suggestion that the bondholders' right to the appointment of trustees in the event of any default might well be replaced by a right to receive voting control over the enterprise. Whatever the reader's view as to the soundness of this suggestion as applied

to default in payment of interest or principal, we imagine that he will agree with us that it has merit in the case of "secondary" defaults, e.g., failure to maintain working capital as agreed or to make sinking-fund payments; for the present alternatives— either to precipitate insolvency or to do nothing at all—are alike completely unsatisfactory.

- In its modern form a sinking fund provides for the periodic retirement of a certain portion of a senior issue through payments made by the corporation. The sinking fund acquires the security by call, by means of sealed tenders, or by open-market purchases made by the trustee or the corporation. In the latter case the corporation turns in the bonds to the sinking fund in lieu of cash.
- The suggestion made in respect to the working-capital covenants, viz., that voting control be transferred to the bondholders in the event of default, is equally applicable to the sinking-fund provision. In our view that would be distinctly preferable to the present arrangement under which the bondholder must either do nothing to protect himself or else take the drastic and calamitous step of compelling bankruptcy.

The emphasis we have laid upon the proper kind of protective provisions for industrial bonds should not lead the reader to believe that the presence of such provisions carries an assurance of safety. This is far from the case. The success of a bond investment depends primarily upon the success of the enterprise and only to a very secondary degree upon the terms of the indenture. But while the protective covenants we have been discussing do not guarantee the safety of the issue, they nevertheless add to the safety and are therefore worth insisting upon.

- As we have previously pointed out, a combination of adequate voting-control provisions for preferred shares with their prompt and effective use could largely overcome the disadvantages inherent in the absence of an unqualified legal right to receive dividends. But until both these conditions are fulfilled, we must continue to stress the practical superiority for investors of the bond form over the preferredstock form.
- Fortunately for the bondholders in some of these cases, the indentures contain provisions prohibiting
 dividends or other distributions to the stockholders unless there is an adequate margin of resources
 above the indebtedness. From the foregoing discussion, it should be clear that these covenants are
 essential to the proper safeguarding of a bond issue.

Chapter 21: Supervision of Investment Holdings

- This 31/2% return appears substantially higher than the 21/2% obtainable from long-term United States government bonds and also more attractive than the 2 or 21/2% offered by savings banks. Nevertheless, if we take into account not only the effort required to make a proper selection but also the greater efforts entailed by the subsequent repeated check-ups, and if we then add thereto the still inescapable risk of depreciation or definite loss, it must be confessed that a rather plausible argument can be constructed against the advisability of fixed-value investments in general. The old idea of permanent, trouble-free holdings was grounded on the not illogical feeling that if a limited-return investment could not be regarded as trouble-free it was not worth making at all.
- We have, it is true, repeatedly argued against the acceptance of an admitted risk to principal without the presence of a compensating chance for profit. In so doing, however, we have not advocated speculation in place of investment but only intelligent speculation in preference to obviously unsound and ill advised forms of investment. We are convinced that the public generally will derive far better results from fixed-value investments, if selected with exceeding care, than from speculative operations, even though these may be aided by considerable education in financial matters. It may well be that the results of investment

will prove disappointing; but if so, the results of speculation would have been disastrous.

- It is generally understood that the investor should examine his holdings at intervals to see whether or not all of them may still be regarded as entirely safe and that if the soundness of any issue has become questionable, he should exchange it for a better one. In making such a "switch" the investor must be prepared to accept a moderate loss on the holding he sells out, which loss he must charge against his aggregate investment income.
- Exceptional Margins of Safety as Insurance against Doubt. The only effective means of meeting this difficulty lies in following counsels of perfection in making the original investment. The degree of safety enjoyed by the issue, as shown by quantitative measures, must be so far in excess of the minimum standards that a large shrinkage can be suffered before its position need be called into question. Such a policy should reduce to a very small figure the proportion of holdings about which the investor will subsequently find himself in doubt.
- Such a policy of demanding very high safety margins would obviously prove especially beneficial if a period of acute depression and market un-settlement should supervene. It is not practicable, however, to recommend this as a standard practice for all investors, because the supply of such strongly buttressed issues is too limited, and because, further, it is contrary to human nature for investors to take extreme precautions against future collapse when current conditions make for optimism.
- Hence it is impracticable, and in a sense unfair, to require investment banking houses to act as impartial
 advisers to buyers of securities; and, broadly speaking, it is unwise for the investor to rely primarily
 upon the advice of sellers of securities.
- In the purely speculative field the objection to paying for advice is that if the adviser knew whereof he spoke he would not need to bother with a consultant's duties. It may be that the profession of adviser on securities will find its most practicable field in the intermediate region, where the adviser will deal with problems arising from depreciated investments, and where he will propose advantageous exchanges and recommend bargain issues selling considerably below their intrinsic value.

Chapter 22: Privileged Issues

- Despite this impressive argument in favor of privileged senior issues as a form of investment, we must recognize that actual experience with this class has not been generally satisfactory. For this discrepancy between promise and performance, reasons of two different kinds may be advanced. The first is that only a small fraction of the privileged issues have actually met the rigorous requirements of a sound investment. The conversion feature has most often been offered to compensate for inadequate security.
- It was also broadly true that the strongly entrenched industrial enterprises raised money through sales of common stock, whereas the weaker—or weakly capitalized—undertakings resorted to privileged senior securities.
- From these contrasting instances an investment principle may be developed that should afford a valuable guide to the selection of privileged senior issues. The principle is as follows: A privileged senior issue, selling close to or above face value, must meet the requirements either of a straight fixed-value investment or of a straight common-stock speculation, and it must be bought with one or the other qualification clearly in view.

- The alternative given supplies two different approaches to the purchase of a privileged security. It may be bought as a sound investment with an incidental chance of profit through an enhancement of principal, or it may be bought primarily as an attractive form of speculation in the common stock. Generally speaking, there should be no middle ground. The investor interested in safety of principal should not abate his requirements in return for a conversion privilege; the speculator should not be attracted to an enterprise of mediocre promise because of the pseudo security provided by the bond contract.
- Having stated a basic principle to guide the selection of privileged issues, we ask next what rules can be
 established regarding their subsequent retention or sale. Convertibles bought primarily as a form of
 commitment in the common stock may be held for a larger profit than those acquired from the
 investment standpoint.

But when the purchase is made primarily as a safe bond investment, then the limitation on the amount of profit that can conservatively be waited for comes directly into play. For the reasons explained in detail above, the conservative buyer of privileged issues will not ordinarily hold them for more than a 25 to 35% advance. This means that a really successful investment operation in the convertible field does not cover a long period of time. Hence such issues should be bought with the possibility of long-term holding in mind but with the hope that the potential profit will be realized fairly soon.

In the typical case, a convertible bond should not be converted by the investor. It should be either held or sold.

It must be recognized that there is something insidious about even a good convertible bond; it can easily prove a costly snare to the unwary. To avoid this danger the investor must cling determinedly to a conservative viewpoint. When the price of his bond has passed out of the investment range, he must sell it; most important of all, he must not consider his judgment impugned if the bond subsequently rises to a much higher level. The market behavior of the issue, once it has entered the speculative range, is no more the investor's affair than the price gyrations of any speculative stock about which he knows nothing

A continued policy of investment in privileged issues would, under favorable conditions, require rather frequent taking of profits and replacement by new securities not selling at an excessive premium. More concretely, a bond bought at 100 would be sold, say, at 125 and be replaced by another good convertible issue purchasable at about par. It is not likely that satisfactory opportunities of this kind will be continuously available or that the investor would have the means of locating all those that are at hand. But the trend of financing in recent years offers some promise that a fair number of really attractive convertibles may again make their appearance.

Chapter 23: Technical Characteristics of Privileged Senior Securities

- It is undoubtedly true that it is more profitable to select the right company than to select the issue with the most desirable terms.
- The amount of speculative interest attaching to a convertible or warrant-bearing senior security is equal
 to the current market value of the number of shares of stock covered by the privilege. Other things being
 equal, the larger the amount of the speculative interest per dollar of investment the more attractive the
 privilege.

Examples: Rand Kardex 51/2s, previously described, carried warrants to buy 221/2 shares of Class A stock initially at 40. Current price of Class A stock was 42. The "speculative interest" amounted to 221/2 42, or \$945 per \$1,000 bond.

- It may be said parenthetically that a speculative interest in a large number of shares selling at a low price is technically more attractive than one in a smaller number of shares selling at a high price. This is because low-priced shares are apt to fluctuate over a wider range percentage wise than higher priced stocks. Hence if a bond is both well secured and convertible into many shares at a low price, it will have an excellent chance for very large profit without being subject to the offsetting risk of greater loss through a speculative dip in the price of the stock.
- In examining the terms of a profit-sharing privilege, three component elements are seen to enter. These are:
 - a. The extent of the profit-sharing or speculative interest per dollar of investment.
 - b. The closeness of the privilege to a realizable profit at the time of purchase.
 - c. The duration of the privilege.
- A privilege having a long period to run is in that respect more desirable than one expiring in a short time.
 The nearer the current price of the stock to the level at which conversion or subscription becomes profitable the more attractive does the privilege become.
- From the theoretical standpoint, a participating feature—unlimited in time and possible amount—is the most desirable type of profit-sharing privilege. This arrangement enables the investor to derive the specific benefit of participation in profits (viz., increased income) without modifying his original position as a senior-security holder. These benefits may be received over a long period of years. By contrast, a conversion privilege can result in higher income only through actual exchange into the stock and consequent surrender of the senior position.
- The price of the common stock is made largely by speculators interested chiefly in quick profits, to secure which they need an active market. The preferred stock, being closely held, is relatively inactive. Consequently the speculators are willing to pay several points more for the inferior common issue simply because it can be bought and sold more readily and because other speculators are likely to be willing to pay more for it also.

The paradoxical principle holds true for the securities market generally that in the absence of a special demand relative scarcity is likely to make for a lower rather than a higher price.

Let us consider what courses of conduct are open to holders of each type in the favorable event that the
company prospers, that a high dividend is paid on the common, and that the common sells at a high
price.

1. Holder of a participating issue:

- a. May sell at a profit.
- b. May hold and receive participating income.

- 2. Holder of a convertible issue:
- a. May sell at a profit.
- b. May hold but will receive no benefit from high common dividend.
- c. May convert to secure larger income but sacrifices his senior position.

3. Holder of an issue with stock-purchase warrants:

- a. May sell at a profit.
- b. May hold but will receive no benefit from high common dividend.
- c. May subscribe to common to receive high dividend. He may invest new capital, or he may sell or apply his security ex-warrants to provide funds to pay for the common. In either case he undertakes the risks of a common stockholder in order to receive the high dividend income.
- d. May dispose of his warrants at a cash profit and retain his original security, ex-warrants. (The warrant may be sold directly, or he may subscribe to the stock and immediately sell it at the current indicated profit.)
- To summarize this section, it may be said that, for long-pull holding, a sound participating issue represents the best form of profit-sharing privilege. From the standpoint of maximum price advance under favorable market conditions, a senior issue with detachable stock purchase warrants is likely to show the best results. Furthermore, subscription-warrant issues as a class have definite advantages in that the privilege is ordinarily not subject to curtailment through early redemption of the security, and they permit the realization of a speculative profit while retaining the original investment position.

