MPLE PRINCIPLES OF
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Simple Principles of Investment

By

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SIMPLE PRINCIPLES OF INVESTMENT

CHAPTER I

INTRODUCTORY REMARKS

IF a wise man works for wages, he naturally demands the highest return obtainable in his particular field of endeavor. If he embarks upon a business venture of his own, he examines with care the various probabilities and possibilities of the proposed enterprise and reflects upon the drawbacks and perplexities which may arise.

Money, being exchangeable for all other commodities, is looked upon as the most important of material possessions. Yet the owner of surplus money does not always display the same amount of care, foresight, and intelligence in directing the employment of his funds as in marketing his physical or mental services. He allows his capital to work for long periods at lower than standard wages, or, per contra, he sells its services to incompetent or dishonest employers at very high wages, frequently losing either wages or capital, or both. He engages it in gambling ventures which he calls speculation, and, after it is lost, he designates all speculation as gambling.

The contention is frequently heard that by buying only the highest grade securities, resting content with the income derived therefrom, and disregarding all changes in market price, one may escape the annoyances and worries attendant upon continual changes in the form of investment. It is unfortunately the case that this view is fostered by bankers for selfish purposes, by brokers who are anxious to save themselves the trouble of investigations, by advisors who artfully figure that they can make no indefensible error through such advice, and by a host of well-meaning but incompetent nuisances who are willing to give advice on any subject whatsoever. As a matter of fact, this popular fallacy is a most dangerous and pernicious one and results in much loss. It may be set down as an axiom which will bear the test of any analysis that the greatest essential of all investments is *constant change*. It is not alone the possibility of serious alteration in the status of an individual security, for which one must be constantly on the alert. The greater drawback lies in changes in the fundamental influences which raise or lower the wages of money and which put a premium or a discount on the employment of funds in certain directions. When the price which capital commands rises for any considerable length of time, the prices of all bonds, notes or other instruments having a fixed rate of income must fall. When capital is not fully employed, money rates will fall and the prices of securities having a fixed rate of income will rise. The postulation is as certain as that water will seek its own level. This is a point to which discussion will be directed later, and an endeavor will be made to show, *inter alia*, that the owners of many securities, including those which have long been considered the soundest investment securities in the world, have seen their fortunes dwindling for years through failure to recognize great but insidious basic changes.

Some people contend that, so long as the income received on certain securities of high grade is sufficient for all their needs or desires and that so long as these returns are forthcoming, they ask for nothing more. For these fortunate individuals we have no argument. They are the real philosophers, truly content and happy. If civilized society was made up exclusively of these estimable people, the world would first cease to move forward and then begin turning backward. However, those who sincerely entertain such views seldom are possessed of surplus capital except through accident. People who have nothing proclaim that if they had a certain fixed income they would be perfectly satisfied, and they most potently and powerfully believe such to be the case—until they get it.

In the preceding comments there is no intention of recommending or upholding the devotion of an undue portion of the precious time alloted to each of us to the worship of Mammon. One may have a reason for attempting to increase his fortune, or at least to prevent its gradual decadence, without possessing the magnificent avarice of a Midas or the miserly desires of a Scrooge. The well-balanced man may, and usually does, find a legitimate outlet for all the money he can reasonably and honestly acquire. Possessed of a clear understanding of the dangers as well as the opportunities of the investment and semi-investment field, he may materially increase his annual income without endangering his principal. The prevalent sophistry that danger to principal necessarily increases in inverse ratio to increased income is another of a long line of popular fallacies, the exploitation of which has permitted shrewd and far-sighted men to reap large returns at the expense of their less astute brethren. Nor is essential knowledge always the result of profound thought, exhaustive study, or great experience. It is more frequently the result of a clear understanding of simple economic laws. Lacking this essential knowledge, the owner of money fails to see the truth until it is too late to act. For example, it required no great amount of wisdom or reflection to realize in the early stages of the European war that heavy Government bond issues, coming into competition for funds at higher and higher rates of interest, would cause a great decline in the price of all other securities of distant maturities bearing a fixed rate of interest. People who understood and foresaw the working out of the phenomenon at once disposed of all distant maturity bonds and, if they did not care to invest in foreign Government issues, they purchased notes, equipment obligations, or other instruments maturing in a year or two, with the result that, while holders of bonds saw gradual but severe declines in the quoted value of their holdings which cancelled all or a large part of the interest received, the holders of the early maturities, which must be redeemed at face value when due, kept their capital liquid and ready for employment in any of the numerous avenues of advantage opened by the war.

Similarly, when it first became apparent that a heavy super-tax was to be levied on wealth in connection with our own war revenue measures, it required no great amount of study or perspicacity to foresee a further decline in all securities of fixed income and distant date. The wealthy owner of a 4%, or even a 5%, railroad bond could, if his income therefrom was to be taxed say 50%, dispose of it and put the proceeds into tax-exempt bonds, obtaining an equal or a higher rate of income and receiving a higher grade of security. In this case, there would be no incentive for the man of small income to make the change, *except* for the certainty that wealthy owners would sell, and that their selling would depress quoted prices. This was, indeed, exactly what happened. The man who realized these facts could have materially increased his income by being quick to dispose of his bonds and awaiting an opportunity to replace them at lower figures, meanwhile employing his funds elsewhere. There would have been very little of the speculative about such a transaction. It would merely be intelligent action based upon a recognition of the working out of certain elementary but immutable laws.

Changes in the basic values of securities are by no means confined to conditions growing out of war or political upheavals. Before the European war began, the increasing gold supply was widely accepted as a cause for advancing interest rates, which meant, of course, declining bond prices. This influence, is one of the more recondite factors which assert themselves so gradually that they are frequently ignored. It is necessary, however, that such influences be understood if funds are to be properly employed and safeguarded.

Next in importance to a clear recognition of the probable effects of economic or political changes on values and prices generally is the intelligent selection of securities. Several works have been published outlining methods of analysis which presumably equip the reader to choose his own investments. As contributions to the literature on the topic, such books are to be commended, but it may as well be understood that no man can rightly consider himself competent to pass upon the individual merits of various securities unless he makes an exhaustive study of the subject. If a certain railroad bond is to be carefully examined as to its vital ingredients, which are, first, safety of principal, and second, assurance of sustained interest payments, a thorough analysis would involve the employment of trusted and high-salaried engineers and experts, in addition to a scrutiny of the statistical exhibits. The finances of the issuing corporation; character of its management; the prior liens; outside leases and security ownership; franchises; probable property value in liquidation; strategic and geographical position in competition with other lines; the character of traffic; past and prospective growth of productive area and population—these and a dozen other like equations would have to be accorded careful and competent consideration. It will be seen at once that an exhaustive inquiry along these lines is a formidable task even for the experts. It would be a flat impossibility for the best posted layman. And an insufficient investigation would be worse than none at all, as error or miscalculation on one important point might prove fatal.

Inability to conduct such examinations personally need not, however, prove a serious drawback to the investor. Every reputable bond house conducts a preliminary scrutiny of all the points mentioned before underwriting an issue. They do this for the mutual protection of their clients and themselves. They must protect their clients in order to hold their patronage, and as the underwriters are often compelled to retain a portion of a flotation for an indefinite time, their own funds are liable to be involved. It is evident, then, that one of the first and most important steps is to patronize only the most conservative and reliable brokerage or banking concerns.

But, granting that a satisfactory bond house or banker has been chosen, we have only taken the first step in a reasonable plan of procedure. While the underwriters or other agents may be trusted to conduct adequate examinations as to the security of principal and interest on each flotation, they are not at all likely to concern themselves with economic or speculative considerations. There are, so far as the writer has been able to discover, no records of any bond or banking institutions warning against the purchase of bonds because of the war influences referred to heretofore. Nor can we find any valid ground for criticism in this regard. The professional underwriters may fairly consider that their responsibility goes no further than to see that both interest and principal are secure. Indeed, most large institutions and bankers, recognizing the probable effect of war or other great economic changes on the money and credit markets, would feel justified in altering the nature of their own holdings. As a matter of fact that is what happened in 1914 and thereafter. As soon as the war broke out, far-sighted institutions, banks and individuals began disposing of their distant maturities and putting the proceeds into short term paper. This resulted in a declining bond market and simultaneously a great demand for sound one or two year notes, equipment obligations, or other forms of early maturities. This was inevitable. It would not have been reasonable to expect that the bankers and others who saw what was coming should have openly advised outsiders to dispose of bonds while they themselves suffered through competitive selling and loss of opportunity. Those who, because of experience, study, reflection, or good counsel, realized that bonds must decline, were the logical gainers, whether they were bankers, brokers or individuals. It is so in every walk of life.

While any attempt on the part of the ordinary man to pass competently upon the numerous and intricate factors which appear in a bond analysis must prove abortive, there are a few fundamental principles which he should understand, and a knowledge of which he may acquire at no great expense of time or effort. He may acquaint himself with the influence of important basic conditions on values and prices of securities. He may learn what barometers indicate such changes and how to read them. He may acquaint himself with the character and nature of the various forms of securities and may equip himself to judge of their relative values. By familiarizing himself with a few practical rules, he may, without pretending to analyze new security issues, be able to detect any change for the better or worse in the status of seasoned issues. As his examinations progress, he will be surprised at the beautiful simplicity of some of the problems he has considered abstruse. Finally, he will find that in devoting a little time and thought to the protection of his property and the increasing of his income, he has entered upon a line of research and reflection which will extend and broaden his entire perspective and which will prove of value in every conceivable line of activity. The man who undertakes to acquire a knowledge of these fundamentals is in much the same position as the progressive individual who acquaints himself with the laws of general health, without, however, considering it necessary to become an expert surgeon or physician. And, as the man who understands and lives in concordance with the general laws of health will less frequently be put to the necessity of employing a physician, so the man who understands how to look after the health and well-being of his capital will escape much perplexity, annoyance and loss.

It is the purpose of this work to point out what factors, in the judgment of the writer, deserve closest attention and how such factors may be examined and understood with a minimum expenditure of time and labor.

Before entering upon the discussion, it may be well, for the sake of a clear understanding, to explain the meaning of the word "speculation" as it will be frequently employed hereafter.

This much abused word has now come to be looked upon as a synonym for gambling transactions in the stock, cereal or cotton markets. Many editors, preachers and other molders of public opinion accept this contorted meaning without question. Lacking even a superficial understanding of the matter and without ability to discriminate as to what is gambling and what is speculation, they bring blanket indictments against the entire practice. These scribes and orators do far more harm than good, for people will continue to speculate as long as the world moves. It would be infinitely better to warn people of the evils masquerading under the name of speculation and to point out the traps and pitfalls which await the unwary.

There is no form of human enterprise which is not in some degree speculative. No great fortune has ever been honestly acquired in a reasonable length of time except through speculation. It is amusing to hear people who are buying non-dividend paying stocks state that, as they are paying for their purchases in full and putting them away, they are not speculating. It is also amusing to observe the efforts made by some commentators to avoid the odium of the word by referring to "semi-investment" or "profit investment," etc., when they mean "speculation" and nothing else.

For the purposes of this work, the word "speculate", or its derivatives, whenever employed, will be understood to mean any form of transaction which contemplates, in addition to income return, a further return through accretion of principal. It may be added that comparatively few purchases of securities are ever made which do not contemplate such a profit. Rothschild's celebrated prescription for getting rich: "Buy cheap and sell dear" could not possibly be followed without involving the highest form of intelligent speculation. Convertible bonds, which have been issued by many corporations in recent years, are more popular than the ordinary form of bonds, simply because they carry speculative possibilities. But it is not necessary to multiply illustrations or prolong argument on a point which can admit of no successful contravention.