Chapter 24: Technical Aspects of Convertible Issues

- The sliding-scale privilege on a "block" basis belongs to the objectionable category of devices that tend to mislead the holder of securities as to the real nature and value of what he owns. The competitive pressure to take advantage of a limited opportunity introduces an element of compulsion into the exercise of the conversion right which is directly opposed to that freedom of choice for a reasonable time which is the essential merit of such a privilege. There seems no reason why investment bankers should inject so confusing and contradictory a feature into a security issue. Sound practice would dictate its complete abandonment or in any event the avoidance of such issues by intelligent investors.
- Some bonds are convertible into other bonds. The usual case is that of a short-term issue, the holder of which is given the right to exchange into a long-term bond of the same company. The holder thus has an option either to demand repayment at an early date or to make a long-term commitment in the enterprise. In practice, this amounts merely to the chance of a moderate profit at or before maturity, in the event that the company prospers, or interest rates fall, or both.
- The privilege of converting is sometimes not operative immediately upon issuance of the obligation. (Delayed Conversion Privilege)

Chapter 25: Senior Securities With Warrants & Participating Issues

- Stock-purchase warrants are either detachable, nondetachable, or nondetachable for a certain period and detachable thereafter. A detachable warrant may be exercised upon presentation of the warrant alone. Hence it may be sold separately from the issue of which it originally formed a part. A nondetachable warrant or right may be exercised only in conjunction with the senior issue; i.e., the bond or preferred stock must be physically presented at the time of making payment for the common shares. Hence such warrants may not be dealt in separately.
- In an active stock market, separate option warrants are popular with speculators (as pointed out before),

and they sell at considerable premiums above their immediately realizable value. Other things being equal, therefore, an issue with detachable warrants will sell higher than one with a non-separable right.

- Participating issues require two kinds of calculation: one showing the number of times the fixed interest
 or dividend is earned, and the other showing the amount per share or per bond available for distribution
 under the participation privilege.
- "Parity," "Premium," and "Discount." When the price of a convertible bond or preferred is exactly equivalent, on an exchange basis, to the current price of the common stock, the two issues are said to be selling at a parity. When the price of the senior issue is above parity it is said to be selling at a premium, and the difference between its price and conversion parity is called the amount of the premium, or the "spread." Conversely if the price of the convertible is below parity, the difference is sometimes called the discount.
- If the senior issue may be promptly exchanged for the common, a discount results in creating an arbitrage opportunity. This is a chance to make a profit (usually small) without risk of loss by: (1) simultaneously buying the senior issue and selling the common stock; (2) immediately converting the senior issue into the common stock; and (3) delivering the common stock against the sale, thus completing the transaction. Arbitraging of this "open and-shut" kind is done rather extensively in active, rising markets.
- Switching. As a practical rule, therefore, holders of common stocks who wish to retain their interest in the company should always exchange into a convertible senior issue of the enterprise, whenever it sells both at an investment level on its own account and also close to parity on a conversion basis. Just how large a premium a common stockholder should be willing to pay in making such an exchange is a matter of individual judgment. Because of his confidence in the future of his company, he is usually unwilling to pay anything substantial for insurance against a decline in value. But experience shows that he would be wise to give up somewhat more than he thinks is necessary in order to secure the strategic advantages that even a fairly sound convertible issue possesses over a common stock.
- These advantages of a strong convertible issue over a common stock become manifest when the market declines. The price of the senior issue will ordinarily suffer less severely than the common, so that a good sized spread may thereby be established, instead of the near-parity previously existing. This possibility suggests a special form of market operation, known as "hedging," in which the operator buys the convertible and sells the common stock short against it, at an approximate parity. In the event of a protracted rise, he can convert the senior issue and thus close out the transaction at only a slight loss, consisting of the original spread plus carrying expenses. But if the market declines substantially, he can "undo" the operation at a considerable profit, by selling out the senior issue and buying back the common.
- Since there was no chance of loss on the transaction, a considerable part of the cost of the preferred stock could properly be borrowed, thus largely increasing the percentage of profit on the capital supplied by the operator. With favorable surrounding conditions, operations of this kind offer a chance for large gains against a small maximum loss. They are particularly suitable as a form of protection against other financial commitments, for they yield their profit in a declining market when other holdings are likely to show losses.
- An exhaustive discussion of hedging would fall outside the scope of this volume, and for this reason we shall merely list below certain elements that the experienced hedger will take into account in embarking upon such operations:

- 1. Ability to borrow stock sold and to maintain short position indefinitely.
- 2. Original cost of establishing position, including spread and commissions.
- 3. Cost of maintaining the position, including interest charges on long holdings, dividends on short stock, possible premiums payable for borrowing stock, and stamp taxes in connection with reborrowings of stock—less offsets in the forms of dividends or interest receivable on long securities and possible interest credit on short position.
- 4. Amount of profit at which operation will probably be closed out if opportunity offers. Relationship between this maximum profit and probable maximum loss, consisting of (2) plus (3)
- An Intermediate Form of Hedging. An intermediate form of hedging consists of purchasing a convertible issue and selling only part of the related common shares, say, one-half of the amount receivable upon conversion. On this basis a profit may be realized in the event of either a substantial advance or a substantial decline in the common stock. This is probably the most scientific method of hedging, since it requires no opinion as to the future course of prices. An ideal situation of this kind would meet the following two requirements:
 - 1. A strongly entrenched senior issue that can be relied on to maintain a price close to par even if the common should drop precipitately. A good convertible bond, maturing in a short time, is an ideal type for this purpose.
 - 2. A common stock in which the speculative interest is large and that is therefore subject to wide fluctuations in either direction. An example of this form of hedge is supplied by operations carried on in 1918–1919 in Pierce Oil 6s, due in 1920, and the company's common stock.

The advantages possessed by convertibles, along the lines just described, are shared also by participating and purchase-warrant issues.

Chapter 26: Senior Securities of Questionable Safety

- Common-stock Approach Preferable. We believe, however, that the sounder and more fruitful approach to the field of speculative senior securities lies from the direction of common stocks. This will carry with it a more thorough appreciation of the risk involved and therefore a greater insistence upon either reasonable assurance of safety or especially attractive possibilities of profit or both. It induces also—among intelligent security buyers at least—a more intensive examination of the corporate picture than would ordinarily be made in viewing a security from the investment angle.
- The field of speculative values proper would therefore commence somewhere near the 70 level (for bonds with a coupon rate of 4% or larger) and would offer maximum possibilities of appreciation of at least 50% of the cost. (In the case of other senior issues, 70% of normal value might be taken as the dividing line.) In making such commitments, it is recommended that the same general attitude be taken as in the careful purchase of a common stock; in other words, that the income account and the balance sheet be submitted to the same intensive analysis and that the same effort be made to evaluate future possibilities—favorable and unfavorable.
- We have already mentioned that the unpopularity of speculative senior securities tends to make them sell
 at lower prices than common stocks, in relation to their intrinsic value. From the standpoint of the
 intelligent buyer this must be considered a point in their favor.

- The fixed obligation to pay bond interest will usually result in the continuation of such payments as long as they are in any way possible. If we assume that a fairly large proportion of a group of carefully selected low-priced bonds will escape default, the income received on the group as a whole over a period of time will undoubtedly far exceed the dividend return on similarly priced common stocks.
- Sinking-fund provisions, for bonds as well as preferred stocks, contribute to the improvement of both the
 market quotation and the intrinsic position of the issue. This advantage is not found in the case of
 common stocks.
- Importance of Large Net-current-asset Coverage. Where a low-priced bond is covered several times over by net current assets, it presents a special type of opportunity, because experience shows that the chances of repayment are good, even though the earnings may be poor or irregular.
- In the typical case of this kind the chance of profit will exceed the chance of loss, and the probable amount of profit will exceed the probable amount of loss. It may well be that the risk involved in each individual case is still so considerable as to preclude us from applying the term "investment" to such a commitment. Nevertheless, we suggest that if the insurance principle of diversification of risk be followed by making a number of such commitments at the same time, the net result should be sufficiently dependable to warrant our calling the group purchase an investment operation.
- We must distinguish, therefore, between the mere fact that the working capital, as reported, covers the funded debt and the more significant fact that it exceeds the bond issue many times over. The former statement is always interesting, but by no means conclusive. If added to other favorable factors, such as a good earnings coverage in normal years and a generally satisfactory qualitative showing, it might make the issue quite attractive but preferably as part of a group-purchase in the field.
- Both as a safeguard against being led astray by the propaganda that is characteristic of the third stage and also as a general guide in dealing with speculative senior issues, the following principle of security analysis is presented, which we shall call "the rule of maximum valuation for senior issues."
 - A senior issue cannot be worth, intrinsically, any more than a common stock would be worth if it occupied the position of that senior issue, with no junior securities outstanding.
- This relationship must hold true regardless of how high the coupon or dividend rate, the par value or the redemption price of the senior issue may be and, particularly, regardless of what amount of unpaid interest or dividends may have accumulated. For if we had a preferred stock with accumulations of \$1,000 per share, the value of the issue could be no greater than if it were a common stock (without dividend accumulations) representing complete ownership of the business. The unpaid dividends cannot create any additional value for the company's securities in the aggregate; they merely affect the division of the total value between the preferred and the common.
- American Zinc preferred stock was created in 1916 as a stock dividend on the common, the transaction thus amounting to a split-up of old common into preferred and new common. The preferred was given a stated par of \$25 but had all the attributes of a \$100-par stock (\$6 cumulative dividends, redemption and liquidating value of \$100). This arrangement was evidently a device to permit carrying the preferred issue in the balance sheet as a much smaller liability than it actually represented.
- We may use the American Zinc example to demonstrate the practical application of our "rule of maximum valuation for senior issues." Was American Zinc Preferred too high at 118 in 1928? Assuming the preferred stockholders owned the company completely, this would then mean a price of 118 for a common stock earning \$6 per share in 1928 after eight years of deficits. Even in the hectic days of 1928 speculators would not have been at all attracted to such a common stock at that price, so that the

application of our rule should have prevented the purchase of the preferred stock at its inflated value.

On the other hand, our "rule of maximum valuation" merely states that the value of Preferred alone cannot exceed value of Common'. This should hold true in practice as well as in theory, except in so far as manipulative or heedlessly speculative activity brushes aside all rational considerations.

Chapter 27: The Theory of Common Stock Investment

- "As far as the typical common stock is concerned—an issue picked at random from the list—an analysis, however elaborate, is unlikely to yield a dependable conclusion as to its attractiveness or its real value. But in individual cases, the exhibit may be such as to permit reasonably confident conclusions to be drawn from the processes of analysis."
- American Can was a typical example of a prewar speculative stock. It was speculative for three good and sufficient reasons: (1) It paid no dividend; (2) its earnings were small and irregular; (3) the issue was "watered," i.e., a substantial part of its stated value represented no actual investment in the business.
 - By contrast, Pennsylvania, Atchison, and National Biscuit were regarded as investment common stocks—also for three good and sufficient reasons: (1) They showed a satisfactory record of continued dividends; (2) the earnings were reasonably stable and averaged substantially in excess of the dividends paid; and (3) each dollar of stock was backed by a dollar or more of actual investment in the business.
- Hence the prewar relationship between analysis and investment on the one hand and price changes and speculation on the other may be set forth as follows: Investment in common stocks was confined to those showing stable dividends and fairly stable earnings; and such issues in turn were expected to maintain a fairly stable market level. The function of analysis was primarily to search for elements of weakness in the picture. If the earnings were not properly stated; if the balance sheet revealed a poor current position, or the funded debt was growing too rapidly; if the physical plant was not properly maintained; if dangerous new competition was threatening, or if the company was losing ground in the industry; if the management was deteriorating or was likely to change for the worse; if there was reason to fear for the future of the industry as a whole—any of these defects or some other one might be sufficient to condemn the issue from the standpoint of the cautious investor.

On the positive side, analysis was concerned with finding those issues which met all the requirements of investment and in addition offered the best chance for future enhancement. The process was largely a matter of comparing similar issues in the investment class, e.g., the group of dividend-paying Northwestern railroads. Chief emphasis would be laid upon the relative showing for past years, in particular the average earnings in relation to price and the stability and the trend of earnings. To a lesser extent, the analyst sought to look into the future and to select the industries or the individual companies that were likely to show the most rapid growth.

Another useful approach to the attitude of the prewar common-stock investor is from the standpoint of taking an interest in a private business. The typical common-stock investor was a business man, and it seemed sensible to him to value any corporate enterprise in much the same manner as he would value his own business. This meant that he gave at least as much attention to the asset values behind the shares as he did to their earnings records. It is essential to bear in mind the fact that a private business has always been valued primarily on the basis of the "net worth" as shown by its statement. A man contemplating the purchase of a partnership or stock interest in a private undertaking will always start with the value of

that interest as shown "on the books," i.e., the balance sheet, and will then consider whether or not the record and prospects are good enough to make such a commitment attractive. An interest in a private business may of course be sold for more or less than its proportionate asset value; but the book value is still invariably the starting point of the calculation, and the deal is finally made and viewed in terms of the premium or discount from book value involved.