CHAPTER II

WHAT TO BUY

THE necessities, inclinations, resources, and habits of thought of individuals differ greatly, therefore it is impossible to offer any rule of thumb covering the intelligent investment of funds. If absolute integrity of principal and interest were the only considerations, we could dismiss the whole subject by advising people to confine their investments to gilt-edged bonds. But the owner of a moderate amount of wealth may not find the income received on such securities sufficient to cover his necessary expenditures and must, whether he will or no, face the alternative of accepting some degree of risk in order to increase the income, or of drawing on the principal. As a choice of the two proposals it may be said without hesitation that a moderate risk is greatly preferable to depletion of capital. The great danger lies, of course, in personal inability to decide what is or is not a "moderate" degree of risk. The credulous or unsophisticated buyers may easily be led to believe that some security which pays, or promises to pay, fifteen or twenty per cent per annum is really quite sound. The vendors or promoters of such securities usually produce most plausible arguments and they succeed in convincing many people as to the merits of their propositions. In this regard it may be pointed out that while there is frequently a decided hiatus in the return on various classes of really good securities, possibly as wide a range as the difference between four and eight per cent, no issue which proposes to pay fifteen or twenty per cent is, at its best, more than a speculation. As speculations, such propositions occasionally justify themselves. In ninety-nine cases out of a hundred they do not. The reason for this is that if any corporation can satisfactorily demonstrate its ability to earn a great deal more than what may be called the maximum legitimate return, and to continue such earnings, there would be no necessity for advertising or peddling it. Capital would easily be found ready and anxious to finance any such enterprise if there was not some vital flaw in the structure.

While it would be impossible adequately to cover in the limits of a brief chapter the very large subject of what to buy, it may be well to formulate a few important preliminary maxims and rules which will be amplified and added to as the discussion progresses.

There are two simple but excellent tests which may be profitably observed by the investor. One is the character and reputation of the men who are dominant in an enterprise; the other is the record of past performances. Neither of these tests can be considered absolute and all-sufficient. They must be supplemented by other investigations, but both are important first steps.

As to the first test, i. e., the character of control, it is only necessary to reflect upon the activities of two or three small groups of powerful railroad financiers to realize the danger of trusting to the tender mercies of selfish, incompetent, or dishonest financial interests. The owners of the securities of one large railroad group, in particular, have suffered hundreds of millions in losses. Not one of the numerous properties controlled by this interest escaped serious decadence. The downfall of these roads cannot be properly attributed to restrictive laws, discrimination, poor territory, or any other natural drawbacks. The fact that other roads operating under the same laws, possessing the same geographical advantages or disadvantages and receiving the same compensation for their services were able to improve in value and to increase profits and dividends, at once disposes of any such contention. Those who made up their minds years ago that they would have nothing whatever to do with any securities or properties in which these financiers were the leading spirits have certainly been gainers by their conservatism. It is a pretty good plan to scrutinize the directorate, management and control of every property in which the investment of funds is contemplated and to mark the securities off the list if there is any room for doubt. Plenty of equally good bargains can be found in other directions. No man possessed of ordinary reasoning powers would engage in a business venture or go into partnership with an individual who has a record for incapacity or questionable dealings. Certainly he would not do so if he could not watch each act of his partner and protect his own interests from day to day. Yet thousands of people become partners in great corporations without due reference to the character and antecedents of their associates.

The record of earnings over a sufficiently long period of years frequently demonstrates, in itself, the probity and ability of those who control the fortunes of an enterprise. In looking over the amounts available for bond interest, stock dividends, and surplus for ten, fifteen, or twenty years, we frequently find discrepancies which cannot be explained away by misfortune or inequalities. As a specific example we may take the case of two great railroad systems of the West and Southwest—Atchison, Topeka & Santa Fe and Chicago, Rock Island & Pacific. In the year 1900 the stock of the Rock Island road was, in the estimation of investors, worth about $120 per share, and it was what is known as a seasoned dividend-payer. Atchison stock in the same year averaged around $30 per share and paid no dividends. In 1915 Rock Island became bankrupt, all the securities suffered a great decline, and stockholders were required to pay an assessment of $40 per share. In the same year Atchison stock averaged above $100 per share and was (and still is) a sound six per cent dividend-payer, and all the securities of the road are looked upon favorably by investors. The opportunities for growth and profit were almost identical in both cases—there were no considerable advantages of territory, traffic, or railroad strategy on either side. But the control of Rock Island was changed, and with that change came an abandonment of conservative methods and an orgy of stock market speculation, with the inevitable results. In this case the records of past performances would not have helped much, but observation of what began to happen as soon as the change of control occurred would have warned the close observer that he would better shun the securities. This example shows us that we may add to our rules of safe conduct the immediate investigation of any change in the control of a property. And this is a rule which works both ways. That is to say, control may change for the *better,* as well as for the *worse.* There has, in fact, been a great deal of elimination of a most salubrious character in the last few years. The banker finds that he cannot finance the securities of corporations which are not properly managed, simply because he cannot pass the securities on to a public which is gradually growing more enlightened.

There are certain simple statistical records by which one may arrive in a fairly satisfactory manner at the condition and progress of any property, the equity value and stability of income, and other salient points. In making such examinations it will not be necessary for the investigator to spend a great deal of time on minute examinations or mathemetical calculations, as all the necessary figures may be found accurately compiled in several publications. As the nature and relevancy of these essential factors require somewhat extended comment and explanation they will be made the subject of another chapter.

The man who seeks a higher return than that afforded by strictly gilt-edged securities must make up his mind to sacrifice something in the way of demonstrated property value. In the case of a very rich investor, an insurance company, or an estate, property value is given first place, and income return second place. But in the case of the investor who depends upon the annual interest or dividend returns, the process is reversed. And the present writer will offer the very decided opinion that so-called property or equity value is frequently a much over-rated equation. This statement may be assailed as rank financial heresy, but it is an easily demonstrated fact that a great many securities which are not designated as "high-grade" have gone on paying their owners six or seven per cent or more for a long period of years and have been constantly increasing in stability and value during that period. Furthermore, there is no doubt that thousands of men who have been willing to give a little care and study to their investments have been able materially to increase the orthodox "safe" income without much risk or loss. It is all right for the banker, the trustee, the insurance corporation, or any custodian of other people's money to adopt rigid rules as to value in possible liquidation, but the individual investor must possess a little vision and must exercise a little courage. After all is said and done, the greatest asset of any business is its earning capacity—its ability to make and pay interest and dividends. Divested of this attribute, most of our railroad and industrial properties would have little value except as junk. A short time ago a Western railroad* with 261 miles of line in the Denver mining district was actually sold as junk, and the holders of the first mortgage recovered $85.55 for each $1,000 bond.

There are plenty of records of second mortgage or general lien bonds which could have been purchased years ago at prices to return seven or eight per cent on invested capital, which have continued to earn their interest requirements by a large margin and which have

*The Colorado Midland.

finally been duly liquidated at their full face value at maturity. Indeed, there is seldom a time when such bargains are not available to the discriminating purchaser, merely because there is no demand for such bonds from important interests which must observe certain precise rules as to their holdings, and no demand from that very large public element which follows the advice of over-conservative people. There are also many preferred railroad and industrial stocks which return six or seven or sometimes eight per cent on investment and which are, in reality, sounder and better than low-grade bonds. Some of these stock issues have paid these high rates for fifteen or twenty years without failing to earn the disbursement by a liberal margin in any single year, good times or bad. Some of the industrial preferred stocks have no funded debt ahead of them, and have, to all intents and purposes, a much higher equity value than inferior mortgage bonds. If, as suggested heretofore, the earning power of these corporations was to cease and the properties were to be sold as junk, the equity would be questionable, but it is idle to assume any such thing as liquidation of our well-managed railroad and industrial enterprises. In the case of the Colorado Midland two great errors were made by purchasers of the bonds. The most vital one was that they failed to observe that the road served a mining territory which proved to be only temporarily productive; the other was that the whole proposition was greatly over-capitalized. There is no necessity for making such errors of judgment very often, if a few simple rules are adopted and adhered to, and a reasonable amount of care exercised in the choice of securities.

As suggested heretofore, there is a wide range in the return which may be secured on various kinds of bonds or preferred stocks. There is also a rather sharply defined line of demarcation which may not be crossed without violating the factor of conservatism. Reasonably sound securities may return as much as seven per cent, possibly eight per cent, if there is an unusual demand for capital, but whenever the return shown is, say, ten per cent, there is ample reason for suspicion and caution, and the greater the return, the greater reason for carefully investigating the securities in question.

Examination of a large number of securities in the various groups shows a fair degree of uniformity in the relative return on invested capital. In normal times, prior to the general disturbance of capital conditions by the European war, when high-grade railroad bonds were on a four per cent basis, the second-grade bonds would be on a five to five and a half per cent basis, according to their character, and the seasoned dividend-paying railroad stocks on a six per cent basis. At the same time industrial preferred stocks were usually on a six and a half to seven per cent basis and industrial common stocks on an eight per cent basis. These discrepancies have never been adequately justified by subsequent price movements or the demonstrated value of the securities. Especially in the case of industrial preferences, unwarranted prejudice and doubt have been in evidence. The attitude of the investor toward industrial bonds, notes, and preferred stocks has been undergoing a gradual change for the better. This was true even before warfare added to the profits of manufacturing corporations in an abnormal way. In the course of time the better class of industrial issues will probably be held in as high esteem as any other investment securities especially if these corporations are compelled to issue monthly statements instead of the inadequate annual reports now in fashion.

It is far from the intention of the writer to advise or suggest that any owner of funds should base his purchases upon income return alone, even when that return is within the prescribed limits set forth. Assuming that he has satisfied himself as to the character of management, the record of past earnings, and the present status of a security, he must also reflect as to the *future* of the particular enterprise in which he proposes to engage his money. Whether we elect to call this personal estimate of the future "speculation" or "vision" or "foresight" or "common sense," it is a prime essential. All successful men have possessed it in a marked degree and, by the same token, the possession of this faculty explains why they were successful.

If the foregoing contentions are acceptable, we may begin by setting down the following simple rules:

1. Careful attention should be given to the character of the individuals or financial groups controlling properties in which investments are contemplated.

2. The records of past earnings, dividends, etc., should be examined over as long a period of time as possible.

3. Changes in control should be noted and investigated.

4. While both equations should be considered, the average investor is justified in giving more attention to earning capacity and income return than to so-called property value.

5. Prejudice against certain classes of stocks or bonds should be eliminated and each proposition weighed on its own merits.

6. Intelligent consideration of the *future* of any enterprise is vastly more important than the known conditions of the present or the records of the past.

CHAPTER III

WHAT NOT TO BUY

THERE are in existence billions of dollars (par value) of untried and questionable securities not listed on any reputable stock exchange. In addition to this, hundreds of millions of the bonds and stocks of new enterprises are offered to the public each year. The list of obsolete securities has been compiled in two large volumes, and the total capitalization of these worthless issues is probably ten times the amount of the living "outside stocks." Yet all these dead securities were at one time sold to a credulous and deluded public at some price. Each one of them has, in the course of exploitation and marketing, been presented in a convincing manner. In some cases, possibly in a majority of cases, the promoters of the enterprises have been sincere, but mistaken. In others the whole proposition has been a swindle.

One of the principal reasons why people hazard their funds in these so-called securities is that there are a few instances where such ventures have proved highly profitable from the start, and the promoters are adept in stressing and emphasizing these exceptional cases. Most of the fake oil or motor corporations load their prospectuses with figures showing the great profits that could have been made by buying Standard Oil or General Motors at ground-floor prices, concluding with confident predictions that their particular ventures will duplicate these performances—which they never do.

It is obviously the case that the word "investment" as it is frequently and glibly applied to new securities of this kind is a misnomer. They are, at their best, speculations, and usually very hazardous speculations. They are patronized by the public because of greed—a desire to get rich quick, or to obtain inordinate returns on surplus funds. The only people who ever make a success through the purchase of such stocks are those who thoroughly understand the nature and possibilities of the business exploited and who can intelligently judge of the prospects of a particular corporation and the real value of its assets. It may be contended that some outsiders possessing no such knowledge have occasionally made large profits out of new issues. But profits made in this way are soon lost. The elated speculator may rest on his laurels for a time, but he always returns to the game.

In attempting to determine the value, earning capacity, or status of the securities of most of these corporations the expert analyst will at once throw up his hands. To begin with, there are no records of the past which afford a basis of comparison, and it is an axiom with accountants that "if there is nothing to compare, there is nothing to criticize." The statements of an official or board of directors cannot be given serious consideration. They may be mistaken, or they may be mendacious—sometimes they are humorists.

The simplest and most reasonable rule for the owner of a moderate amount of capital to adopt in regard to new promotions or unlisted stocks is to let them alone. Perhaps one or two out of a hundred of these flotations will make good, but that does not constitute even a fair gambling chance. To buy a number of these stocks in the hope that the great profits made on one will exceed the losses made on the others is about as intelligent a method as betting simultaneously on all the numbers on a roulette wheel.

It may appear unnecessary, in a work addressed to *investors,* to warn against the dangers of involving funds in uncertain enterprises. But are there many readers of these articles who can say that they have never suffered losses through such purchases? Are there any?

Mining stocks (and in this category the stocks representing corporations producing petroleum are included) often make a strong appeal to the investor. The dividends are larger and the possibilities of exceptional profits appear greater. But the buyer or owner of such shares should keep one salient fact steadily in mind, which is that his property is constantly consuming itself. For this reason his stock certificate is also constantly consuming itself. This statement does not necessarily apply to the distributors or refiners of metals and oils, but it surely holds good as to a mine of any kind. The amounts received in dividends from a mine are partly profit and partly the paying back of invested capital. When the mine is exhausted, the stock certificate is practically worthless, so the owner of mining securities must figure on getting back all his invested capital, together with interest thereon, before the property ceases to be productive. This process, technically known as "amortization," will be explained in its proper place.

On the other hand, the owner of a railroad or manufacturing stock may reasonably assume that the business will increase and the property value grow greater as time goes on. Wealth and population and the resultant demand for traffic or fabricated staples will be augmented from year to year. No doubt many critics will object to this statement on the theory that the owner of railroad stocks has had a very hard time of it in the last twenty years. This popular view is due to prejudice, or to ignorance of what has really happened. In the fifteen years preceding the European war the owners of sound and well-managed railroad stocks reaped very large returns. For example, the average per cent per annum received by the investor in Atchison common stock who made his purchases in the year 1900 was 14.2 per cent. This is exclusive of any profit which could have been made through a rise in the price of the shares. Including this profit, the average annual return would have been 33 per cent. On Great Northern the returns would have been 12.5 per cent per annum on the first basis and 10.7 per cent on the second. On Southern Pacific the figures were 16.8 per cent and 31.2 per cent per annum, respectively. None of the leading properties showed an average return below 6 per cent in the period under review. There were exceptions, but their troubles are easily traced to specific evils or mistakes.

Reference has been made to the danger of buying unlisted stocks of any kind except in cases where the purchaser is thoroughly familiar with the character and prospects of such stocks. It is unfortunately the case that newly listed securities are also productive of a great deal of loss—a statement which is easily verified if we scrutinize the records of all the corporations which have been listed on the New York Stock Exchange in the last twenty years. The debut of such securities into stock exchange society is usually marked by some preliminary advertising of the coming event, together with much favorable comment as to the earnings of the past and the prospects of the future. It is a remarkable truth, the elucidation of which may be left to the psychologists, that the investing and speculating public will always patronize these novelties freely even when there are better and more fully demonstrated bargains among the old-line securities. This public patronage naturally results in market activity and some advance in the prices of the newcomers. That is due to competitive buying, and it may be of interest to note, parenthetically, that no influence except competitive buying can possibly cause prices to advance. A security may double or treble in value, but unless the price is bid up there can be no higher *quotations*.

In nine cases out of ten the initial advance in these new issues is followed, first by a period of hesitation, and then by a decline, usually a very severe one. This does not apply to common stocks alone, but to bonds and preferred stocks. As a single but prominent illustration of this, we may take United States Steel. When the new securities were listed in March, 1901, the common stock started off around $45 per share and the preferred around $95 per share. In April the common reached $55 and the preferred $102. These were the highest figures attained for many years. In 1903 the common sold below $10 per share and the preferred below $50. Similarly, Amalgamated Copper was greatly oversubscribed by the public at about $95 per share in November, 1900. In June, 1901, it reached $135 per share and in December of that year the price reached $60, and fell to $33 in 1903. How rapidly or how severely this deflation affects newly listed issues is, of course, largely dependent upon general developments affecting all security prices, but even in normal times there is almost invariably a baptism of fire before the securities are "seasoned."

There are two principal reasons for this phenomenon, which may be briefly analyzed as follows:

First. The owners of a certain large property which has made rapid progress and which has an excellent record of profits may decide to dispose of it at a high price. The simplest, if not the only way, to accomplish this is to increase the capitalization of the corporation, advertise its records of growth and prosperity, list it on the stock exchange and sell it to the public. By this method a much higher price can be secured than any single buyer or limited syndicate would be willing to pay. The proposition is simply "watered," a process which Daniel Drew invented when he fed his hogs and cattle salty food and let them drink copiously just before he weighed them in at the market place.

The promoters of a flotation of this character are always shrewd enough to select a time for the transaction when earnings are at the apex and when outside money is plentiful. In short, they select the period of greatest prosperity, which, in the working out of the cycle, immediately precedes an era of depression.

Second. The promoters of a great combination of properties must pay fancy prices for the securities of competing corporations. When a price is agreed upon, the sellers of the outside properties receive part cash and part bonds or stocks of the new parent concern. After the merger is completed, the sellers of the independent plants begin to realize their profits by disposing of the securities received whenever the market will permit of advantageous sales. In the last analysis, an over-enthused and unposted public provides the bulk of the huge sums necessary to finance the merger and, sad to relate, the same public usually foots up the final and total loss. Later on the combination may prove a great success, but by the time the water has been absorbed or squeezed out the securities are no longer in public hands. The outsiders have either relinquished their holdings in disgust or have been forced to sell because of financial embarrassment. Here again United States Steel is a good illustration.

The conservative investor should exercise extreme care when he is tempted to buy the securities of corporations which have suddenly increased their earnings in an abnormal manner. It is an established law of economics that no line of enterprise can possibly make abnormal profits for any considerable length of time, as capital will at once begin to flow from less profitable sources into a business showing larger returns, and it will continue to flow in that direction until the equilibrium is established. The only exception to this law is in the case of monopolies, but monopolies are, broadly speaking, a thing of the past.

Sometimes a corporation which has had a "fat year" will increase its dividends to conform with the surplus earnings of that particular period. More frequently the increased dividends will be technically described as being partly "regular" and partly "extra." The first plan is bad practice unless there is every reason to believe that the rate named can be paid indefinitely. The second plan is quite legitimate. There is no reason why unusual profits should not be distributed as extra disbursements. If the surplus funds are not needed in the business, they may as well be handed over to the security owners—there are no other claimants. Once these temporary profits are distributed, they are no longer a factor. They have been taken out of the treasury and subtracted from the value of the securities. The prevalent error, which is a most mischievous one, lies in the propensity of the security owner to assume that the extraordinary distributions will be *maintained.* The mere designation of any part of a dividend as "extra" should be sufficient warning that the directors are not satisfied that it can be maintained.

The man who buys at $100 a share a stock paying "6 per cent and 4 per cent extra," on the theory that he has a 10 per cent stock, is likely to be sadly disappointed. Suppose he receives his full 10 per cent rate for one year and then the "extras" are eliminated. He certainly cannot criticize the management for paying out these sums in excess of the regular dividends, especially when the extraordinary disbursements were clearly stated as being "extra." But he now finds himself in possession of a 6 per cent stock which may be a very poor bargain, and all he gained from the one year of large returns is lost in the market value of the stock.

Closely related to the extra dividend fallacy is the popular idea that the distribution of profits which have been piling up in the treasury of a corporation for a period of years can add to the future value of a stock. These acquired sums are a known quantity and have consequently been discounted in the quoted price of the shares. When these funds are paid out the price and value of the stock drops by just that amount. Even more delusive is the "stock dividend." No corporation can possibly add a dollar to its profits or its value by handing a stockholder two shares of new stock for one share of old. The process consists of trading paper for paper; but this form of financial alchemy has often induced credulous people to buy securities at twice what they were worth.

The owner of money should always reflect that there are thousands of people whose business it is to sell something to the public at a price which will make a profit for the *seller.* That is true of real estate or any other line of barter, but the security market offers the most fertile field for promotion, and the wares offered for sale are numerous and varied. All offerings must be made to appear attractive, else they could not be sold at all. It has been the purpose of this chapter to cross off a few divisions of securities which should be avoided on general principles. With this in view, the following suggestions are offered:

1. Do not buy the bonds or stocks of new corporations unless thoroughly acquainted with the particular line of business and the prospects of the individual corporation.

2. Do not buy mining or oil stocks as long-time *investments.*

3. Do not buy newly listed securities until they have been "seasoned."

4. Do not buy securities on the theory that suddenly increased or "extra" dividends will necessarily be maintained.

5. Do not buy securities in the hope that approaching "melons" or stock dividends will enhance values.

CHAPTER IV

WHEN TO BUY

ROTHSCHILD, probably the most successful combination of investor and speculator of whom we have any record, was the author of three terse axioms which are well known but which will bear repetition. They constitute, in themselves, a volume on the subject.

The first of these has already been referred to. It contains only five words, "Buy cheap and sell dear." The second was in reply to the question, "How did you make your fortune?" to which Rothschild replied: "By never trying to buy at the bottom and always selling too soon."

The third takes the form of a well authenticated story. During the internecine troubles in France, following the Franco-Prussian war, Rothschild was asked by a friend what he should buy. He advised the purchase of French rentes (the equivalent of our Government bonds) which were then selling at about 60 per cent of their face value. "But," said the recipient of this advice in amazement, "the streets of Paris are running with blood."

"That is the reason you can buy rentes at sixty," replied Rothschild.

This last axiom might be fused with the two others quoted. The advice contemplated buying the rentes because they were "cheap," but not necessarily because they were "at the bottom."

In the nature of things no bond or stock can be purchased at a price far below its value unless extraordinary and depressing conditions exist. Fear as to the future is one of the most vital of these conditions; temporarily high prices for money, credit, or capital is another.

When there is unwarranted fear as to the integrity of any security or class of securities, or as to the fortunes of a nation on whose welfare these securities are dependent, there are two primary stages of liquidation. Far-sighted bankers or rich individuals dispose of securities before the alarm becomes general. Such selling is supplemented by some liquidation by institutions which find it expedient to reef their sails. This is followed by more widespread apprehension, accentuated by the spectacle of falling prices. Then the public begins to liquidate. Under this competitive selling prices crumble rapidly. In a short time very low figures are reached and the wiser interests begin to replace their holdings. But the public investor or speculator invariably stands aloof when prices are low. His theory is that he will be able to buy as cheap or cheaper after the atmosphere has cleared. He fails to realize that many other men have greater facilities, both tangible and mental, for correctly forecasting an improved outlook, and that their buying will advance prices before the truth stands plainly revealed. He is, in many cases, engaged in a futile attempt to "buy at the bottom." He usually winds up by buying at the top.

The most difficult task the outsider encounters is to determine when securities are cheap. In a great majority of cases he tries to solve this rather intricate problem in the easiest way. The ordinary method is to assume that if a certain security has declined heavily from its former high prices, it must be cheap. No more serious error could be made. The very fact that such a decline has occurred may be the best evidence of inherent weakness and is surely the best reason for careful investigation. This is especially true when a certain security or group of securities is declining in the face of normal conditions and steady prices for the general list of securities. When the decline is comprehensive, the causes must be sought and the turn of the tide anticipated.

It is, of course, impossible to offer a set of mechanical rules by which the limit of high or low prices can be even approximately gauged. But, impossible and irrational as any such advice may be, thousands of people have attempted to invent such methods. There is no record of a success in this direction. The efforts have proved as futile as attempts to invent perpetual motion, or to square the circle. However, there are a few visible aspects which may be scientifically interpreted and which will prove of great benefit to the investor who devotes a little time to the subject.

In abnormal periods, such as a time of war, when doubt and uncertainty are the predominant influences, the decision as to the proper time to invest must be left, to some extent, to individual views as to the final outcome and the probable duration of the disturbance. But even at such times financial conditions usually steady down and stand on a solid foundation after the first spasm of fright and liquidation is completed. When this stage has been reached, both money rates and the price of capital will settle around a more or less stable level and remain there. We had ample evidence of this in the discount rates of the banks of Great Britain and France during the progress of the European war.