- We thus see that investment in common stocks was formerly based upon the threefold concept of: (1) a suitable and established dividend return, (2) a stable and adequate earnings record, and (3) a satisfactory backing of tangible assets. Each of these three elements could be made the subject of careful analytical study, viewing the issue both by itself and in comparison with others of its class. Common-stock commitments motivated by any other viewpoint were characterized as speculative, and it was not expected that they should be justified by a serious analysis.
- The new theory or principle may be summed up in the sentence: "The value of a common stock depends entirely upon what it will earn in the future." From this dictum the following corollaries were drawn: 1. That the dividend rate should have slight bearing upon the value. 2. That since no relationship apparently existed between assets and earning power, the asset value was entirely devoid of importance.
- The combination of these two ideas supplied the "investment theory" upon which the 1927–1929 stock market proceeded. Amplifying the principle stated on page 355, the theory ran as follows:
 - 1. "The value of a common stock depends on what it can earn in the future."
 - 2. "Good common stocks are those which have shown a rising trend of earnings."
 - 3. "Good common stocks will prove sound and profitable investments."

These statements sound innocent and plausible. Yet they concealed two theoretical weaknesses that could and did result in untold mischief. The first of these defects was that they abolished the fundamental distinctions between investment and speculation. The second was that they ignored the price of a stock in determining whether or not it was a desirable purchase.

- The notion that the desirability of a common stock was entirely independent of its price seems incredibly absurd. Yet the new-era theory led directly to this thesis. If a public-utility stock was selling at 35 times its maximum recorded earnings, instead of 10 times its average earnings, which was the pre-boom standard, the conclusion to be drawn was not that the stock was now too high but merely that the standard of value had been raised. Instead of judging the market price by established standards of value, the new era based its standards of value upon the market price.
- The book is entitled Common Stocks as Long-term Investments, by Edgar Lawrence Smith, published in 1924. Common stocks were shown to have a tendency to increase in value with the years, for the simple reason that they earned more than they paid out in dividends and thus the reinvested earnings added to their worth. In a representative case, the company would earn an average of 9%, pay 6% in dividends, and add 3% to surplus. With good management and reasonable luck the fair value of the stock would increase with its book value, at the annual rate of 3% compounded.

This was, of course, a theoretical rather than a standard pattern, but the numerous instances of results poorer than "normal" might be offset by examples of more rapid growth.

 In fact their rush to take advantage of the inherent attractiveness of common stocks itself produced conditions entirely different from those which had given rise to this attractiveness and upon which it basically depended, viz., the fact that earnings had averaged some 10% on market price. As we have seen, Edgar Lawrence Smith plausibly explained the growth of common-stock values as arising from the building up of asset values through the reinvestment of surplus earnings.

See Gabriel Preinreich, The Theory of Dividends, New York, 1935; and J. B. Williams, The Theory of Investment Value, Cambridge, Mass., 1938. The latter work is built on the premise that the value of a common stock is equal to the present value of all future dividends.

This principle gives rise to an elaborate series of mathematical equations designed to calculate exactly what a common stock is worth, assuming certain vital facts about future earnings, distribution policy and interest rates.

Chapter 28: Newer Canons of Common Stock Investment

- 1. Investment is conceived as a group operation, in which diversification of risk is depended upon to yield a favorable average result.
- 2. The individual issues are selected by means of qualitative and quantitative tests corresponding to those employed in the choice of fixed-value investments.
- 3. A greater effort is made, than in the case of bond selection, to determine the future outlook of the issues considered. Whether or not a policy of common-stock acquisition.
- This philosophy of investment is set forth at some length in the 1938 report of National Investors Corporation, an investment trust, from which we quote as follows:

The studies by this organization, directed specifically toward improved procedure in selection, afford evidence that the common stocks of growth companies—that is, companies whose earnings move forward from cycle to cycle, and are only temporarily interrupted by periodic business depressions—offer the most effective medium of investment in the field of common stocks, either in terms of dividend return or longer term capital appreciation. We believe that this general conclusion can be demonstrated statistically and is supported by economic analysis and practical reasoning.

In considering this statement critically, we must start with the emphatic but rather obvious assertion that the investor who can successfully identify such "growth companies" when their shares are available at reasonable prices is certain to do superlatively well with his capital. Nor can it be denied that there have been investors capable of making such selections with a high degree of accuracy and that they have benefited hugely from their foresight and good judgment.

The third source of difficulty is perhaps the greatest. Assuming a fair degree of confidence on the part of the investor that the company will expand in the future, what price is he justified in paying for this attractive element? Obviously, if he can get a good future for nothing, i.e., if the price reflects only the past record, he is making a sound investment. But this is not the case, of course, if the market itself is counting on future growth. Characteristically, stocks thought to have good prospects sell at relatively high prices. How can the investor tell whether or not the price is too high?

We think that there is no good answer to this question —in fact we are inclined to think that even if one knew for a certainty just what a company is fated to earn over a long period of years, it would still be impossible to tell what is a fair price to pay for it today. It follows that once the investor pays a substantial amount for the growth factor, he is inevitably assuming certain kinds of risk; viz., that the growth will be less than he anticipates, that over the long pull he will have paid too much for what he gets, that for a considerable period the market will value the stock less optimistically than he does.

- On the other hand, assume that the investor strives to avoid paying a high premium for future prospects by choosing companies about which he is personally optimistic, although they are not favorites of the stock market. No doubt this is the type of judgment that, if sound, will prove most remunerative. But, by the very nature of the case, it must represent the activity of strong-minded and daring individuals rather than investment in accordance with accepted rules and standards.
- Our emphasis has been laid more on the pitfalls of investing for future growth than on its advantages.
 But we repeat that this method may be followed successfully if it is pursued with skill, intelligence and diligent study.

If so, is it appropriate to call such purchases by the name of "investment"? Our answer is "yes," provided that two factors are present: the first, already mentioned, that the elements affecting the future are examined with real care and a wholesome scepticism, rather than accepted quickly via some easy generalization; the second, that the price paid be not substantially different from what a prudent business man would be willing to pay for a similar opportunity presented to him to invest in a private undertaking over which he could exercise control.

- In either case the "margin of safety" resides in the discount at which the stock is selling below its minimum intrinsic value, as measured by the analyst.
- Third, the method itself requires a considerable amount of human fortitude. It generally involves buying and selling when the prevalent psychology favors the opposite course, watching one's shares go lower after purchase and higher after sale and often staying out of the market for long periods (e.g., 1927–1930) when most people are actively interested in stocks. But despite these disadvantages, which we do not minimize, it is our view that this method has a good deal to commend it to those temperamentally qualified to follow it.
- "An investment operation is one that can be justified on both qualitative and quantitative grounds." Benjamin Graham
- Of more practical importance is the question whether or not investment can be successfully carried on in common stocks that appear cheap from the quantitative angle and that—upon study—seem to have average prospects for the future. Securities of this type can be found in reasonable abundance, as a result of the stock market's obsession with companies considered to have unusually good prospects of growth. Because of this emphasis on the growth factor, quite a number of enterprises that are long established, well financed, important in their industries and presumably destined to stay in business and make profits indefinitely in the future, but that have no speculative or growth appeal, tend to be discriminated against by the stock market—especially in years of subnormal profits—and to sell for considerably less than the business would be worth to a private owner.

Note that we have applied the touchstone of "value to a private investor" to justify two different types of investment in common stocks: (1) purchase of issues thought to have exceptional prospects at no higher price than would be paid for a corresponding interest in a private business, and (2) purchase of issues with good records and average prospects at a much lower price than the business is worth to a private owner.

We incline strongly to the belief that this last criterion—a price far less than value to a private owner—will constitute a sound touchstone for the discovery of true investment opportunities in common stocks. This view runs counter to the convictions and practice of most people seeking to invest in equities, including practically all the investment trusts. Their emphasis is mainly on long-term growth, prospects

for the next year, or the indicated trend of the stock market itself.

Chapter 29: The Dividend Factor In Common Stock Analysis

- A NATURAL classification of the elements entering into the valuation of a common stock would be under the three headings:
 - 1. The dividend rate and record.
 - 2. Income-account factors (earning power).
 - 3. Balance-sheet factors (asset value).
- It is considered proper managerial policy to withhold current earnings from stockholders, for the sake of any of the following advantages:
 - 1. To strengthen the financial (working-capital) position.
 - 2. To increase productive capacity.
 - 3. To eliminate an original over-capitalization.
- The weakness of the foregoing reasoning rests of course in the major premise. Whatever benefits a business benefits its owners, provided the benefit is not conferred upon the corporation at the expense of the stockholders. Taking money away from the stockholders and presenting it to the company will undoubtedly strengthen the enterprise, but whether or not it is to the owners' advantage is an entirely different question. It is customary to commend managements for "plowing earnings back into the property"; but, in measuring the benefits from such a policy, the time element is usually left out of account. It stands to reason that, if a business paid out only a small part of its earnings in dividends, the value of the stock should increase over a period of years, but it is by no means so certain that this increase will compensate the stockholders for the dividends withheld from them, particularly if interest on these amounts is compounded.
- One of the obstacles in the way of an intelligent understanding by stockholders of the dividend question is the accepted notion that the determination of dividend policies is entirely a managerial function, in the same way as the general running of the business. This is legally true, and the courts will not interfere with the dividend action or inaction except upon an exceedingly convincing showing of unfairness. But if stockholders' opinions were properly informed, it would insist upon curtailing the despotic powers given the directorate over the dividend policy.
 - Experience shows that these unrestricted powers are likely to be abused for various reasons. Boards of directors usually consist largely of executive officers and their friends. The officers are naturally desirous of retaining as much cash as possible in the treasury, in order to simplify their financial problems; they are also inclined to expand the business persistently for the sake of personal aggrandizement and to secure higher salaries. This is a leading cause of the unwise increase of manufacturing facilities which has proved recurrently one of the chief unsettling factors in our economic situation.
- In the case of United States Steel Corporation, the original capitalization exceeded tangible assets by no less than \$768,000,000, representing all the common and more than half the preferred stock. This "water" in the balance sheet was not shown as a good-will item, as in the case of Woolworth, but was concealed by an overvaluation of the fixed assets (i.e., of the "Property Investment Accounts"). Through various accounting methods, however, the management applied earnings from operations to the writing off of these intangible or fictitious assets.
- Experience would confirm the established verdict of the stock market that a dollar of earnings is worth

more to the stockholder if paid him in dividends than when carried to surplus. The common-stock investor should ordinarily require both an adequate earning power and an adequate dividend. If the dividend is disproportionately small, an investment purchase will be justified only on an exceptionally impressive showing of earnings (or by a very special situation with respect to liquid assets). On the other hand, of course, an extra-liberal dividend policy cannot compensate for inadequate earnings, since with such a showing the dividend rate must necessarily be undependable.

- * The dividend rate is the amount of annual dividends paid per share, expressed either in dollars or as a percentage of a \$100 par value. (If the par value is less than \$100, it is inadvisable to refer to the dividend rate as a percentage figure since this may lead to confusion.)
- * The earnings rate is the amount of annual earnings per share, expressed either in dollars or as a percentage of a \$100 par value.
- * The dividend ratio, dividend return or dividend yield, is the ratio of the dividend paid to the market price (e.g., a stock paying \$6 annually and selling at 120 has a dividend ratio of 5%).
- * The earnings ratio, earnings return or earnings yield, is the ratio of the annual earnings to the market price (e.g., a stock earning \$6 and selling at 50 shows an earnings yield of 12%).
- If the investor makes a small concession in dividend yield below the standard, he is entitled to demand a
 more than corresponding increase in the earning power above standard.
- The sensible remedy would be to transfer to the stockholder the task of averaging out his own annual income return. Since the common-stock investor must form some fairly satisfactory opinion of average earning power, which transcends the annual fluctuations, he may as readily accustom himself to forming a similar idea of average income. As in fact the two ideas are substantially identical, dividend fluctuations of this kind would not make matters more difficult for the common-stock investor. In the end such fluctuations will work out more to his advantage than the present method of attempting, usually unsuccessfully, to stabilize the dividend by large additions to the surplus account.
- In view of the skepticism that we have expressed as to whether or not stockholders are really benefited by dividend-withholding policies, we may be thought sympathetic to the idea of preventing reinvestment of profits by imposing penalty taxes thereon. This is far from true. Dividend and reinvestment policies should be controlled not by law but by the intelligent decision of stockholders. Individual cases may well justify retention of earnings to an extent far greater than is ordinarily desirable.