When this plateau of stability is reached, the task of the investor is largely one of comparison between the return which may be secured on sound securities and the prevailing price of money or capital. To formulate a rough rule, it may be said that if time money is fixed around 6 per cent and the highest grade of investments — Government bonds — are selling at a price which yields 5½ to 6 per cent, ordinary railroad bonds or preferred stock, or other instruments having a fixed rate of interest, would not be cheap unless the return on invested capital is at least 7 per cent. On high-grade railroad or other stocks 8 per cent would be about the right figure. This rule is subject to numerous variations, according to the individual character of securities and the maturity dates, but it is as near as we can come to a definite prescription.

It may be contended that the fortunes of war or other unknown factors would render this rule useless. That might occur, but it is improbable. If one may presume to make a tentative analysis of what was going on in

Rothschild's mind when he gave his famous advice to buy French rentes, it may be suggested that his fundamental idea was that the securities and the future of a great nation would not be bankrupted by even the disastrous defeat by Prussia and a more disastrous civil uprising.

In normal times the barometers are much more easily read. The cause of all our financial panics in recent years, excluding the abnormal influence of warfare, has been over-expansion of credits—too much prosperity. A too rigid banking system, which has now been measurably reformed, contributed to these eras of artificial disaster, but no banking system which can be invented will overcome credit inflation. We cannot build a machine which will nullify human error.

In a published work* the present writer undertook to show by statistical exhibits that in all past years when security prices were at the top, general business, as reflected in bank clearings, was most active, speculation at a maximum and the whole outlook superficially favorable. These were the popular and visible evidences of prosperity. But those who delved below the surface found some disconcerting facts in regard to our credit structure. The loans exceeded the deposits; the percentage of specie or reserves was very low and money rates were high. In short, the dollar was being overworked and something had to crack. The security markets were the first to suffer. When the banking position became so strained that loans must be curtailed, it was inevitable that the blow should fall first upon collateral security instead of upon the mercantile world.

* The Pitfalls of Speculation (1916)

Loans were called, or could not be renewed, and securities of all kinds were sold in the open markets. Then came the reflex action. Over-extended merchants or corporations found their business falling off because panicky conditions had reduced the purchasing power of the public. These distributors and producers were compelled to abate their activities and reduce their own loans. It is a noteworthy fact that 1903 and 1907, which are called "panic years" in the estimation of the Stock Exchange, were both years of record-breaking general business, while 1904 and 1908 were both years of decided business depression, although the security markets, which had declined heavily in 1903 and 1907, made great advances in 1904 and 1908. These two illustrations will serve to give us satisfactory evidence of the anteriority of security prices. While wise people who saw the signs correctly in the early part of the 1907 boom were liquidating their holdings, the outsiders, enthused by the surface appearances, were buying; and in 1908, when the disgruntled public would have nothing to do with the markets, the wise people were repurchasing what they had sold. And, looking again only to our barometers, it is found that the percentage of loans had fallen in 1904 and 1908 to very low figures, while the percentages of specie and reserves were very high, and money was a drug in the market. But the legible and lucid popular signs were all discouraging. The atmosphere was blue. The outsider was in much the same frame of mind as the gentleman who hesitated to buy rentes because the streets of Paris were running with blood.

The remarks which follow may appear to be somewhat disrelated from the topic "When to Buy," but they are germane to the subject.

It is quite frequently the case that the owners of surplus funds will invest in securities and will be slow to make any changes in their commitments, even when obviously better bargains are available. These holders may ignore the opportunity to make advantageous exchanges for three main reasons. First, they may be satisfied with the character and return already secured, in which case they are contented. Second, they may not want to go to the trouble of liquidating the old securities and buying those which are better or more promising, in which case they are lazy. Third, they may hesitate to dispose of the securities they own because they were purchased at higher prices and it would be necessary to write off a loss if the bonds or stocks were sold, in which case they are foolish.

As it would be wicked to disturb contentment and useless to attempt to cure laziness, attention is especially directed to the third notation.

The propensity to hang on to a bad bargain rather than to sell it at a lower figure than that at which it was purchased is one of the most prolific sources of loss. The value of a security in the immediate market is measured by the price at which it can be sold *today,* and the fact that it was bought at a higher price cannot possibly increase that current value. If it can be exchanged for a better security it should be promptly exchanged. It would be a good thing if every owner of securities could forget what he paid for them. If he could, he would not hesitate to sell when a security appeared to be in a weak position nor would he be constrained to dispose of it for no better reason than that the price was higher than that originally paid. A man may own a bond or stock for which he paid, say 90. The price may decline to, say, 80. The conditions affecting his property may have changed for the worse, and what originally looked like an excellent bargain may now appear to be a rather questionable one. And at the same time he may have knowledge of another security in the same class, paying the same return, and having much better prospects, which can be purchased at 80. But he will not make the change *because he has a loss*. This is a wholly psychological trait. It is illogical. It is irrational. It is stubborn. The big question —and the only question—is "what is going to be the effect on my bank account in the final outcome?"

To amplify and magnify this illustration, suppose a certain security has been purchased at 100 and the price is now 50. Suppose further that this security is sold and the proceeds placed in some other issue selling at 50. Suppose, finally, that while the original security is dormant the one for which it was exchanged has advanced to 100. Obviously, all the loss would have been recovered because the owner of the first purchase was courageous enough and intelligent enough to *take a loss*.

To the suggestions offered in preceding chapters the following may be added:

It is usually a good time to make purchases—

1. When very few people want to buy and the surface appearances are blue.

2. When a decided decline is followed by a period of dulness and readjustment and the evils responsible for the decline are generally understood.

3. When the established return is above the prevailing prices of money and capital, provided (a) that the integrity of the current return is assured, and (b) that there is no good reason to expect a materially higher level of money or capital rates.

4. When banking conditions show a sound credit structure, as represented by a low percentage of loans to deposits and a high percentage of reserves.

5. When money is plentiful and rates for *time* money (four months, six months, nine months, or a year) are low.

Finally, we should always keep Rothschild's famous admonition in mind and never try to buy at the bottom.

CHAPTER V

WHEN TO SELL

JUST as the most advantageous purchases are effected when everything appears gloomy and when prices are low, so the most advantageous sales are effected in periods of good feeling and buoyancy. This applies to any class of securities. Occasionally we encounter abnormal economic conditions which bring about advancing bond markets while stocks are declining. This is because the funds realized by large interests who are liquidating stocks are being invested in bonds. Per contra, we sometimes find bonds declining while stocks advance, as was the case in the war years 1915, 1916 and 1917. This was largely due to high and advancing capital rates, which made instruments having a fixed rate of return very dear and undesirable property, while, on the other hand, many corporations were reaping huge profits out of war conditions.

But, referring only to the natural course of prices in normal times, it is found that high bond and stock prices usually go hand in hand. The greatest activity and largest volume of general business is present near the culmination of an era of prosperity; everybody has money, and this money they proceed to invest or speculate with according to their individual habits or desires.

The outside demand for securities grows greater as prosperity and wealth are augmented, and reaches its most extreme volume just before a reversal or collapse.

This accounts, in part, for the accepted and proven fact that about eighty per cent of public buying is done at the approximate high prices and at the time when realizing sales would be the logical plan. In referring to this propensity, the eminent economist, Walter Bagehot, made the following terse statement:

"At particular times a great many stupid people have a great deal of stupid money. This blind capital seeks for someone to devour it, and there is plethora; it finds someone, and there is speculation; it is devoured, and there is panic."

In the preceding chapter it was shown that just before a major advance in the level of security prices, certain phenomena, easily discerned and interpreted by the close observer, forecast the end of liquidation and depression and the coming of better times. The same indicia, viewed in a reverse light, are of value in determining when to sell. In order to make the appearance of these signs clearer and more convincing, the status of the salient factors may be tabulated in simple form, covering the two great cycles of the last twenty years (1902-1905 and 1906-1909).

The so-called panic of 1903 was clearly indicated in the last quarter of 1902, and all the signs of the approaching panic of 1907 were visible in the last quarter of 1906. The conditions were as follows:

	Last Quarter of 1902	Last Quarter of 1906
Per cent of Loans to Deposits (avg.)	100.16%	101.60%
Per cent of Specie to Loans (avg.)..	17.74%	17.60%
Call Money (avg.)................	6¾%	8¼%
Time Money (avg.)................	6%	7%
Sales on N. Y. Stock Exchange (shares)	49,205,853	61,751,312
Clearings (N. Y.) compared with preceding year....................	+7.4%	+5.5%
Clearings (outside N. Y.) compared with preceding year..............	+5.6%	+9.2%
Average Price 20 Railroad Stocks....	120	135
Average Price 12 Industrial Stocks..	63	95
Dividends increased in Years 1902 and 1906	21	22
Dividends reduced in years 1902 and 1906	4	3
Railroad Receiverships (miles) 1902 and 1906......................	278	204
Average Return on Money Invested	3¾%	3½%

Here we find in both cases a sharp increase in clearings, representing general business activity, numerous dividend increases and very few decreases; no railroad receiverships worth mentioning, and marked investment and speculative activity, as revealed by the large volume of Stock Exchange business. These were the superficially favorable and inspiring influences. Everyone saw them. What they did *not* see was the danger reflected by the more submerged factors. The credit situation was badly strained, as shown by the high percentage of loans and the low percentage of specie; both time and call money rates were abnormal; the average level of stock prices was, in both periods, at approximately the highest ever reached, and the average return on invested funds was unduly low. These storm warnings received little attention, however. People were so obsessed with the nearby appearances of prosperity and plenty that they lost their perspective.

For the sake of comparison, let us now examine briefly the other side of the story, i. e., the appearances just before the major recoveries from these two periods of depression. The evidences of an approaching advance were visible in the second quarter of 1904, a few weeks before we started on the big upward swing which culminated in 1906; and in the first quarter of 1908, just before the major advance which culminated in 1909.

The same influences reviewed above had a very different aspect in these periods, as the following exhibits will show:

	Second Quarter of 1904	First Quarter of 1908
Per cent of Loans to Deposits (avg.)	94.40%	98.89%
Per cent of Specie to Loans (avg.)..	21.85%	22.35%
Call Money (avg.)..................	1⅝%	1¾%
Time Money (avg.)................	3¼%	3½%
Sales on N. Y. Stock Exchange (shares)	18,468,445	42,373,856
Clearings (N. Y.) compared with preceding year......................	—12.6%	—28%
Clearings (outside N. Y.) compared with preceding year...............	—4.3%	—15.1%
Average Price 20 Railroad Stocks...	95	90

Average Price 20 Industrial Stocks..	48	62
Dividends increased years 1904 and 1908	4	4
Dividends reduced years 1904 and 1908	22	26
Railroad Receiverships (miles) 1904 and 1908	744	8,099
Return on Money Invested (avg.)..	5.65%	5.95%

In these two periods the surface appearances were all bad. General business was depressed; transactions on the Stock Exchange had fallen off to a comparatively small volume; dividends had been reduced or passed on many leading stocks, and railroad and other bankruptcy had increased. But again the submerged indications belied the popular pessimism. The credit situation was extremely strong; money was available at very low figures; the return on invested funds was at a point which was considered high in those years, and stock prices were at a low level.

The reader will understand that it would not be safe to accept mere activity, rising security prices, general prosperity, etc., as a sufficient reason for selling. These appearances will occur *during the progress* of an advance and may continue over a considerable period of time. What is most essential is that the credit conditions, the supply of money, and the return on invested funds be closely watched so that we may determine when danger threatens through a strain on credits and money and also when securities are selling for more than they are *worth*. This last factor alone, intelligently scrutinized in the periods under review, would have furnished ample grounds for suspicion in one case and confidence in the other. The respective average returns of 3.75% and 3.50% in 1902 and 1906 were *too low,* and especially so in view of the very high rates commanded by money. Similarly, the respective returns of 5.65% and 5.95% in 1904 and 1908 were high, and money was very cheap. These are reflections which appear so elementary that it would seem unnecessary to enlarge upon them, but the fact remains that even such simple conditions are widely misunderstood or overlooked.