The practice should vary with the circumstances; the policy should be determined and proposed in the first instance by the management; but it should be subject to independent consideration and appraisal by stockholders in their own interest, as distinguished from that of the corporation as a separate entity or the management as a special group.

Chapter 30: Stock Dividends

DISTRIBUTIONS MADE in the form of stock instead of cash are of two kinds, which may be called
extraordinary and periodic. An extraordinary stock dividend may be defined as one that capitalizes part
of the accumulated surplus of past years; i.e., it transfers a substantial amount from the accumulated
surplus to stated capital and gives the stockholders additional shares to represent the funds thus
transferred.

A periodic stock dividend may be defined as one that capitalizes part of only the current year's earnings. Hence it is almost always of relatively small size. It is called periodic because such dividends are usually repeated over a number of years in accordance with an established policy.

- Extraordinary stock dividends and stock split-ups are both open to the serious objection that their
 declaration exercises an undue influence upon market prices and hence that they afford an avenue for
 manipulation and for unfair profits by insiders.
- Stock speculation is largely a matter of A trying to decide what B, C and D are likely to think—with B, C and D trying to do the same. Hence a stock dividend, even if it has no real significance of any kind, can and does serve as a stimulus to that mutual attempt at taking advantage of each other which often lies at the bottom of speculators' activities.
- Since investors are legitimately interested in the cash dividend, they must necessarily be interested also
 in any stock dividend, for this may have a bearing upon the probable cash dividend. The dividend
 history of a successful industrial corporation frequently discloses the following sequence:
 - 1. A protracted period of small dividends in relation to earnings, with the up-building of a huge surplus.
 - 2. The sudden payment of a large stock dividend.
 - 3. An immediate increase in the regular cash dividend payments.
- When the market price is kept far below the true value of the shares by an unduly "conservative" dividend policy. It is fully as objectionable, of course, to pursue a policy calculated to create a market price higher than that warranted by the earnings and other value factors. Such an unjustified price must necessarily be of temporary duration and is likely to result (as does all improper accounting) in giving the initiated an unfair advantage over the investing public.
- Stock dividends may be paid in preferred stock instead of common stock.
- Our conception of suitable dividend policies, discussed at length in this and the preceding chapter, may
 be summed up in the following three statements:
 - 1. Withholding and reinvestment of a substantial part of the earnings must be clearly justified to the stockholders on the grounds of concrete benefits therefrom exceeding the value of the cash if paid to the stockholders. Such withholding should be specifically approved by the stockholders.
 - 2. If retention of profits is in any sense a matter of necessity rather than choice, the stockholders should be advised of this fact, and the amounts involved should be designated as "reserves" instead of as "surplus profits."
 - 3. Earnings voluntarily retained in the business should be capitalized in good part by the periodic issuance of additional stock, with current market value not exceeding such reinvested earnings. If the additional capital is subsequently found no longer to be needed in the business, it should be distributed to the shareholders against the retirement of the stock previously issued to represent it.

Chapter 31: Analysis of The Income Account

When an investor was able to take very much the same attitude in valuing shares of stock as in valuing his own business, he was dealing with concepts familiar to his individual experience and matured judgment. Given sufficient information, he was not likely to go far astray, except perhaps in his estimate of future earning power. The interrelations of balance sheet and income statement gave him a double check on intrinsic values, which corresponded to the formulas of banks or credit agencies in appraising the eligibility of the enterprise for credit.

- Now that common-stock values have come to depend exclusively upon the earnings exhibit, a gulf has been created between the concepts of private business and the guiding rules of investment. When the business man lays down his own statement and picks up the report of a large corporation, he apparently enters a new and entirely different world of values. For certainly he does not appraise his own business solely on the basis of its recent operating results without reference to its financial resources.
- When in his capacity as investor or speculator the business man elects to pay no attention whatever to corporate balance sheets, he is placing himself at a serious disadvantage in several different respects: In the first place, he is embracing a new set of ideas that are alien to his everyday business experience.

In the second place, instead of the twofold test of value afforded by both earnings and assets, he is relying upon a single and therefore less dependable criterion.

In the third place, these earnings statements on which he relies exclusively are subject to more rapid and radical changes than those which occur in balance sheets. Hence an exaggerated degree of instability is introduced into his concept of stock values.

In the fourth place, the earnings statements are far more subject to misleading presentation and mistaken inferences than is the typical balance sheet when scrutinized by an investor of experience.

Wall St.'s method of appraising common stocks:

 $Price = current \ earnings \ per \ share \ X \ quality \ coefficient.$

The result of this procedure is that in most cases the "earnings per share" have attained a weight in determining value that is equivalent to the weight of all the other factors taken together. The truth of this is evident if it be remembered that the "quality coefficient" is itself largely determined by the earnings trend, which in turn is taken from the stated earnings over a period.

- It goes without saying, none the less, that security analysis must devote thoroughgoing study to corporate income accounts. It will aid our exposition if we classify this study under three headings, viz.:
 - 1. The accounting aspect. Leading question: What are the true earnings for the period studied?
 - 2. The business aspect. Leading question: What indications does the earnings record carry as to the future earning power of the company?
 - 3. The aspect of investment finance. Leading question: What elements in the earnings exhibit must be taken into account, and what standards followed, in endeavoring to arrive at a reasonable valuation of the shares?
- But from the standpoint of common-stock analysis these audited statements may require critical interpretation and adjustment, especially with respect to three important elements:
 - 1. Non-recurrent profits and losses.
 - 2. Operations of subsidiaries or affiliates.
 - 3. Reserves.
- Accounting procedure allows considerable leeway to the management in the method of treating non-recurrent items. It is a standard and proper rule that transactions applicable to past years should be excluded from current income and entered as a charge or credit direct to the surplus account. Yet there are many kinds of entries that may technically be considered part of the current year's results but that are

none the less of a special and non-recurrent nature. Accounting rules permit the management to decide whether to show these operations as part of the income or to report them as adjustments of surplus. Following are a number of examples of entries of this type:

- 1. Profit or loss on sale of fixed assets.
- 2. Profit or loss on sale of marketable securities.
- 3. Discount or premium on retirement of capital obligations.
- 4. Proceeds of life insurance policies.
- 5. Tax refunds and interest thereon.
- 6. Gain or loss as result of litigation.
- 7. Extraordinary write-downs of inventory.
- 8. Extraordinary write-downs of receivables.
- 9. Cost of maintaining non-operating properties.

Wide variations will be found in corporate practice respecting items such as the foregoing. Under each heading examples may be given of either inclusion in or exclusion from the income account. Which is the better accounting procedure in some of these cases may be a rather controversial question, but, as far as the analyst is concerned, his object requires that all these items be segregated from the ordinary operating results of the year.

For what the investor chiefly wants to learn from an annual report is the indicated earning power under the given set of conditions, i.e., what the company might be expected to earn year after year if the business conditions prevailing during the period were to continue unchanged. (On the other hand, as we shall point out later, all these extraordinary items enter properly into the calculation of earning power as actually shown over a period of years in the past.)

The analyst must endeavor also to adjust the reported earnings so as to reflect as accurately as possible the company's interest in results of controlled or affiliated companies. In most cases consolidated reports are made, so that such adjustments are unnecessary. But numerous instances have occurred in which the statements are incomplete or misleading because either:

- (1) they fail to reflect any part of the profits or losses of important subsidiaries or
- (2) they include as income dividends from subsidiaries that are substantially less or greater than the current earnings of the controlled enterprises.

The third aspect of the income account to which the analyst must give critical attention is the matter of reserves for depreciation and other amortization, and reserves for future losses and other contingencies. These reserves are subject in good part to arbitrary determination by the management. Hence they may readily be overstated or understated, in which case the final figure of reported earnings will be correspondingly distorted.

- If any useful results can be expected from an analysis of investment-trust exhibits, such analysis must clearly be based on the three items: investment income, profits or losses on the sale of securities and changes in market values. It is equally obvious that the gain or shrinkage, so computed, in any one year is no indication whatever of earning power in the recurrent sense. Nor can an average taken over several years have any significance for the future unless the results are first compared with some appropriate measure of general market performance. Assuming that an investment trust has done substantially better than the relevant "average," this is of course a prima facie indication of capable management. But even here it would be difficult to distinguish confidently between superior ability and luckier guesses on the market.
- A like problem is involved in analyzing the results shown by insurance companies and by banks. Public interest in insurance securities is concentrated largely upon the shares of fire insurance companies. These enterprises represent a combination of the insurance business and the investment trust business. They have available for investment their capital funds plus substantial amounts received as premiums paid in

advance. Generally speaking, only a small portion of these funds is subject to legal restrictions as regards investment, and the balance is handled in much the same way as the resources of the investment trusts. The underwriting business as such has rarely proved highly profitable. Frequently it shows a deficit, which is offset, however, by interest and dividend income.

- A contrary result appears when senior securities are retired at a cost exceeding the face or stated value.
 When this premium involves a large amount, it is always charged against surplus and not against current income.
- From the analyst's standpoint, either profit or expense in such special transactions involving the company's own securities should be regarded as non-recurring and excluded from the operating results in studying a single year's performance.

Chapter 32: Extraordinary Losses & Other Special Items In The Income Account

- An examination of the wholesale charges made against surplus in 1932 by American Machine and Metals, detailed on page 419, suggests the possibility that excessive provision for losses may have been made in that year with the intention of benefiting future income accounts. If the receivables and inventories were written down to an unduly low figure on December 31, 1932, this artificially low "cost price" would give rise to a correspondingly inflated profit in the following years.
- The accounting for inventory losses is frequently complicated by the use of reserves set up before the
 loss is actually realized. These reserves are usually created by a charge to surplus, on the theory that it is
 a function of the surplus account to act as a sort of contingency reserve to absorb unusual future losses.
 If later the inventory shrinkage actually takes place, it is naturally charged against the reserve already
 created to meet it.

The result is that in no year does the income account reflect the inventory loss, although it is just as much a hazard of operations as a decline in selling prices. When a company charges inventory losses to surplus—whether directly or through the intermediary of a reserve device—the analyst must take this practice carefully into account, especially in comparing the published results with those of other companies.

The student of corporate reports must familiarize himself with two permissible variations from the usual accounting practice in handling inventories. As is well known, the standard procedure consists of taking inventory at the close of the year at the lower of cost or market. The "cost of goods sold" is then found by adding purchases to the opening inventory and subtracting the closing inventory, valued as described.

Last-In, First-Out. The first variation from this method consists of taking as the cost of goods sold the actual amount paid for the most recently acquired lots. The theory behind this method is that a merchant's selling price is related mainly to the current replacement price or the recent cost of the article sold. The point is of importance only when there are substantial changes in unit values from year to year; it cannot affect the aggregate reported profits over a long period but only the division of results from one year to another; it may be useful in reducing income tax by avoiding alternations of loss and profit due to inventory fluctuations.

The Normal-stock or Basic-stock Inventory Method. A more radical method of minimizing

fluctuations due to inventory values has been followed by a considerable number of companies for some years past. This method is based on the theory that the company must regularly carry a certain physical stock of materials and that there is no more reason to vary the value of this "normal stock" from year to year—because of market changes—than there would be to vary the value of the manufacturing plant as the price index rises or falls and to reflect this change in the year's operations. In order to permit the base inventory to be carried at an unchanging figure, the practice is to mark it down to a very low unit price level—so low that it should never be necessary to reduce it further to get it down to current market.