It is a cardinal principle of all intelligent investment that the owner of funds should command as high a return as it is possible for him to get without sacrificing the factor of safety. There is, as pointed out heretofore, a popular fallacy which it is difficult to controvert, to the effect that whatever is gained in interest return must be lost in safety of principal. There is just enough truth in this axiom to make it acceptable to the uninitiated. The theory has been fostered and promulgated for many years by brokers, bond-dealers, and bankers who themselves frequently wish to dispose of securities showing an inadequate return in order to place the proceeds more profitably. In normal times the price level is usually in fairly close conformity with values and return, but during periods of war, panic, or over-stimulation, there are often opportunities to make decidedly advantageous changes.

The most prevalent and common reason for not altering the character of commitments promptly is the human aversion to "taking a loss," which was mentioned in a former chapter. This foolish and expensive propensity has cost the investor, as well as the speculator, untold millions. A man may see a chance to dispose of a certain bond returning five per cent and reinvest the proceeds in an equally sound bond returning six per cent, but because there is a loss of four or five points as compared with his purchase price he refuses the opportunity. Not only would his income be increased by the transfer, but his chances of recouping his loss would be improved, as the probability of the six per cent security advancing when its merits are more generally recognized is infinitely greater. At the risk of being accused of undue reiteration, the writer suggests that every investor or speculator should reason with himself until he realizes the utter absurdity of this infirmity and purges himself of what is nothing but a costly and irrational *state of mind.*

A bad or questionable bargain should be disposed of promptly, regardless of what it cost, and the proceeds placed in something safer and more promising, even if it is necessary to take a smaller amount of the new acquisition. Also, a good bargain should be promptly exchanged for a better one in the same way.

The holder of bonds or stocks will often conveniently arrange for himself a certain fixed figure at which he is willing to sell. As the market approaches this figure he places an order with his broker or banker specifying his price. This is a method which results in more loss than profit. The time to sell is when the price is too high or when the proceeds can be employed to better advantage in other directions. When this is decided on, the sale should be made, without any limitations or reservations.

The attempt to gain the ultimate dollar or to "get out even" has caused many people to lose their market altogether. It may be chronicled as a well-authenticated fact that the wisest operators never use the limited order at all except in accumulating large lines on a scale down or liquidating them on a scale up. Exception may be made in the case of important interests or individuals who realize that the introduction of unlimited orders to buy or sell large amounts of a certain security might put prices up or down beyond all reason, but this does not apply to the transactions of the ordinary investor. It will be recalled that our old Nestor—Rothschild—never tried to buy at the bottom and always sold too soon. Those who try to improve upon his methods are more than likely to be disappointed.

Another influence which frequently prevents the owners of securities from selling at an opportune time is the idea that something can be gained by holding on for approaching interest or dividend payments and then making the sale. This is not so common in bonds as in stocks, as in most cases the seller of bonds will receive the accrued interest up to the date of sale. The practice is on all fours with numerous other delusions. Eliminating the speculative equation, a stock will rise in price gradually from day to day to cover the accruing dividend and, when it is paid, the total amount will be subtracted from the market price. If it were possible to gain any advantage by following this practice, we could accumulate great riches by simply buying stocks a day or two before the dividends were paid and selling as soon as the payments were received.

The same thing is measurably true of "melons" or extra distributions of cash or stocks, provided the coming of such distributions is a known factor. So long as there is mystery and expectation the prospects of a "melon" will appeal to speculators and at times to investors, but nothing that is *known* can possibly be *speculative*. A man will more frequently find an advantage in disposing of securities as soon as the good news is out than in buying on receipt of the joyous tidings.

The "accumulated dividend" proposition is also a humbug in a majority of instances. Many people will invest in preferred stocks which are badly in arrears on the dividends, on the theory that some day the deficit will be paid off. But a little reflection will show that if the corporation lacks the means to pay its obligations, the payment will depend entirely upon future earning capacity, in which case the profits would, or should, be distributed as rapidly as good practice will permit, regardless of whether any cumulative obligations exist or not. The presence of deferred dividend obligations is prejudicial to the status of the common stock, but is of little advantage to the senior issue.

In adding to the rules of safe conduct offered heretofore, we may simply reverse some of the recommendations as to "When to Buy" and apply them in the revised form to the problem of "When to Sell." With this in mind, the following suggestions are submitted:

It is usually a good time to sell—

1. When the enthusiastic eleventh-hour public wants to buy and when surface appearances are rosy.
2. When a great advance or recovery has been in

progress for a considerable time and optimism is general.

3. When the average return on investments is *below* the prevailing prices of money and capital.

4. When banking and credit conditions are strained, as indicated by a high percentage of loans and low reserves.

To all of which the following precepts may be added:

1. Do not hesitate to dispose of a poor or doubtful bargain because it must be sold below the purchase price.

2. Do not, for the same reason, hesitate to exchange even a good security for a better.

3. Do not place price limits on orders in an attempt to gain the ultimate dollar.

4. Do not hazard an opportunity to sell to advantage by waiting for forthcoming interest or dividend payments.

5. Do not try to *speculate* on what is *known*.

6. Do not be misled into buying poor issues because of accumulated interest or dividends, especially the latter.

CHAPTER VI

DIVERSIFICATION OF INVESTMENTS

ANDREW CARNEGIE is said to have paraphrased a patriarchal maxim to read, "Put all your eggs in one basket and watch the basket." This remark has been seized upon by some observers and applied, in a rather indiscriminate way, to the investment of money. It is highly probable that the venerable Ironmaster referred more to a man's vocation than to the disposition of his funds. It is quite certain that Mr. Carnegie himself has many and diversified investments, as is the case with all rich men. John D. Rockefeller supports a regularly organized bureau under the direction of shrewd analysts who are constantly on the lookout for security bargains or advantageous changes from one issue to another. Mr. Carnegie's epigram may be intelligently applied to any line of enterprise in which a man's talents, knowledge, and capital are involved, but not to the investment of his surplus wealth.

Diversification has two main objectives, which may be stated as follows:

1. Safety of Income and Principal, *per se*.
2. Safety of a Portion of Income and Principal.

In the first case, the investor seeks to insure himself against the possible loss of all he possesses by distributing his fortune in various high-grade securities, with no especial effort to increase the rate of income return.

We find this policy exemplified in the published lists of insurance companies and banks, in the investments of trustees, and in the list of holdings revealed by a rich man's demise. And it may be pointed out, parenthetically, that seldom, if ever, will such a list fail to disclose some very poor bargains, which would have resulted in a disaster if all the eggs had been put in any one of *those* baskets.

It is impossible for even the shrewdest and best-informed man to be absolutely sure as to the future of any security, no matter how sound it may appear, or be, at the time of purchase. Judge Gary once remarked succinctly that it was a great deal of trouble to safeguard even a little money, which is quite true. If the investor seeks to secure absolute safety, so far as absolute safety is possible, and places his entire fortune in Government bonds, he must make sacrifices in the way of income. The reader will understand that there is no intent to deprecate the purchase of Government bonds in time of war. At such times it is good business policy, quite aside from higher patriotic motives, to purchase Government issues freely, as such action is tantamount to buying insurance on all other temporal possessions.

The investor who is concerned with safety of principal and interest alone and who has succeeded in distributing his commitments in a satisfactory manner is frequently prone to relax his vigilance and depend upon the calculus of probabilities to shield him from any serious loss. This is all right, as far as it goes. It covers a primary function of diversification. But he who gives careful attention to the protection of his funds should not be content to depend wholly upon the merits of apportionment. He should examine each block of his mosaic from time to time and when an imperfect one is found, it should be promptly cast out and replaced. Even if a particular block appears to be quite good, he may possibly find a better. He should keep the fact constantly in mind that one of the greatest essentials of safe and profitable investment is *constant change.* Whether the changes are desirable because of the individual status of a security, or because of economic conditions affecting all classes of securities does not matter. Eternal vigilance is the price of safety.

"But," the reader may perhaps say, "this will take too much of my time." It will take far less time than most people imagine. Owners of securities receive periodical reports covering the progress of the corporation in which they are interested, but these reports are usually so choked with figures and technical terms that the lay observer despairs of interpreting them. It is suggested that the unposted recipient of one of these reports begin his work by reducing the whole problem to four simple equations: 1. How much is the corporation taking in? (gross earnings). 2. How much is it costing them to run the business? (operating expenses). 3. What does their borrowed capital cost them? (interest on funded debt). 4. What remains in the way of profits? (net income). When this easy process has been followed, the student will naturally begin to extend his researches. He will, for example, observe what proportion of the operating expenses are devoted to maintenance of the property and what proportion to wages and other strictly operating costs. In a very short time the mysteries will disappear. There are also a number of books which will prove of value in learning to interpret fiscal reports, but the great trouble with most of these works is that they begin with the branches and finally work down to the roots, which is exactly the reverse of the method suggested above. The plan adopted by many writers on the subject is calculated to confuse and discourage the investigator. It is much the same thing as attempting to teach a child to walk before it creeps or to read and write before it learns to talk.

The second form of diversification, i. e., distribution which has for its object a high degree of safety for a portion of the invested funds, while some risk is taken with the balance, will no doubt prove of more interest to the average investor than the form discussed in the preceding paragraphs. The second plan may be subdivided into two designs: (a) for the purpose of increasing the average rate of income, or (b) for the purpose of employing a portion of the available funds in more or less speculative ventures. Or perhaps it will be considered expedient to employ all three of the variations, investing partly in high-grade securities, partly in second-grade securities and partly in speculative bonds or stocks.

It would obviously be impossible to formulate any cut-and-dried rule as to the proportions into which mixed investments of this character should be segregated. The amount of money involved, the necessities or obligations of the individual, or the willingness to take chances vary so greatly that what would be desirable for one man would be highly undesirable for another. In this connection the writer will offer the opinion, at the risk of being accused of another heretical statement, that the man possessing only a small amount of money is more justified in taking chances than is the millionaire. If we could dissect the very rich man's fortune, we would find that in almost all cases it was made by taking intelligent chances, and that it could not possibly have been erected in any other way except by inheritance. Yet a great majority of these plutocrats would be horrified at the idea of ordinary humans attempting to emulate them. No fortune was ever made in a reasonable period of time by following *ultra*-conservative methods. The time to exercise *extreme* conservatism is after we "get it." But please note the italics.

For the purposes of illustration let us first assume that a certain individual has surplus funds at his command amounting to, say, $100,000. He finds that $2,000 per annum will cover all his living and other routine requirements. He may secure this annuity by investing $50,000 in strictly "gilt-edged" securities returning four per cent. He may increase the rate to a flat five per cent on the entire $100,000 by investing the remaining $50,000 at six per cent and, in nine cases out of ten he will, with due discrimination and proper guidance, be able to do this and still reasonably conserve the factor of safety. At certain times, when security prices are low, or when capital commands high wages, he will be able to do much better, possibly getting high-grade issues to return five or even six per cent and fairly sound issues to return seven or eight per cent. Such opportunities are rare, but they are golden. Not only is the higher income secured on an equally safe basis, but when the price of capital falls to normal figures, as it will in the fullness of time, the prices of his securities will automatically advance and they can be disposed of at a profit which will materially add to the return derived from income. No doubt some critics will arise to say that this is speculation and that the very fact that such high return could be secured is *prima facie* evidence of something wrong. But we can overwhelm the non-conformists with evidence to the contrary. Take any or all of our panic years, when over-extended people were compelled to sacrifice securities in the open market in order to raise money, and when the rates for capital were abnormally high. These lower security prices were not caused by any change in the intrinsic value or future prospects of the corporations responsible for them. They were caused by competitive selling to cover the imperative necessities of thousands of men or institutions who had failed to reef their sails in time.

As another illustration, suppose our hypothetical owner of $100,000 is disposed to place $50,000 in high-grade bonds, $25,000 in fairly safe bonds showing a higher return, and the remaining $25,000 in stocks or low-grade bonds, with a view to increasing his principal through speculation. (These proportions are, of course, all arbitrary and may be rearranged according to personal necessities or inclinations.)