- Security analysis is a severely practical activity, and it must not linger over matters that are not likely to affect the ultimate judgment. At times however, these items may assume appreciable importance.
- Bonds are usually floated by corporations at a price to net the treasury less than par. The discount suffered is part of the cost of borrowing the money, i.e., part of the interest burden, and it should be amortized over the life of the bond issue by an annual charge against earnings, included with the statement of interest paid.

Chapter 33: Misleading Artifices In The Income Account (Earnings of Subsidiaries

- In view of Wall Street's naïve acceptance of reported income and reported earnings per share. Our example suggests also a further check upon the reliability of the published earnings statements, viz., by the amount of the federal income tax accrued. The taxable profit can be calculated fairly readily from the income-tax accrual, and this profit compared in turn with the earnings reported to stockholders. The two figures should not necessarily be the same, since the intricacies of the tax laws may give rise to a number of divergences. We do not suggest that any effort be made to reconcile the amounts absolutely but only that very wide differences be noted and made the subject of further inquiry.
- In passing judgment on the inclusion of leasehold appreciation in the current earnings of United Cigar Stores, a number of considerations might well be borne in mind.
 - 1. Leaseholds are essentially as much a liability as they are an asset. They are an obligation to pay rent for premises occupied. Ironically enough, these very leaseholds of United Cigar Stores eventually plunged it into bankruptcy.
- A moral of considerable practical utility may be drawn from the United Cigar Stores example. When an enterprise pursues questionable accounting policies, all its securities must be shunned by the investor, no matter how safe or attractive some of them may appear. This is well illustrated by United Cigar Stores Preferred, which made an exceedingly impressive statistical showing for many successive years but later narrowly escaped complete extinction. Investors confronted with the strange bookkeeping detailed above might have reasoned that the issue was still perfectly sound, because, when the overstatement of earnings was corrected, the margin of safety remained more than ample. Such reasoning is fallacious.

You cannot make a quantitative deduction to allow for an unscrupulous management; the only way to deal with such situations is to avoid them.

- When a holding company takes into its income account stock dividends received at a higher value than
 that assigned them by the subsidiary that pays them, we have a particularly dangerous form of
 pyramiding of earnings.
- It may be stated as a Wall-Street maxim that where manipulation of accounts is found, stock juggling will be found also in some form or other. Familiarity with the methods of questionable finance should assist the analyst and perhaps even the public, in detecting such practices when they are perpetrated.

- It is now frequent procedure for industrial companies to indicate either in the income account or in a footnote thereto their equity in the profits or losses of non-consolidated subsidiaries after allowance for dividends. Examples: The 1938 report of American Tobacco Company showed by way of footnote that dividends received from non-consolidated subsidiaries exceeded their earnings by \$427,000. Hercules Powder reported a similar figure of \$257,514 for that year, in footnote form, whereas prior to 1937 it had included its share of the undistributed earnings of such affiliates under the heading "Other Income."
- Similarly, the interest of Du Pont in General Motors, representing about 23% of the total issue, is undoubtedly significant enough in its effect on the owning company to warrant adjustment of its earnings to reflect the results of General Motors. This is actually done by Du Pont each year in the form of an adjustment of surplus to reflect the previous year's change in the book value of its General Motors holdings. The analyst would prefer, however, to make the adjustment concurrently and to include it in the calculated earnings of Du Pont.
- The statistical manuals and agencies have naturally come to feature the per-share earnings in their analysis of corporations. They might, however, perform a more useful service if they omitted a calculation of the per-share earnings in all cases where the company's reports appear to contain irregularities or complications in any of the following directions and where a satisfactory correction is not practicable:
 - 1. By reason of non-recurrent items included in income or because of charges to surplus that might properly belong in the income account.
 - 2. Because current results of subsidiaries are not accurately reflected in the parent company's statements.
 - 3. Because the depreciation and other amortization charges are irregularly computed.
- When earnings of non-consolidated subsidiaries are allowed to accumulate in their surplus accounts, they may be used later to bolster up the results of a poor year by means of a large special dividend paid over to the parent company.

This device of concealing a subsidiary's profits in good years and drawing upon them in bad ones may seem quite praise-worthy as a method of stabilizing the reported earning power. But such benevolent deceptions are frowned upon by enlightened opinion, as illustrated by the more recent regulations of the New York Stock Exchange which insist upon full disclosure of subsidiaries' earnings. It is the duty of management to disclose the truth and the whole truth about the results of each period; it is the function of the stockholders to deduce the "normal earning power" of their company by averaging out the earnings of prosperity and depression. Manipulation of the reported earnings by the management even for the desirable purpose of maintaining them on an even keel is objectionable none the less because it may too readily lead to manipulation for more sinister reasons.

- Summary. To avoid leaving this point in confusion, we shall summarize our treatment by suggesting:
 - 1. In the first instance, subsidiary losses are to be deducted in every analysis.
 - 2. If the amount involved is significant, the analyst should investigate whether or not the losses may be subject to early termination.
 - 3. If the result of this examination is favorable, the analyst may consider all or part of the subsidiary's loss as the equivalent of a nonrecurring item.

Chapter 34: The Relation of Depreciation & Similar Charges To Earning Power

- The accounting theory that governs depreciation charges is simple enough. If a capital asset has a limited life, provision must be made to write off the cost of that asset by charges against earnings distributed over the period of its life. But behind this innocent statement lie complications of a threefold character. First we find that accounting rules themselves may permit a value other than cost as the base for the amortization charge. Second, we find many ways in which companies fail to follow accepted accounting practice in stating their depreciation deduction in the income account. Third, there are occasions when an allowance that may be justified from an accounting standpoint will fail to meet the situation properly from an investment standpoint.
- There is support in accounting circles for the theory that the function of the depreciation allowance is to provide for the replacement of the asset at the end of its life rather than merely to write off its cost. If this idea were actually followed, the current or expected future replacement cost would be the basis for the depreciation charge, and it would vary not only with the value of the identical asset but also with changes in the character of the item that is expected to replace the one worn out.
- It should be obvious that no company should use one set of values for its balance sheet and another for
 its income account. The more recent tendency is to correct these disparities by eliminating the previous
 writeup from the balance sheet, thus returning to original cost.
- If a company has paid money for a leasehold, the cost is regarded as a capital investment that should be written off during the life of the lease. (In the case of an oil lease the write-off is made against each barrel produced, rather than on a time basis, since the output declines rapidly from the initial flush figure.) These charges are in reality part of the rent paid for the property and must obviously be included in current operating expense.

When structures are built on leased property or alterations made or fixtures installed, they are designated as "leasehold improvements." Hence their cost must be written down to nothing during the life of the lease, since they belong to the landlord when the lease expires. The annual charge-off for this purpose is called "amortization of leasehold improvements." It partakes to some extent of the nature of a depreciation charge. Chain-store enterprises frequently invest considerable sums in such leasehold improvements, and consequently the annual write-offs thereof may be of appreciable importance in their income accounts.

Example: The December 31, 1938, balance sheet of F.W. Woolworth Company carried "Buildings Owned and Improvements on Leased Premises to be amortized over periods of leases" at a net valuation of \$46,717,000. The charge against 1938 earnings for amortization of these buildings and leasehold improvements amounted to \$3,925,283.

Since these items belong to the amortization group, they lend themselves to the same kind of arbitrary treatment as do the others. By making the annual charge against surplus instead of income or by writing down the entire capital investment to \$1 and thus eliminating the annual charge entirely, a corporation can exclude these items of operating cost from its reported per-share earnings and thus make the latter appear deceptively large.

The argument has often been advanced that depreciation charges may properly be ignored because they are mere bookkeeping entries and do not represent a real outlay of cash. This is a highly inaccurate statement of the case. Depreciation is not a mere book keeping conception, because for the most part it registers an actual diminution of capital values, for which adequate provision must be made if creditors or owners are to avoid deceiving themselves.

Moreover, in the majority of cases the depreciation charges are consumed or offset over a period of time by even larger cash expenditures made for replacements or extensions. More often than not, therefore, depreciation charges are eventually found to be related to actual cash outlays and turn out to be as truly an expense of the business as wages or rents.

- In answer to the frequent argument that a depreciation allowance is unnecessary because liberal repairs keep the assets good, we may quote Hatfield's classic sentence: "All machinery is on an irresistible march to the junk heap, and its progress, while it may be delayed, cannot be prevented by repairs." Henry R. Hatfield, Accounting: Its Principles and Problems, p. 130, New York, 1928.
- Another fairly prevalent practice was the deduction of only part of the depreciation charge from earnings, the balance being taken out of the surplus account.

A. Depreciation Proper.

1. Straight-line Method. Each class of depreciable property is written down to salvage value by equal annual charges during the period of its estimated life. This is the standard method of calculating depreciation, permitted by the revenue acts and generally followed by all companies in their income tax returns. Surprisingly few electric and gas companies, however, have employed this method in their published income accounts.

Example: Union Electric Company of Missouri, a subsidiary of North American Company, has used the straight-line method for a number of years. But even here the company's reported allowance is less than that claimed on its income tax return (\$3,899,205 vs. \$5,549,109 in 1937) the difference being due apparently to assuming a shorter life for tax purposes than for annual report purposes. As will be pointed out later, recent regulations adopted by state commissions and by the Federal Power Commission are now necessitating a change-over by many companies to the straight-line or standard method in their reported earnings.

2. Sinking-fund Method. Allowance is here made for the fact that amounts set aside for depreciation will earn interest until the property is retired. The effect of this method is to make the deductions somewhat smaller in the earlier years and correspondingly higher in the later years. It is generally used by California utility corporations under agreements with the Railroad Commission of the state, the rate of interest allowed being 6%.

(*Examples*: Pacific Gas and Electric, San Diego Consolidated Gas and Electric.) Even here the companies take the straight-line basis in their tax returns.

3. The Over-all Method. This applies a single annual percentage to the entire depreciable property account, instead of varying rates to different classes of assets. The object, presumably, is to arrive at a simple approximation of the actual depreciation.

Example: Commonwealth Edison deducts 3% of the average book value of depreciable property.

B. Retirement Reserve Methods.

The distinguishing feature of a retirement reserve is that it does not seek to measure the depreciation during a given period caused by wear and tear or obsolescence. Instead it is supposed to provide funds that, in the opinion of the management, will be adequate to take care of retirements of property when and as they occur.

Over any long period of time, proper depreciation and proper retirement allowances should total the same amount. But a retirement reserve policy apparently permits arbitrary annual variations, to reflect good or bad earnings or the expected near term need for actual retirements. In reality, as will be seen, the majority of retirement reserve policies operate simply to understate the current loss of property value and thus to overstate the earnings. Various bases of calculating retirement reserves are as follows:

4. Percentage of Gross. This method would tend to approximate a regular depreciation rate if the percentage taken were adequate. Generally this is not the case.

Example: Duquesne Lighting Company deducts 8% of gross. On the other hand, its income tax deduction for 1932–1934 equaled no less than 30% of gross.

5. Fixed Rate per Unit of Product. This method clearly resembles the preceding and is subject to the same criticism.

Examples: In 1932 Brooklyn Union Gas Company stated that it was reserving 3 cents per thousand cubic feet for retirements. (This policy has since been changed.) Cincinnati Gas and Electric Company stated in 1937 that it was making provision for retirement reserve at the rate of 5 cents per thousand cubic feet of gas sold and \$2.70 per thousand kilowatt-hours of electricity sold.

6. Over-all Percentage of Gross for Maintenance and Depreciation Combined. By this method the larger the amount spent for maintenance the less is reserved for depreciation.

Examples: Third Avenue Railway used a 20% deduction for maintenance and depreciation combined for the years 1912–1918. Tidewater Power Company uses varying total rates for different services, viz. (in 1936): Gas and Electric, 15%; Water, 12%; Railway; 30%.