The *modus operandi* last mentioned is quite popular and, if properly carried out, it offers excellent opportunities for profit without the risks attendant on venturing the entire surplus in speculative ventures. But this plan is frequently abused and is productive of many temptations and dangers. The principal drawbacks will be briefly described under three heads.

First—The owner of money who sets aside twenty-five per cent or any other proportion of his resources for speculative or semi-speculative purposes is often inclined to employ this special fund in a rash and careless manner. He looks upon it as a get-rich-quick department of his activities and instead of adhering to reasonable speculative methods he plunges in wildcat stocks or depends upon mere market activity or tips, instead of values, dividends, and future prospects. Such a course will surely result in the loss of all the principal involved. It is merely a question of time.

Second—When severe losses occur in the speculative account, nine men out of ten will draw upon the investment account to fortify the speculative end. They may sell some of their income investments, or they may hypothecate them, which is much the same thing. It is axiomatic that the average operator will sacrifice his best and most promising bargains in order to "protect" the inferior ones. This fault is born of the propensity to measure and compare losses. If a certain doubtful holding shows a loss of ten or twenty points, while an excellent bargain shows a profit or only a small loss, the human tendency is to dispose of the latter and retain the former. To the reflective mind the absurdity of this theory needs no exposure. It is a vital error, redolent of mischief, and should be sternly repressed. The allocation of funds into various groups for fixed purposes becomes farcical when the prearranged schedule is violated. It would have been as well to devote the whole to speculative purposes in the beginning.

Third—When the speculative account is at first handled with discrimination and good judgment and liberal profits are secured, there is a natural proclivity to expand the process. Success begets greed, and greed is the mother of over-speculation. The fortunate operator either diverts a larger part of his funds to the speculative division or devotes his whole attention to it to the neglect and prejudice of his more important investment holdings. He loses opportunities to secure high return or fair profits, or possibly a combination of the two, in his futile attempts to eliminate the element of *time*. Patience and time are as important as money—more so, in fact—for given the two former equations we may do well with very little money, but without them we cannot do well with a great deal of money. In thirty years of close observation the writer cannot name a single individual who has made *and kept* a large fortune on small capital in a brief period of time. We frequently hear of this or that man making millions in the stock market in a few months. This has been done by very rich men or interests, but the millions so made had many other millions to back the venture and amounted to no more than a reasonable profit on the amount involved. Occasionally a fortunate plunger will acquire a great deal of money on a small beginning, but just because he is a plunger he loses it again. Each man, through the influence of his ego, will confidently assert that *he* would have been content with the great profits and would have quit at the psychological moment, but there is not one well-authenticated case on record where this has been done. We see our desires as they appear to us from our *present* financial standpoint. What we do not see is that quickly acquired profits will give us an entirely new perspective. We cannot endow a man simultaneously with the rashness of a plunger and the conservatism of a miser.

Just as it is certainly true that over-timid or lazy people do not turn their funds to the most profitable uses, so is it true that those who attempt to reap inordinate gains in a brief period are in constant danger. We must seek the golden mean, and when after due deliberation we have decided upon a line of procedure and have adopted certain laws and rules, we must follow the straight road without going out into the bypaths to gather flowers. In investment or speculation, as in the game of whist, rules may occasionally be departed from, but laws never. We might, for example, make a decision not to invest in unlisted securities. That is a *rule* and circumstances might arise which would warrant breaking it. We might also make a decision not to over-extend ourselves. That is a *law* and should be rigidly adhered to.

Perhaps it will be said that in the foregoing remarks there is an undue amount of discourse anent speculation, to the exclusion of matter of particular interest to the investor. To the reader who is interested only in strict investment an apology is offered. But experience teaches us that the dividing line between investment and speculation is a knife edge, and a great many people deceive themselves into believing that they are investing when they are really speculating. It is well to call things by their right names and it is extremely important that we observe and point out the dangers as well as the advantages of certain methods.

If the possessor of funds wishes to follow out the first plan of diversification discussed, i. e., to distribute his commitments among various high-grade securities with an eye only to the safety of principal and income, the task is not a very difficult one. He will find it necessary to consult the margin of safety, the records of earnings and progress over a sufficient period of time, the date of maturities, the nature of the enterprises upon which his securities are based and other equations which will be made the subject of more particular comment hereafter. If he wishes to follow the plan of investing partly in high-grade and partly in second-grade but reasonably safe securities, in order to increase the annual income, the task is comparatively difficult, as the lower-grade issues require more careful scrutiny and investigation. If he wishes to divert a portion of his funds to speculative ventures, he should treat the sum so employed as conscientiously and carefully as if it constituted his entire fortune and consider it as being in no way related to or dependent upon his investments. He may put his eggs in as many baskets as he desires and watch *all* the baskets.

CHAPTER VII

GENERAL INFLUENCES

THE principal general influences affecting all classes of securities, favorably or unfavorably, are crops, money and credit conditions, political and legislative developments, war and taxation. These factors will be briefly discussed in the order mentioned.

Crops and Crop Prospects

In normal times the products of agriculture have a very important bearing upon the prosperity of the nation. This influence is felt, directly or indirectly, by every line of business, and is duly reflected in security prices. Bumper crops have an inspiring effect upon manufacturers, jobbers and retailers, railroad traffic, communal wealth, banking conditions and the profits of corporations. Small crops have a correspondingly depressing effect.

The question of agricultural production is so vital that business men no longer await actual developments but eagerly consult the preliminary indications and govern their actions largely by the prospects. To assist the public in these investigations, the Government maintains an elaborate statistical department which issues weekly weather reports, monthly reports of conditions and acreage and numerous other informative documents throughout the planting, growing and harvesting seasons. These official data are supplemented by many private reports compiled by railroads and large corporations.

As we are a "surplus" nation, exporting a large amount of wheat, cotton and other agricultural products annually, good or bad crops have also a bearing on our trade balance, and consequently on our money and credit conditions.

The crop prospects are more closely studied by investors and speculators in relation to their probable effect on railroad securities than as regards other classes of stocks and bonds, for, although the influence is well nigh universal, it is more clearly visible and more easily interpreted in its bearing on the fortunes of the carriers. Large crops, of course, mean increased railroad traffic and earnings, but they mean something more. The prosperity and increased purchasing power of communities inevitably result in a large return tonnage for the roads and heavier sales by the producers of clothing, musical instruments, farm machinery, and whatnot. Large crops will sometimes validate the status of a shaky interest or dividend payment and there are instances where impending bankruptcy has been permanently avoided because of ample crops.

Money and Credit Conditions

As has been shown in a preceding chapter, we frequently find an era of prosperity rudely checked by strained money and credit conditions, although strictly fundamental factors may be satisfactory. The basic trouble at such times is due to an attempt to employ simultaneously the financial resources of the country in a business boom and a speculative orgy. The American dollar gets overworked and lies down. Something must give. The banks must either curtail loans made on stock exchange collateral or must reduce mercantile credits. Inevitably the speculative structure is promptly discriminated against. Loans are called and renewals or new loans are declined. The only alternative of the borrower is to liquidate all or a portion of his holdings. Bond, as well as stock prices will fall, as many owners of bonds will have borrowed on these securities to finance their speculative ventures. Others will follow the bad practice of liquidating their best securities in order to protect the worst. This decline will antedate a shrinkage in general business by from six to eighteen months. In fact, the business stagnation which invariably comes in the wake of a collapse in the security markets is usually in the nature of a reflex action. The losses suffered in the security markets result in failures, deferment of building and other enterprises and a reduction in public purchasing power. It has been pointed out that in the years 1903 and 1907 the security markets declined severely, while general business, as indicated by the bank clearings, was greater in volume than ever before. In 1904 and 1908 the security markets recovered rapidly, while general business fell into a state of comparative stagnation.

In periods like those described above we find our greatest and safest opportunities for advantageous purchases. The situation is artificial and temporary and the recovery is as abrupt as the decline. It is, nevertheless, a fact that only the wisest and most sophisticated men buy heavily at such times. The public is depressed or alarmed, or financially incapacitated by previous losses.

There is a widely held popular theory that our rigid banking laws have been responsible for most of the security-market panics of the past and that the new Federal Reserve methods will prevent the recurrence of such spasms. With this view the present writer is not inclined to agree. The new arrangements will no doubt tend to stabilize money and credit conditions, but, in the writer's opinion, it is folly to assume that any machinery, banking or other, can overcome the natural results of human folly or relieve people from the penalties of over-expansion and extravagance. If we reduce the legal reserve requirements of banks from twenty-five per cent to fifteen per cent we provide an added amount of available credit which may carry us through a critical period now and then, but obviously the foundation of the credit structure has been rendered just so much less secure. Follow the proposition to a *reductio ad absurdum* and eliminate legal reserve requirements altogether and we would still have to pay the price of ill-advised and injudicious expansion. The panic cycles have appeared in European countries with charming regularity as far back as we have recorded history, no matter what banking or legislative or sumptuary laws were devised with a view to preventing the upheavals.

Political and Legislative Developments

There is a tradition in market circles that Presidential years are usually years of falling security prices, but history does not support this view. The only records we have of unusual depression in Presidential years have been when some great issue was at stake, such as the Bryan silver scare. The voters of an enlightened Republic may usually be trusted to select a safe man for the Presidential office and a majority of safe men for the legislative halls, and to reject any candidates professing revolutionary, radical, or irrational ideas. Much has been said of the power of the money magnates to influence or control legislatures or even men in the highest places, and, indeed, there has been some reason for the contention in the past. This power, however, appears to have reached its apex and is now declining because of better laws and better understanding. The dominance of powerful financial kings has had its growth, and its subsidence or overthrow, in all civilized nations. It flourishes only when the people are ignorant of its purport or are deceived as to its intent. Exposure and condemnation of tricky and dishonest methods must come in time and each new revelation reduces the ability to repeat the offences. People who are pessimistic by nature (and their name is legion) will no doubt question this cheerful view, but, to confine the argument to a single line of enterprise, we may feel confident that such disgraceful incidents as the New Haven or Rock Island Railroad abortions will never again be permitted. These exploitations of the public were, in fact, a reverberation of the methods employed much more extensively and in a much more barefaced way in the old "public be damned" days of Commodore Vanderbilt, Jim Fisk, and Jay Gould. And it may not be amiss to interpolate the remark here that the public owners of securities have been largely to blame for their own losses, in that they did not make any attempt to exercise their proxy rights intelligently and to eliminate looters and incompetents from directorates. There is some improvement in that direction, but there is room for much more.

Mistaken or biased legislation has caused considerable trouble in the past, especially as regards restrictive laws, such as the prohibition of railroad pooling. Conflicting state laws affecting interstate commerce have been even more mischievous. All these laws result in sheer economic waste, with no offsetting gains, as, for illustration, requiring a railroad to use three different forms of headlight in crossing three adjoining states. There was considerable agitation against these silly methods prior to the war and we may be sure that the practical experience and concrete demonstrations due to war conditions will result in many salubrious alterations in the statutes.

Legislation aimed at monopolies or other evils is for the best, unless it be too sweeping or be framed in an unscientific manner, like the Sherman Law. Security owners have much less to fear from the actions of unscrupulous individuals, or the influence exerted on legislators by such individuals, than from mistaken or vicious legislation of the ordinary character. And, as stated, the outlook in both directions is improving.

War and Taxation

When a nation is at war the entire business structure is, to all intents and purposes, transferred from private to public control. The Government becomes the great operator and all individual enterprises or fortunes are subservient to the nation's necessities. Money rates will inevitably and immediately rise to comparatively high figures, but will seldom continue upward in a progressive way. After the first days of disturbance are over, the price of money and credit will be stabilized and will fluctuate in a narrow range, if at all. This condition will ordinarily endure throughout the struggle and will be little affected by the shifting fortunes of war.

Because of high prices for money and capital, withdrawal of resources from fixed investments in order to employ them elsewhere, and selling by apprehensive owners, security prices will fall until the liquidation is completed and the return on money placed in such securities rises to a point which will attract reinvestment. When this point is reached the panicky conditions disappear and the subsequent course of prices is largely determined by developments not connected with warfare or the prospects of a favorable or unfavorable outcome of the conflict.

The common stocks of corporations which secure large orders for war materials will rise in the early days of war but will soon be adversely affected by rising costs of materials and labor and heavy taxation. Also their plants will be greatly increased in order to meet the accelerated demand and unusual specifications and, after the war ends, a surplus of available plant capacity will eventually lead to acute competition.

This formula refers to the status of the securities of a belligerent nation. A neutral nation having surplus commodities or manufacturing facilities will benefit materially and immediately through the sale of its products at high prices to the warring nations. This result was amply illustrated during our own period of neutrality.

Contrary to the popular view, a great war is not at once followed by depression. There is, in fact, a post-bellum period of activity, full employment of labor at high wages, and a general, but fictitious, appearance of prosperity. This period endures until the imperative work of reconstruction is completed. When this is over, depression is sure to appear, the severity of which is dependent upon the length of the active conflict and the extent of destruction of capital. At the conclusion of the active work of reconstruction, the savings of the people have been swallowed up by the high cost of living and high taxation and there is a surplus supply of labor. The world must set to work and reproduce what has been destroyed before genuine prosperity reappears.

When a war results in wholesale production of bonds and uncovered paper money, it is followed by a period of inflation with the attendant evils of high commodity prices and consequent demands for higher wages. This influence also results in extensive speculation, largely due to the existence of a huge amount of available credits which were expanded to meet war conditions and which are never promptly reduced to normal. The widespread employment of government bonds as collateral for loans and the inflated currency add to the speculative enthusiasm. Everything that money can be exchanged for rises in price, with the exception of bonds and other high-grade securities having a fixed rate of return. When this period, which naturally parallels the period of active reconstruction, has run its course, capital is concentrated in the hands of comparatively few people, who withdraw their funds from manufacturing and other enterprises and invest it in bonds. Thus, while stocks are falling, the bond and note markets will advance. Prolonged stagnation in business, whether due to the aftermath of war or other factors, will result in a steady demand for high-grade securities, as witness the firmness of bond prices in the 1893-96 depression.

Inflation, so far as we may be guided by precedent or reasoning, consists of five main stages which may be outlined as follows:

First.—An immediate and sustained advance in the prices of all commodities, which will last until war ends or until the end is definitely indicated.

Second.—A partial recovery in security prices due to low prices and the gradually increasing employment of Government bonds as collateral.

Third.—The end of the war, with considerable disturbance due to the demobilizing of armies and readjustment of business affairs. Also a sharp decline in commodity prices and real wages. These phenomena are all of a temporary nature.

Fourth.—A recovery in commodity prices and wages and an active demand for labor and materials, together with increasing activity in all directions. Finally, growing confidence and enthusiasm and an era of inordinate and excessive speculation.

Fifth.—A rapid decline in security prices ending in panicky conditions and a protracted period of depression.

It is obviously the case that the greatest menace to the investor or speculator during a period of inflation lies in the danger of over-staying his market and getting caught in the deluge. It is impossible to lay down any rule which will even approximate the duration of this stage of reconstruction and inflation, and surface appearances will be most misleading and exhilarating just before the time of culmination is at hand. The close observer who exercises self-control and caution will, however, find indications of danger some time before the collapse materializes. Whenever he finds the return on high-grade stocks far below the rates for banking accommodations, the loans in excess of deposits and steadily increasing, while the ratio of reserves is declining, stock exchange transactions on an unprecedented scale from day to day, and the public indulging in rash marginal ventures, he may safely look for the beginning of the end. And he should not wait for the end itself, but should reflect on the last half of Rothschild's famous injunction and "sell too soon."

During the progress of a war the financial necessities of the nation are supplied, in part, by special taxation. The bulk of the funds so acquired is raised by excess profits and income taxes. The excess profits taxes are heavy but are never carried to a point which would prevent normal or even liberal profits. Unduly drastic profit taxation would defeat its own object by reducing production, and is, therefore, never resorted to. The excess profits tax *does,* however, prohibit the making of huge profits in any line of endeavor.

A serious drawback noted in connection with high excess profits taxation is that these imposts will endure for a considerable time after peace is declared, and will so continue to keep profits down, although the original cause of the extraordinary measures has been removed. But we should remember that the term "excess profits" is to be accepted literally and that only that portion of profits which is *in excess* of a normal or predetermined exemption is affected.

High income taxation results in extensive liquidation of securities held by institutions, trustees, banks, and rich individuals. These owners find an advantage in selling their bonds or stocks and placing the proceeds in tax-exempt Government issues. For example, a man owning securities of any class showing a return of, say seven per cent, can, if his income tax is fifty per cent or more, dispose of such securities and buy three and a half per cent tax-exempt bonds. In this case his income is as large or larger than ever and he has exchanged for a high-grade security. High income taxes are likely to be sustained even longer than excess profits taxes after a war has ended.

CHAPTER VIII

VARIOUS CLASSES OF BONDS

BEFORE proceeding to describe the various classes of bonds, it is considered advisable to expose another widely accepted delusion which results in much loss or the curtailing of reasonable and legitimate income return.

The error referred to lies in the propensity to look upon first-mortgage bonds as being sound and safe securities, because they *are* mortgages, As a generalization, the view has a certain amount of merit, but failure to seek the truth *in detail* is frequently found very expensive. Many investors, possessed of the little learning which is a dangerous thing, have stated proudly that they "invested in nothing but first mortgage bonds." Only too frequently they have discovered that a poor first mortgage is not nearly so safe or valuable as a good income bond or common stock. The fundamental cause of this slavish adherence to an alluring title may be easily and simply explained.

It is a matter of common knowledge that a first mortgage upon real estate, improved or unimproved, or upon chattels, is a high form of security. Loans made upon this kind of property seldom exceed fifty or, at the outside, seventy-five percent of appraised value, and it may reasonably be assumed that the property so mortgaged can be sold under the hammer for an amount sufficient to pay off the loan. The buyer or owner of bonds quite naturally attempts to apply this well-known rule to his corporate mortgage holdings, in which he is entirely wrong. A railroad property is very seldom sold in order to satisfy a mortgage. The proposition is too big. No buyer could be found able or willing to produce the huge amount of cash which would be necessary in order to effect a sale at auction. When a railroad becomes bankrupt through its inability to pay its fixed charges, receivers are appointed and the final outcome is a reorganization. The legal forms are all observed and there is a foreclosure, but no sale. In the rare cases where a sale is actually made, the owners of the first mortgage bonds fare very badly. There has only been one such case in recent years. The Colorado Midland Railway Company, which has been mentioned heretofore, issued in 1897 first mortgage fifty year four percent gold bonds to the amount of approximately $10,000,000 together with about $5,000,000 of seven percent preferred stock and $3,500,000 of common stock. The bonded indebtedness was at the rate of $20,763 per mile, which was not considered excessively high. In 1906 these bonds sold at 80, or $800 for each $1,000 bond. In 1917 the entire property was sold under foreclosure for $1,425,000 and the owners of the first mortgage bonds received $85.55 for each $1,000 bond. This is an exceptional case, of course, but it serves to show us what property value may amount to under a real foreclosure.

There is no intention of attempting to convey the idea that first mortgage bonds are not more desirable property than the subsidiary bonds *of the same corporation.* The mortgage issue will be given precedence in the matter of interest payments, even during receivership, and in reorganization these bonds are far less likely to be penalized or disturbed than are the junior securities. Finally, in the extreme case of an actual sale, the owners of the first mortgage, while they may not get much for their bonds, will get all the cash there is. But admitting all these advantages, the fact remains that *earning power is the greatest of all considerations.* When a reorganization is effected it will invariably be based upon *earning power,* and not upon property value. If it is found that sufficient net earnings are not assured to cover the bond interest after all prior charges, with a comfortable margin to spare, the owner of the mortgages will be forced to "scale down" his principal and accept a smaller amount of bonds. In such cases the sacrifice is usually made up, as a matter of form, by giving him an amount of inferior securities, usually stocks, on which interest or dividends may or may not be paid. These facts must be thoroughly appreciated before we can hope to have a clear understanding of the character and value of bonds. When an investor pays par for a four percent bond because it is a first mortgage, he is frequently sacrificing one or two percent or more for the purpose of attaining a degree of safety which exists largely in his imagination. Or, to put it another way, he avoids securities showing a higher return through fear of danger which is imaginary. If we could get the same rate of income on a first mortgage bond as on a second mortgage or a general lien bond, there would be no question as to the advisability of taking the former. But where one or two percent per annum in income is given up in order to insure safety of principal, the insurance premium of twenty to forty percent is too high, and the insurance is by no means absolute. Furthermore, the investor who exercises care in the selection of his securities will have little trouble in finding issues yielding the higher rate which have not one chance in a thousand of ever defaulting interest or failing to liquidate promptly at maturity.

The first step taken by the intelligent buyer of bonds should be a careful examination of the amount earned available for interest payments over a long period. If a corporation has been able to show a large margin over and above all charges for many years, all its bonds may be considered reasonably safe. If this improvement has been progressively favorable, so much the better. On the other hand, a gradually dwindling margin of safety should be viewed with suspicion. The simplest way of determining this point is to consult the percentage of fixed charges (interest on funded debt) to gross or net income. If the ratio remains stable or declines gradually the safety of all bonds is indicated. If the ratio rises steadily there is a strong inference of approaching danger. As an illustration of this take two great railroads, one of which has been going forward and the other backward—Atchison, Topeka and Santa Fe, and New York, New Haven and Hartford. The investor who took a little pains in order to safeguard his funds would have had no trouble in discovering the trend of the fortunes of these two properties by reference to the course of fixed charges alone. New Haven's interest charges began increasing many years ago and this trend was continued even in recent years. In 1912 the ratio of gross income consumed by interest charges was 34.11 percent. In 1916, it was 49.40 percent. Atchison's ratio was 39.21 percent in 1912 and 26.60 percent in 1916. This showing, if observed by the investor, would naturally have stimulated investigation and it would have been quickly discovered that New Haven was paying fancy prices for non-productive securities, borrowing heavily on the credit and equities of the parent road and forcing up interest charges. Atchison, meanwhile, was ploughing back earnings into the property instead of borrowing money and its profits were rapidly increasing. The improvement in one case and the decadence in the other were later reflected in the quoted values of the various securities of the two roads.

Another simple method of tracing the progress of a corporation is to refer to the records of surplus earnings applicable to the common stocks. If this surplus is increasing it naturally follows that the integrity of the bonds is being augmented. This may be illustrated by a few figures, employing the same roads for examples.

Earnings for Common Stock

Years	*New Haven*	*Atchison*
1908	8.38%	7.74%
1909	7.43%	12.11%
1910	10.78%	8.89%
1911	7.45%	9.30%
1912	4.96%	8.19%

Earnings for Common Stock—Continued

Years	*New Haven*	*Atchison*
1913	0.15%	8.62%
1914	1.47%	7.39%
1915	2.75%	9.18%
1916	3.53%	12.30%
1917	1.53%	15.02%

Ignoring the fluctuations due to good or bad years, we find a gradual decline in the case of New Haven and gradual improvement in the case of Atchison.

In concluding this preamble, the writer will reiterate the statement that the value of a bond, or any other security, is much more dependent upon the ability of the corporation uttering it to earn and pay interest or dividends than upon mortgages or alleged property values. The insurance companies, savings banks, trustees and very rich individuals will patronize the so-called gilt-edged securities at all times. They are frequently required to do so because of legal prescriptions and, if these do not hamper them, they are governed by iron-clad rules, but the small investor is at liberty to use his intellect.

As there are many classes of bonds, and as the specific titles are frequently obscure or misleading, the various issues will be described. The titles are arranged alphabetically for convenient reference.

Adjustment Mortgage Bonds. Strictly defined, a bond issued in adjustment of another mortgage. A company in receivership may find it impossible to reorganize the corporation on a reasonable basis unless the holders of mortgages agree to have their original holdings reduced or "scaled down." When this is done they are given a smaller amount of new bonds, designated as "adjustment mortgages."

Assumed Bonds. A corporation may purchase control of another corporation or may separately capitalize a branch line, assuming or guaranteeing the obligations of the subsidiary corporation as to principal or interest, or both.