- **7. Discretionary Deductions.** The majority of companies following the retirement reserve method have been bound by no mathematical formula but have based the annual deduction largely on the judgment of the management.
- We have already stated that, regardless of what method is followed in the annual reports, practically every company *follows the straight-line basis of depreciation in computing its income tax*. The investor is thus confronted with a dual situation and a pressing problem. In many cases it is of vital importance to know which basis of depreciation is correct, since bond-interest coverage and commonstock earnings which may appear adequate as reported in the company's annual statements would turn out to be entirely insufficient if the income tax figures are accepted.
- Where any real alternative exists, the investor in fixed-value securities must invariably apply the more stringent test of soundness.
- There is another large group of companies that have taken depreciation allowances that appear liberal in themselves but are still substantially less than the income tax deductions.

Examples: In 1938 Detroit Edison charged 13.5% of gross on its report to shareholders, vs. 18.2% of gross on its tax return for that year. Corresponding figures for North American Company for 1937 were 12.8 and 14.8%, respectively.

In these instances the investor—and particularly the common-stock buyer—may argue that the income tax basis is unduly severe. It is difficult to pronounce judgment on this point in the absence of detailed knowledge of the properties themselves and a better familiarity with public- utility engineering details than we possess. We are inclined to advance the compromise suggestion that when the tax figure exceeds, say, 121/2% of gross, the latter rate be used provisionally for purposes of analysis.

Chapter 36: Amortization Charges From The Investor's Standpoint

In this case (example given), therefore, as in our hypothetical example, the investor or the analyst must reject the company's basis for depreciation and endeavor to establish some other basis more consonant with the actual conditions of the business. How can the proper charge be determined? The answer was given without difficulty for the trucking companies, because we knew just what depreciation had to be allowed for in order to maintain these enterprises in operation. But in practice such exact knowledge is hardly ever available.

We do not know how long the Eureka Pipe Line's fixed assets will last or how much it would cost to replace them. The best we can do is to formulate some rough estimates based on the discoverable facts. The only virtue of these estimates may be that they are in all probability closer to the mark than the company's figures, which we realize are untenable.

- The expenditures on property account, including new fixed assets, represent in effect the portion of the depreciation reserve that is not available in cash, and that portion should hence be considered as the minimum amount of depreciation that must be allowed for in conducting the business. We may call this item the Expended Depreciation Charge. (If the increase in the property account exceeds the year's depreciation, then all of the latter must be considered as "expended.") In the case of Eureka Pipe Line, such expenditures averaged \$73,000 for the three years 1924–1926. This period is much too short upon which to base conclusions. But it happens that about the same results are shown by Eureka over a much longer period, so that the 1924–1926 figure may here be used as a basis of calculation. We must warn the student against deriving any notion as to the normal expended depreciation from examination of a short period, e.g., less than ten years, unless he knows that the nature of the business is such as to warrant a conclusion therefrom.
- The Expended Depreciation Charge has been found to average about \$75,000 per annum. There are no indications that the entire plant will have to be replaced at any predictable date. On the contrary, the line appears to have an indefinite life, due to continuous expenditures on maintenance, repairs and renewals. In this respect the enterprise resembles a railroad far more than it does a trucking company. According to our reasoning only the expended depreciation charge should be deducted from earnings. The remainder of the depreciation factor is actually the obsolescence hazard, which is related to the possible exhaustion of the tributary oil fields. This should be considered after the earnings are arrived at and not before.
- The concept of "expended depreciation" may be useful in this field, because the average expenditures for replacements must be considered as the equivalent of a cash operating expense. (Parenthetically it may be pointed out this is an important factor in the analysis of hotel bonds. But it is even more important to warn the investor that hotel bonds should be viewed as obligations of a special type of business enterprise and not as a form of real estate security.)
- It is a striking commentary on the change in our financial viewpoint that the term "stock watering" has
 practically disappeared from the investor's vocabulary. By a strange paradox the same misleading results
 that were obtained prior to 1914 by overstating property values are now sought by the opposite

stratagem of understating these assets.

Erase the plant account; thereby eliminate the depreciation charge; thereby increase the reported earnings; thereby enhance the value of the stock. The idea that such sleight-of-hand could actually add to the value of a security is nothing short of preposterous. Yet Wall Street solemnly accepts this topsy turvy reasoning, and corporate managements are naturally not disinclined to improve their showing by so simple a maneuver.

- A large number of important manufacturing companies own patents that are carried on their books at \$1 or else at their cost—which is generally a relatively small amount. It is standard accounting practice to write off such cost by equal annual charges to earnings during the life of the patent, which is 17 years from the date it is granted.
- It follows that the \$1 valuation of patents is the soundest for the investor's purpose; that amortization of patents can be added back to earnings if the amount is substantial; and hence, if such amortization is charged to surplus instead of income, it is not necessary to correct the earnings figure.
- Our lengthy discussion of amortization policies may be summarized in the following rules:
 - Rule 1: The company's amortization charges are to be accepted in analysis whenever (both):
 - a. They are based on regular accounting rules applied to fair valuations of the fixed assets, and
 - b. The net plant account has not decreased over a period of years.
 - Rule 2: The company's charges may be reduced in the analyst's calculations if they regularly exceed the cash expenditures on the property. In such a case the average cash expenditures may be deducted from earnings as a provisional depreciation charge and the balance of depreciation included as part of the obsolescence hazard, which tends to reduce the valuation of the average cash earning power. The obsolescence allowance will be based upon the price paid for the enterprise by the investor and not upon either the book value or the reproduction cost of the fixed assets.
 - Rule 3: The company's charges must be increased in the analyst's calculations if they are both less than the average cash expenditures on the property and less than the reserve required by ordinary accounting rules applied to the fair value of the fixed assets used in the business.
- Use of Contingency and Similar Reserves to Distort the Earnings Picture. During the years 1931 and 1932, however, contingency and similar reserves were resorted to by many companies with the effect of greatly obscuring and confusing their annual statements. These reserves were created for a threefold purpose: (1) to permit losses to be charged against surplus instead of against income, (2) to gloss over the actual taking of the loss, and (3) in some cases to lay the groundwork for inflated earnings in subsequent years.
- A particular and frequent type of contingency reserve is a reserve for future inventory decline. In our discussion of various permissible methods of figuring inventory (in Chap. 32) we pointed out that the Normal Stock Method aims to mark down the basic stock to so low a figure that no drop in price will require a further charge against earnings. This method involves, in essence, the use of a contingency reserve for future inventory decline, calculated in accordance with a definite and continuing policy.

On the whole we must regard a device of this kind as meriting praise rather than criticism. But it is essential that the analyst allow for the use of such reserves when studying a single year's results and particularly when comparing several companies in the same field. Let us further remind the reader that the setting up of an inventory reserve out of surplus, whatever the theory behind it, almost invariably

results in overstating the reported profits over a period of years.

Chapter 37: Significance Of The Earnings Record

The second main question confronting the analyst is concerned with the utility of this past record as an indicator of future earnings. This is at once the most important and the least satisfactory aspect of security analysis. It is the most important because the sole practical value of our laborious study of the past lies in the clue it may offer to the future; it is the least satisfactory because this clue is never thoroughly reliable and it frequently turns out to be quite valueless.

These shortcomings detract seriously from the value of the analyst's work, but they do not destroy it. The past exhibit remains a sufficiently dependable guide, in a sufficient proportion of cases, to warrant its continued use as the chief point of departure in the valuation and selection of securities.

- In studying earnings records an important principle of security analysis must be borne in mind:

Quantitative data are useful only to the extent that they are supported by a qualitative survey of the enterprise.

In order for a company's business to be regarded as reasonably stable, it does not suffice that the past record should show stability. The nature of the undertaking, considered apart from any figures, must be such as to indicate an inherent permanence of earning power.

On the contrary, it must be remembered that the automatic or normal economic forces militate against
the indefinite continuance of a given trend. Competition, regulation, the law of diminishing returns, etc.,
are powerful foes to unlimited expansion, and in smaller degree opposite elements may operate to check
a continued decline.

Hence instead of taking the maintenance of a favorable trend for granted—as the stock market is wont to do—the analyst must approach the matter with caution, seeking to determine the causes of the superior showing and to weigh the specific elements of strength in the company's position against the general obstacles in the way of continued growth.

- The divergence in method between the stock market and the analyst—as we define his viewpoint—would mean in general that the price levels ruling for the so-called "good stocks" under normal market conditions are likely to appear overgenerous to the conservative student. This does not mean that the analyst is convinced that the market valuation is wrong but rather that he is not convinced that its valuation is right. He would call a substantial part of the price a "speculative component," in the sense that it is paid not for demonstrated but for expected results.
- Where the trend has been definitely downward, as that of Company C, the analyst will assign great weight to this unfavorable factor. He will not assume that the down curve must presently turn upward, nor can he accept the past average—which is much higher than the current figure—as a normal index of future earnings. But he will be equally chary about any hasty conclusions to the effect that the company's outlook is hopeless, that its earnings are certain to disappear entirely and that the stock is therefore without merit or value. Here again a qualitative study of the company's situation and prospects is essential to forming an opinion whether at some price, relatively low, of course, the issue may not be a bargain, despite its declining earnings trend. Once more we identify the viewpoint of the analyst with that of a sensible business man looking into the pros and cons of some privately owned enterprise.
- Analysis of the Future Should Be Penetrating Rather than Prophetic.

Chapter 38: Specific Reasons For Questioning or Rejecting The Past Record

Evidently the stock market—like the heart, in the French proverb—has reasons all its own. In the
writers' view, where these reasons depart violently from sound sense and business experience, commonstock buyers must inevitably lose money in the end, even though large speculative gains may
temporarily accrue, and even though certain fortunate purchases may turn out to be permanently
profitable.

Chapter 39: Price-Earnings Ratio's For Common Stocks

- A given common stock is generally considered to be worth a certain number of times its current earnings. This number of times, or multiplier, depends partly on the prevailing psychology and partly on the nature and record of the enterprise. Prior to the 1927–1929 bull market ten times earnings was the accepted standard of measurement. More accurately speaking, it was the common point of departure for valuing common stocks, so that an issue would have to be considered exceptionally desirable to justify a higher ratio, and conversely.
- Security analysis cannot presume to lay down general rules as to the "proper value" of any given common stock. Practically speaking, there is no such thing. The bases of value are too shifting to admit of any formulation that could claim to be even reasonably accurate. The whole idea of basing the value upon current earnings seems inherently absurd, since we know that the current earnings are constantly changing.

Hence the prices of common stocks are not carefully thought out computations but the resultants of a welter of human reactions. The stock market is a voting machine rather than a weighing machine. It responds to factual data not directly but only as they affect the decisions of buyers and sellers.

Confronted by this mixture of changing facts and fluctuating human fancies, the securities analyst is clearly incapable of passing judgment on common-stock prices generally.

- His fundamental basis of appraisal must be an intelligent and conservative estimate of the future earning
 power. But his measure of future earnings can be conservative only if it is limited by actual performance
 over a period of time. We have suggested, however, that the profits of the most recent year, taken singly,
 might be accepted as the gage of future earnings, if
 - (1) general business conditions in that year were not exceptionally good,
 - (2) the company has shown an upward trend of earnings for some years past and
 - (3) the investor's study of the industry gives him confidence in its continued growth.

In a very exceptional case, the investor may be justified in counting on higher earnings in the future than at any time in the past. This might follow from developments involving a patent or the discovery of new

ore in a mine or some similar specific and significant occurrence. But in most instances he will derive the investment value of a common stock from the average earnings of a period between five and ten years.

 We would suggest that about 20 times average earnings is as high a price as can be paid in an investment purchase of a common stock.

Hence we may submit, as a corollary of no small practical importance, that people who habitually purchase common stocks at more than about 20 times their average earnings are likely to lose considerable money in the long run. This is the more probable because, in the absence of such a mechanical check, they are prone to succumb recurrently to the lure of bull markets, which always find some specious argument to justify paying extravagant prices for common stocks.

— It should be pointed out that if 20 times average earnings is taken as the upper limit of price for an investment purchase, then ordinarily the price paid should be substantially less than this maximum. This suggests that about 12 or 121/2 times average earnings may be suitable for the typical case of a company with neutral prospects.

We must emphasize also that a reasonable ratio of market price to average earnings is not the only requisite for a common-stock investment. It is a necessary but not a sufficient condition. The company must be satisfactory also in its financial set-up and management, and not unsatisfactory in its prospects.

- According to our view, the high prices paid for "the best common stocks" make these purchases
 essentially speculative, because they require future growth to justify them. Hence common-stock
 investment operations, as we define them, will occupy a middle ground in the market, lying between
 low-price issues that are speculative because of doubtful quality and well-entrenched issues that are
 speculative, none the less, because of their high price.
- A corresponding adjustment of the per-share earnings must be made at times to reflect the possible future increase in the number of shares outstanding as a result of conversions or exercise of option warrants. When other security holders have a choice of any kind, sound analysis must allow for the possible adverse effect upon the per-share earnings of the common stock that would follow from the exercise of the option.
- The material in the last few pages may be summarized in the following general rule:

The intrinsic value of a common stock preceded by convertible securities, or subject to dilution through the exercise of stock options or through participating privileges enjoyed by other security holders, cannot reasonably be appraised at a higher figure than would be justified if all such privileges were exercised in full.

Chapter 40: Capitalization Structure

- The optimum capitalization structure for any enterprise includes senior securities to the extent that they may safely be issued and bought for investment.
- Furthermore, just as it is desirable from the bank's standpoint that sound businesses borrow seasonally, it
 is also desirable from the standpoint of investors generally that strong industrial corporations raise an
 appropriate part of their capital through the sale of bonds. Such a policy would increase the number of
 high-grade bond issues on the market, giving the bond investor a wider range of choice and making it

deservedly difficult to sell unsound bonds.

- An unwary investor, looking at the two exhibits, might reject Company D's 6% bonds as unsafe because their interest coverage was only 1.39 but yet accept the Company C bonds at par because he was satisfied with earnings of twice fixed charges. Such discrimination would be scarcely intelligent. Our investor would be rejecting a bond merely because it pays him a generous coupon rate, and he would be accepting another bond merely because it pays him a low interest rate. The real point, however, is that the minimum margin of safety behind bond issues must be set high enough to avoid the possibility that safety may even appear to be achieved by a mere lowering of the interest rate. The same reasoning would apply of course to the dividend rate on preferred stocks.
- We have indicated in Chap. 26 that a bond speculative because of inadequate safety should not ordinarily be purchased above 70.
- The top-heavy capitalization structure resulted in a low price for the bonds and the preferred stock, the latter being affected particularly by the temporary suspension of its dividend in 1931.
- The overdeflation of a speculative issue like Staley common in unfavorable markets creates the possibility of an amazing price advance when conditions improve, because the earnings per share then show so violent an increase. Note that at the beginning of 1927 Staley common was quoted at about 75, and a year later it sold close to 300. Similarly the shares advanced from a low of 33 in 1932 to the equivalent of 320 in 1939.
- To view the matter in a practical light, the purchase of speculatively capitalized common stocks must be considered under general or market conditions that are supposedly normal, i.e., under those which are not obviously inflated or deflated. Assuming (1) diversification, and (2) reasonably good judgment in selecting companies with satisfactory prospects, it would seem that the speculator should be able to profit rather substantially in the long run from commitments of this kind.

In making such purchases, partiality should evidently be shown to those companies in which most of the senior capital is in the form of preferred stock rather than bonds. Such an arrangement removes or minimizes the danger of extinction of the junior equity through default in bad times and thus permits the shoe-string common stockholder to maintain his position until prosperity returns. (But just because the preferred-stock contract benefits the common shareholder in this way, it is clearly disadvantageous to the preferred stockholder himself.)

Chapter 41: Low Priced Common Stocks: Analysis Of The Source Of Income

- It is a commonplace of the securities market that an issue will rise more readily from 10 to 40 than from 100 to 400. This fact is due in part to the preferences of the speculative public, which generally is much more partial to issues in the 10-to-40 range than to those selling above 100.
- Unless there are serious uncompensated errors in the statistical work here presented, this investigation would seem to establish the existence of certain relationships between price level and price fluctuations which have hitherto gone unreported by students of stock-market phenomena. These relationships may be briefly stated as follows:
 - 1. Low-price stocks tend to fluctuate relatively more than high-price stocks.
 - 2. In a "bull" market the low-price stocks tend to go up relatively more than high-price stocks, and they do not lose these superior gains in the recessions which follow. In other words, the downward movement

of low-price stocks is less than proportional to their upward movement, when compared with the upward and downward movement of high-price stocks.

In consequence the bulk of the low-priced purchases made by the public are of the wrong kind; i.e., they do not provide the real advantages of this security type. The reason may be either because the companies are in bad financial condition or because the common stock is low-priced in appearance only and actually represents a full or excessive commitment in relation to the size of the enterprise. The latter is preponderantly true of new security offerings in the low-priced range.

In such cases, a pseudo-low price is accomplished by the simple artifice of creating so large a number of shares that even at a few dollars per share the total value of the common issue is excessive. This has been true of mining-stock flotations from of old and was encountered again in the liquor-stock offerings of 1933 and in the airplane issues in 1938–1939.

- But where a low-priced stock fulfills our conditions of speculative attractiveness, there is apt to be no
 pressure to sell and no effort to create buying. Hence the issue is inactive and attracts little public
 attention. This analysis may explain why the public almost always buys the wrong low-priced issues and
 ignores the really promising opportunities in this field.
- When a rise in the price of the commodity occurs, there will ordinarily be a larger advance, percentage wise, in the shares of high-cost producers than in the shares of low-cost producers. The foregoing table indicates that a rise in the price of copper from 10 to 13 cents would increase the value of Company A shares by 100% and the value of Company B and C shares by 300%. Contrary to the general impression in Wall Street, the stocks of high-cost producers are more logical commitments than those of the low-cost producers when the buyer is convinced that a rise in the price of the product is imminent and he wishes to exploit this conviction to the utmost.
- It is a truism to say that the more impressive the record and the more promising the prospects of stability and growth the more liberally the per-share earnings should be valued, subject always to our principle that a multiplier higher than about 20 (i.e., an "earnings basis" of less than 5%) will carry the issue out of the investment price range.
- Situations of this kind (examples provided) arise with sufficient frequency, however, to give this
 discussion practical value. It should be useful also in illustrating again the wide technical difference
 between the critical approach of security analysis and the highly superficial reactions and valuations of
 the stock market.

Chapter 42: Balance Sheet Analysis: Significance of Book Value

- A strong argument may be advanced in favor of valuing all preferred stocks on a uniform dividend basis, say 5%, unless callable at a lower figure. This would mean that a \$1,000,000 five per cent issue would be valued at \$1,000,000, a \$1,000,000 four per cent issue would be given an effective value of \$800,000 and a \$1,000,000 seven per cent non-callable issue would be given an effective value of \$1,400,000. But it is more convenient, of course, to use the par value, and in most cases the result will be sufficiently accurate. A simpler method, which would work well for most practical purposes, is to value preferred issues at par (plus back dividends) or market, whichever is higher.
- In calculating the book value of a preferred stock issue it is treated as a common stock and the issues
 junior to it are left out of consideration.
- In addition to the well known concept of book value, we wish to suggest two others of similar character,

viz., current-asset value and cash-asset value.

The current-asset value of a stock consists of the current assets alone, minus all liabilities and claims ahead of the issue. It excludes not only the intangible assets but the fixed and miscellaneous assets as well

The cash-asset value of a stock consists of the cash assets alone, minus all liabilities and claims ahead of the issue. Cash assets, other than cash itself, are defined as those directly equivalent to and held in place of cash. They include certificates of deposit, call loans, marketable securities at market value and cash-surrender value of insurance policies.

The book value of a common stock was originally the most important element in its financial exhibit. It was supposed to show "the value" of the shares in the same way as a merchant's balance sheet shows him the value of his business. This idea has almost completely disappeared from the financial horizon. The value of a company's assets as carried in its balance sheet has lost practically all its significance. This change arose from the fact, first, that the value of the fixed assets, as stated, frequently bore no relationship to the actual cost and, secondly, that in an even larger proportion of cases these values bore no relationship to the figure at which they would be sold or the figure which would be justified by the earnings.

The practice of inflating the book value of the fixed property is giving way to the opposite artifice of cutting it down to nothing in order to avoid depreciation charges, but both have the same consequence of depriving the book-value figures of any real significance.

- *Financial Reasoning vs. Business Reasoning.* We have here the point that brings home more strikingly perhaps than any other the widened rift between financial thought and ordinary business thought. It is an almost unbelievable fact that Wall Street never asks, "How much is the business selling for?"

Yet this should be the first question in considering a stock purchase. If a business man were offered a 5% interest in some concern for \$10,000, his first mental process would be to multiply the asked price by 20 and thus establish a proposed value of \$200,000 for the entire undertaking. The rest of his calculation would turn about the question whether or not the business was a "good buy" at \$200,000.

In any particular case the message that the book value conveys may well prove to be inconsequential and unworthy of attention. But this testimony should be examined before it is rejected. Let the stock buyer, if he lays any claim to intelligence, at least be able to tell himself, first, what value he is actually setting on the business and, second, what he is actually getting for his money in terms of tangible resources.

There are indeed certain presumptions in favor of purchases made far below asset value and against those made at a high premium above it. (It is assumed that in the ordinary case the book figures may be accepted as roughly indicative of the actual cash invested in the enterprise.) A business that sells at a premium does so because it earns a large return upon its capital; this large return attracts competition, and, generally speaking, it is not likely to continue indefinitely. Conversely in the case of a business selling at a large discount because of abnormally low earnings. The absence of new competition, the withdrawal of old competition from the field, and other natural economic forces may tend eventually to improve the situation and restore a normal rate of profit on the investment.

Although this is orthodox economic theory, and undoubtedly valid in a broad sense, we doubt if it applies with sufficient certainty and celerity to make it useful as a governing factor in common-stock selection. It may be pointed out that under modern conditions the so-called "intangibles," e.g., good-will or even a highly efficient organization, are every whit as real from a dollars-and-cents standpoint as are

buildings and machinery.

Earnings based on these intangibles may be even less vulnerable to competition than those which require only a cash investment in productive facilities. Furthermore, when conditions are favorable the enterprise with the relatively small capital investment is likely to show a more rapid rate of growth. Ordinarily it can expand its sales and profits at slight expense and therefore more rapidly and profitably for its stockholders than a business requiring a large plant investment per dollar of sales.

We do not think, therefore, that any rules may reasonably be laid down on the subject of book value in relation to market price, except the strong recommendation already made that the purchaser know what he is doing on this score and be satisfied in his own mind that he is acting sensibly.

Chapter 43: Significance of The Current Asset Value

- THE CURRENT-ASSET VALUE of a common stock is more likely to be an important figure than the book value, which includes the fixed assets. Our discussion of this point will develop the following theses:
 - 1. The current-asset value is generally a rough index of the liquidating value.
 - 2. A large number of common stocks sell for less than their current asset value and therefore sell below the amount realizable in liquidation.
 - 3. The phenomenon of many stocks selling persistently below their liquidating value is fundamentally illogical. It means that a serious error is being committed, either: (a) in the judgment of the stock market, (b) in the policies of the company's management, or (c) in the attitude of the stockholders toward their property.
- A company's balance sheet does not convey exact information as to its value in liquidation, but it does supply clues or hints which may prove useful. The first rule in calculating liquidating value is that the liabilities are real but the value of the assets must be questioned. This means that all true liabilities shown on the books must be deducted at their face amount. The value to be ascribed to the assets, however, will vary according to their character. The following schedule indicates fairly well the relative dependability of various types of assets in liquidation.

Type of Asset	Normal Range	Rough Average
Cash Assets (Including Securities)	100.00%	100.00%
Receivables (Less Reserves)	75-90%	80.00%
Inventories (Lower of Cost or Market)	50-75%	66.50%
Real Estate (Buildings)	1-50%	15.00%
Machinery & Equip.	1-50%	15.00%
Non-Marketable Investments	1-50%	15.00%
Intangibles	1-50%	15.00%

^{* %} of liquidation value

Common stocks in this category practically always have an unsatisfactory trend of earnings. If the
profits had been increasing steadily, it is obvious that the shares would not sell at so low a price. The

objection to buying these issues lies in the probability, or at least the possibility, that earnings will decline or losses continue and that the resources will be dissipated and the intrinsic value ultimately become less than the price paid. It may not be denied that this does actually happen in individual cases. On the other hand, there is a much wider range of potential developments which may result in establishing a higher market price. These include the following:

- 1. The creation of an earning power commensurate with the company's assets. This may result from:
- a. General improvement in the industry.
- b. Favorable change in the company's operating policies, with or without a change in management. These changes include more efficient methods, new products, abandonment of unprofitable lines, etc.
- 2. A sale or merger, because some other concern is able to utilize the resources to better advantage and hence can pay at least liquidating value for the assets.
- 3. Complete or partial liquidation.
- In considering these issues it will be helpful to apply the converse of the proposition developed earlier in this book with reference to senior securities. We pointed out (Chap. 26) that a bond or preferred stock could not be worth more than its value would be if it represented full ownership of the company, i.e., if it were a common stock without senior claims ahead of it. The converse is also true. A common stock cannot be less safe than it would be if it were a bond.

Chapter 44: Stockholder-Management Relationships

- The answer to this question takes us into the heart of one of the strangest phenomena of American finance the relations of stockholders to the businesses that they own. The subject transcends in its scope the narrow field of security analysis, but we shall discuss it here briefly because there is a distinct relationship between the value of securities and the intelligence and alertness of those who own them. The choice of a common stock is a single act; its ownership is a continuing process. Certainly there is just as much reason to exercise care and judgment in being as in becoming a stockholder.
- But a second reason for not always accepting implicitly the decisions of the management is that on certain points the interests of the officers and the stockholders may be in conflict. This field includes the following:
- 1. Compensation to officers—Comprising salaries, bonuses, options to buy stock.
- 2. Expansion of the business—Involving the right to larger salaries and the acquisition of more power and prestige by the officers.
- 3. Payment of dividends—Should the money earned remain under the control of the management or pass into the hands of the stockholders?
- 4. Continuance of the stockholders' investment in the company—Should the business continue as before, although unprofitable, or should part of the capital be withdrawn, or should it be wound up completely?
- 5. Information to stockholders—Should those in control be able to

benefit through having information not given to stockholders generally?

On all of these questions the decisions of the management are interested decisions, and for that reason they require scrutiny by the stockholders.

- In publicly owned corporations these matters are passed on by the board of directors, whom the stockholders elect and to whom the officials are responsible.

Theoretically, the directors will represent the stockholders' interests, when need be, as against the opposing interests of the officers. But this cannot be counted upon in practice. In many companies a majority, and in most companies a substantial part, of the board is composed of paid officials. The directors who are not officers are frequently joined by many close ties to the chief executives. It may be said in fact that the officers choose the directors more often than the directors choose the officers.

- It is true, of course, that a company's officers are not responsible for fluctuations in the price of its securities. But this is very far from saying that market prices should never be a matter of concern to the management. This idea is not only basically wrong, but it has the added vice of being thoroughly hypocritical. It is wrong because the marketability of securities is one of the chief qualities considered in their purchase. But marketability must presuppose not only a place where they can be sold but also an opportunity to sell them at a fair price. It is at least as important to the stockholders that they be able to obtain a fair price for their shares as it is that the dividends, earnings and assets be conserved and increased. It follows that the responsibility of managements to act in the interest of their shareholders includes the obligation to prevent—in so far as they are able—the establishment of either absurdly high or unduly low prices for their securities.

It is difficult not to lose patience with the sanctimonious attitude of many corporate executives who profess not even to know the market price of their securities. In many cases they have a vital personal interest in these very market prices, and at times they use their inside knowledge to take advantage in the market of the outside public and of their own stockholders.

- An obvious but fundamental fact, viz., that the liquidation (or sale) of an unprofitable company holding substantial assets (particularly current) is almost certain to realize for the stockholders considerably more than the previously existing market price. The reason is, of course, that the market price is governed chiefly by the earnings, whereas the proceeds of liquidation depend upon the assets.
- During the 1930–1933 depression repurchases of their own shares were made by many industrial companies out of their surplus cash assets, but the procedure generally followed was open to grave objection. The stock was bought in the open market without notice to the shareholders. This method introduced a number of unwholesome elements into the situation. It was thought to be "in the interest of the corporation" to acquire the stock at the lowest possible price. The consequence of this idea is that those stockholders who sell their shares back to the company are made to suffer as large a loss as possible, for the presumable benefit of those who hold on. Although this is a proper viewpoint to follow in purchasing other kinds of assets for the business, there is no warrant in logic or in ethics for applying it to the acquisition of shares of stock from the company's own stockholders. The management is the more obligated to act fairly toward the sellers because the company is itself on the buying side.
 - The low market price of a stock may be due to the absence of earnings and the irregular dividend. Under such conditions the quoted price would not reflect the very large cash holding theoretically available for the shares. Stocks sell on earnings and dividends and not on cash-asset values—unless distribution of these cash assets is in prospect.
 - Certain elementary facts, once well nigh forgotten, might well be emphasized here: Corporations are in

law the mere creatures and property of the stockholders who own them; the officers are only the paid employees of the stockholders; the directors, however chosen, are virtually trustees, whose legal duty it is to act solely in behalf of the owners of the business.

To make these general truths more effective in practice, it is necessary that the stock-owning public be educated to a clearer idea of what are the true interests of the stockholders in such matters as dividend policies, expansion policies, the use of corporate cash to repurchase shares, the various methods of compensating management, and the fundamental question of whether the owners' capital shall remain in the business or be taken out by them in whole or in part.

Chapter 45: Balance Sheet Analysis (Conclusion)

- OUR DISCUSSION IN THE preceding chapters has related chiefly to situations in which the balance-sheet exhibit apparently justified a higher price than prevailed in the market. But the more usual purpose of balance-sheet analysis is to detect the opposite state of affairs, viz., the presence of financial weaknesses that may detract from the investment or speculative merits of an issue. Careful buyers of securities scrutinize the balance sheet to see if the cash is adequate, if the current assets bear a suitable ratio to the current liabilities, and if there is any indebtedness of near maturity that may threaten to develop into a refinancing problem.
- Nothing useful may be said here on the subject of how much cash a corporation should hold. The investor must form his own opinion as to what is needed in any particular case and also as to how seriously an apparent deficiency of cash should be regarded. On the subject of the working-capital ratio, a minimum of \$2 of current assets for \$1 of current liabilities was formerly regarded as a standard for industrial companies.
- A second measure of financial strength is the so-called "acid test," which requires that current assets
 exclusive of inventories be at least equal to current liabilities. Ordinarily the investor might well expect
 of a company that it meet both the 2-to-1 test and the acid test.
- Financial difficulties are almost always heralded by the presence of bank loans or of other debt due in a short time. In other words, it is rare for a weak financial position to be created solely by ordinary trade accounts payable. This does not mean that bank debt is a bad sign in itself; the use of a reasonable amount of bank credit —particularly for seasonal needs—is not only legitimate but even desirable. But, whenever the statement shows Notes or Bills Payable, the analyst will subject the financial picture to a somewhat closer scrutiny than in cases where there is a "clean" balance sheet.
- The impending maturity of a bond issue is of importance to the holders of all the company's securities, including mortgage debt ranking ahead of the maturing issue. For even the prior bonds will in all likelihood be seriously affected if the company is unable to take care of the junior issue.
- This point is illustrated in striking fashion by the Fisk Rubber Company First Mortgage 8s, due 1941. Although they were deemed to be superior in their position to the 51/2% unsecured notes, their holders suffered grievously from the receivership occasioned by the maturity of the 51/2s. The price of the 8s declined from 115 in 1929 to 16 in 1932.
- It will be noted from our discussion here and in Chap. 32 that the matter of inventory profits or losses belongs almost equally in the field of income account and of balance-sheet analysis.
- New developments in products, processes or other factors—including war profits—may change the
 picture for the better, but this has become a matter for speculative anticipation of future improvement

rather than a reasonable expectation based on past performance.

Chapter 46: Stock-Option Warrants

- In a broad sense, option warrants possess the same general characteristics as low-priced common stocks, the theory of which was discussed in Chap. 41. Warrants are in name and in form, as low-priced stocks frequently are in essence, a long-term call upon the future of a business. It is true also that the relationship between a warrant and its common stock is roughly similar to that between a common stock and a speculative senior security of the same company.
- As with all other speculative commitments, the attractiveness of a given warrant depends upon two entirely dissimilar factors: the qualitative element, being the nature of the enterprise, in relation particularly to its supposed chance of great improvement; and the quantitative element, being the terms on which the warrant is offered, including its price and the price of the common stock it calls for. Security analysis cannot be counted upon to reveal those businesses which are most likely to forge ahead in the years to come. There is not much we can say, therefore, about the qualitative element in selecting warrants for speculation. Since ordinarily a warrant can attain tangible value only through an increase in earnings, emphasis must be laid upon the prospects of change rather than upon stability.
- It is an easier matter to point out the elements that govern the relative attractiveness of warrants from a quantitative standpoint. The desirable qualities are: first, a low price; second, a long duration; and thirdly, an option (or purchase) price close to the market. From the standpoint of speculative theory, the most important of the three no doubt is a low price for the warrant.
- It is technically desirable that the price of a warrant be low not only in itself but also in relation to the price of the common stock.
- The foregoing discussion leads to the conclusion that a given option warrant has speculative
 attractiveness, in a technical sense, only if it constitutes a low-cost, long-term right to purchase a stock at
 a price not too remote from the current market.
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 attractiveness, in a technical sense, only if it constitutes a low-cost, long-term right to purchase a stock at
 a price not too remote from the current market.
- A Dangerous Device for Diluting Stock Values. The option warrant is a fundamentally dangerous and objectionable device because it effects an indirect and usually unrecognized dilution of common-stock values. The stockholders view the issuance of warrants with indifference, failing to realize that part of their equity in the future is being taken from them. The stock market, with its usual heedlessness, applies the same basis of valuation to common shares whether warrants are outstanding or not. Hence warrants may be availed of to pay unreasonable bonuses to promoters or other insiders without fear of comprehension and criticism by the rank and file of stockholders. Furthermore, the warrant device facilitates the establishment of an artificially high aggregate market valuation for a company's securities, because (with a little manipulation) large values can be established for a huge issue of warrants without reducing the quotation of the common shares.

Chapter 47: Cost of Financing & Management

- A holding company, in which the exercise of managerial skill appears to be reduced to a minimum once the original acquisitions are made.
- 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.
- The venturing of capital into new businesses is essential to American progress, but no substantial contribution to the up building 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.
- 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 semi-fraud. In theory a promoter may offer something worth \$1 per share at \$5, provided he discloses all the facts and adds no false representations.

Chapter 48: Some Aspects of Corporate Pyramiding

- 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.
 - The memory of the financial community is proverbially and distressingly short.
- 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.
 - 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.

Chapter 49: Comparative Analysis of Companies In The Same Field

- 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.

Comparison of Industrial Companies In The Same Field

A. Capitalization:

- 1. Bonds at par.
- 2. Preferred stock at market value (number of shares market price).
- 3. Common stock at market value (number of shares 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:
- 23. 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.

- 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.
- 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 over conservative 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.

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 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 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 dis-similarly. If similarly, then substantial weight maybe 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

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.

- 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 stubborness 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 & 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.
 - 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 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, 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.
- 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 undervalued 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.
- 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 market wise 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.
- 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 all stock prices adversely, and the less active issues may prove especially vulnerable to the effects of necessitous selling.
- 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 under-valuations resulting therefrom are almost always confined to bond issues, we shall discuss this subject later in the chapter in connection with senior securities.

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 under-valuations, and, taking these as a class, they lend themselves exceedingly well to exploitation by the securities analyst.

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.

- 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.

- 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.
 - 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.
 - 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.
- 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.
- 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.

- 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.

Chapter 52: Market Analysis & 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.

- 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.
- 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.

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.

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.

- It is difficult to establish any definite correlation between fluctuations in earnings and fluctuations in market quotations.
- In the Appendix, Note 70, 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 skeptical 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.
- 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 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.

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