When such subsidiary issues are actually guaranteed, the covenant should appear upon the bond itself. Unless so endorsed, a bond may be nominally assumed by the parent corporation without being legally guaranteed. That is to say, the parent concern will accept and liquidate the obligations of the subsidiary so long as it appears advisable to protect its credit, but cannot be compelled by law to do so.

Blanket Mortgage. This is a very vague and elastic term which admits of many definitions. The blanket mortgage may cover all the property of several corporations or may cover the equipment, machinery, and all other property in addition to realty, right of way, etc., or may be a lien on any property accumulated in the future. It may be a first, second, or general mortgage, or any other form of lien. The term is so flexible that it should not be accepted without careful examination as to the exact nature and character of the security.

Called Bonds. Many bonds contain the proviso that all or a portion of the issue may be retired either at par value or, more frequently, at a premium, as 102½, 103, 105, etc. This privilege is not often exercised, but when bonds are issued during a period of high capital rates, it may be found possible at some time in the future to refund the loan profitably by borrowing at a lower rate, in which case the new loan will be arranged and the old one "called."

The owner of callable bonds should make sure that no call has been made. If the bonds should be retired and he fails to turn in his holdings, the interest will cease with the date of call and cannot be recovered.

Closed Mortgage. It is often the case that a corporation will authorize a certain amount of bonds, only a part of which are at once sold to the public, the balance being issued at stated intervals or whenever more funds are required. When all the bonds so authorized have been issued, the mortgage is said to be "closed."

Collateral Bonds, or *Collateral Trust Bonds.* These bonds may be equivalent to a first mortgage in case they are secured by first mortgage bonds of other corporations. In this case the term "Collateral Mortgage Bond" may be properly employed. Sometimes the security is of a mixed character, consisting of the bonds and stocks held in a company's treasury for purposes of control or investment. Occasionally the collateral is stock and nothing else, in which case the value of the bonds is based solely upon the value of the stock so pledged. In the case of the Chicago, Rock Island and Pacific Rail*road* Company $75,000,000 of so-called gold bonds were issued which had nothing behind them but the stock of the Chicago, Rock Island and Pacific Rail*way* Company. The only provision for interest on these bonds consisted of the dividends received on the stock held as collateral. The confusing terms "rail*road*" and "rail-

way" led many innocent investors to believe that the rail*way* company was responsible for the rail*road* bonds, which was not the case. Dividends on the railway stock were discontinued and the public lost many millions in this bond issue, which is now defunct.

It is obviously the case that in buying any collateral bond the proposition resolves itself largely into the question of the value of the securities deposited or held in trust.

Collateral Trust bonds are sometimes designated as "convertible." This does not mean that they can be converted into other forms of security, but that the trustees may sell at their discretion a portion or all of the orginal collateral and either replace with other securities or employ the funds so secured to retire some or all of the bonds. Such bonds almost invariably contain a redemption clause.

Consolidated Mortgage Bonds. This is another flexible term which is sometimes misused. The consolidated mortgage may be a bond issued to cover the equities of a number of properties which have been merged. It may be a first mortgage, a junior mortgage, or a general lien, subject to one or more prior liens.

The consolidated mortgage may also be authorized and issued as the numerous other obligations of the corporation mature, the object being gradually to reach the ideal state of only one form of bond or mortgage on the property. For example, the Great Northern Railway has a total funded debt of approximately $251,000,000. There is, however, an authorized issue of $600,000,000 First and Refunding mortgage bonds, of which only $35,668,000 have been issued. The amount authorized is theoretically sufficient to retire all the existent obligations as they become due and also provide ample latitude for expansion.

Convertible Bonds. The convertible bond has become very popular in recent years. It affords to the investor an opportunity to buy a security having the stability of a bond and at the same time gives him the right to exchange his bonds for other securities, usually stocks of the same corporation, which may increase their dividends and prices without restriction. As an illustration of this class of bonds we may take the Atchison, Topeka and Santa Fe Convertible four percent bonds. The owner of these bonds has the privilege of exchanging them for the common stock of the corporation at any time before June 1, 1923. The common stock is a seasoned six percent dividend-payer and the owner of the convertible bonds could therefore increase his income from four percent to six percent at any time, accepting, however, a security of inferior grade.

In case the common stock of the Atchison Company should at some future time increase its dividend to, say eight percent, the advantage to the convertible bondholder would be correspondingly increased. Or, in case the stock should sell at, say $125 per share, because of, or in anticipation of, greater dividends, the bondholder may secure his profit by exchanging for stock and at once selling the stock in the open market. In this regard, however, it should be pointed out that, because of the ability of the bondholder to make this change at any time, the quoted price of the bonds will invariably correspond quite closely with that of the stock, regardless of general capital conditions. Thus in 1912, Atchison common stock sold at 111¾ and the convertible bonds were quoted on the same day at 111, although the highest grade four percent mortgage bonds of the corporation did not reach 100.

The owner of convertible bonds argues, quite correctly, that he gains all the advantage of a possible advance in the price of the security for which his bond is exchangeable, but that in case the stock falls to a very low figure, the price of his bond will not necessarily decline below its indicated value *as a bond*. Also, the dividends on the stock might be wholly discontinued, while the bond interest charges could not be suspended without inviting bankruptcy and receivership.

A convertible bond may stipulate that the exchange for stock shall be made at par (10 shares of $100 par value stock for one $1,000 bond) or at any other specified figure. Thus, the Erie Railroad Convertible "A" bonds could be exchanged for Erie common stock at $50 per share (20 shares of stock for one $1,000 bond).

The time limits during which the conversion may be made does not usually correspond with the date of issue or maturity of the bond. A bond issued in 1910 and maturing in 1960 may be convertible only between 1915 and 1930, or during any other period the directors may decide on. The buyer of such securities should therefore be careful to examine the exact covenant, else he may buy bonds which cannot be exchanged for some years to come, or on which the privilege has already expired.

Convertible bonds are frequently criticized both as to their bearing on the value of the common stock and the general financial requirements of the corporation uttering them. It is contended that when a large issue of bonds is exchanged for common stock the stock capitalization and the amount necessary to pay dividends are increased, thus diluting the equity value and dividend prospects of the old stock. It is further contended that, as the amount paid out in dividends is greater than the bond interest would have been, the whole financial structure is placed under an added strain. The present writer does not agree with either of these contentions. In the first place, the amount disbursed in dividends is merely the difference between what was paid on the bonds originally and what is paid on the stock after conversion. The addition of, say $10,000,000, to stock capitalization, bearing a six percent dividend, does not, as many careless observers appear to think, add $600,000 per year to the disbursements of the corporation. If $10,000,000 of four percent bonds have been converted and retired, there is a decrease of $400,000 in interest charges, leaving the net increase in disbursements only $200,000. Again, there is no remote probability of these bonds being converted into stock unless the fortunes of the corporation have improved sufficiently to *warrant* a higher rate of dividend and a price for the stock higher than the fixed conversion figure.

Finally, the reduction of funded debt and fixed charges, through the exchanging of bonds for stock, fortifies rather than weakens the financial status of the corporation. Dividends may be reduced in hard times without any danger of bankruptcy, but this is not true of interest charges.

Any class of bonds, mortgages, debentures, income, or whatnot, may be made convertible. Sometimes the preferred stocks or notes of a corporation contain the conversion clause.

Coupon Bonds. A great majority of bonds are issued in coupon form. The coupons are attached in such manner that they may be clipped off and cashed or deposited in the owner's bank as they become due. When all the coupons have been removed the bond has reached maturity and the principal will be paid by the corporation responsible for the issue.

As coupons are made payable to bearer, it is necessary to exercise the same care in handling them as if they were bank notes.

Most bonds are now made interchangeable. That is, the coupon bond may be exchanged for a registered bond (q.v.) or vice versa.

Debenture Bonds. The debenture bond is usually merely a certificate of debt, with no mortgage or other security. There are exceptions to this rule, but they are not numerous. In recent years debentures have been issued freely to retire or take the place of short term notes, especially when high money rates were expected for years to come. Thus, the New York Central, in the early months of the European war, hastened to put out $100,000,000 of twenty year debentures at the high rate of six per cent. This action was no doubt inspired by the belief that the price of capital would be high for years to come and that it might be difficult to renew one or two year notes at a fair rate of interest from time to time. These views proved quite correct. The proceeds of the sale of debentures were used to retire the large note issues then outstanding, and the question of obtaining funds for current necessities was simplified for at least twenty years.

A debenture bond may ordinarily be looked upon as nothing but a note coming just ahead of the preferred stock, or as a preferred preferred stock, so to speak. It differs from the preferred stock in that it has priority as to assets in case of liquidation, which is not the case with a stock unless it is specified that the shares are "preferred as to assets." Deferred interest charges on debentures are also cumulative, which is not necessarily the case with a preferred stock. Failure to pay the interest on debentures does not result in bankruptcy proceedings, as there is no mortgage, and consequently nothing which can be foreclosed. The value of a debenture is obviously based upon the credit and particularly upon the earning capacity of the corporation uttering it.

Divisional Bonds. These bonds usually constitute a mortgage upon the property of a single division or branch line of a road. They may, or may not, be guaranteed by the parent company. In case they are so guaranteed, they become a first lien upon the property actually mortgaged and a junior lien or certificate of debt as regards the guarantor corporation.

Extended Bonds. Bonds which are merely extended for a certain period, without retiring or refunding the old issue. The rate of interest may be higher or lower than originally, all changes of this character being stamped upon the face of the bond and new coupons issued to the holder

Extension Bonds. Much the same as divisional bonds, except that they constitute a first mortgage on property over which a road is being extended. These bonds may also be a second or third mortgage on the parent property or any portion thereof, or a general lien if guaranteed.

First Mortgage Bonds. This term requires little further explanation. The bond is just what its name implies—a first mortgage on certain property. However, it should be pointed out that a first mortgage bond of a railroad does not necessarily mean that it is a first mortgage on *all* the property of the corporation. The description of such a mortgage always gives the number of miles of road on which it is a first lien. But the fact that it is a first mortgage on a large number of miles is no guide to the value of the security. Five hundred miles of the main line of a railroad may be far more valuable, from every point of view, than a thousand miles traversing sparsely populated territory. It is essential, therefore, to determine not only the number of miles but the character of the mileage on which the mortgage rests.

There are various joint and qualifying terms in connection with the first mortgage bond, as "First and Refunding mortgage," "First and General mortgage," etc. These are described in the following paragraphs.

First and General Mortgage Bonds. A bond which is a first mortgage on a certain part of a corporation's property and a general mortgage (q.v.) on other property.

First and Refunding Mortgage Bonds. This is frequently a misleading term, as it is likely to be confused with a First Refunding mortgage bond or a Refunding First mortgage bond. The First *and* Refunding bond, literally construed, is a first mortgage on some portion of the property and any sort of lien upon a part or all of the remainder.

First Refunding Mortgage Bonds. This may not be, and usually is not, a first mortgage at all, but merely the *first* issue of Refunding bonds which are secured only by second or third or general mortgages. The word "first" applies to the sequence of issue, and not to the character of the lien. (See also Refunding First Mortgage Bond.)

First and Consolidated Mortgage Bonds. This term, properly employed, means a first mortgage on a portion of the property and a consolidated mortgage (q.v.) on other property.

First Consolidated Mortgage Bonds. This a term easily confused with the preceding title. The word "first" does not refer to a first mortgage, but to an initial issue of consolidated mortgage bonds. The mortgage may be of any class whatsoever. Also a "Consolidated First Mortgage" would properly mean a consolidation of first mortgages *only*.

First General Mortgage Bonds. The first *general* mortgage issued, not a first mortgage.

First Mortgage Trust Bond. A bond secured by collateral in the hands of trustees, such collateral consisting *only* of first mortgages. Such a bond partakes, indirectly, of all the virtues of a first mortgage bond. Here again we find a term which is sometimes contorted and which only too frequently misleads innocent buyers. Designating a bond as a "First Trust mortgage" is quite likely to result in the buyer confounding it with a First Mortgage Trust bond, although it is nothing of the kind.

General First Mortgage Bonds. There is no excuse whatever for this title unless we wish to excuse those who seek to mislead investors. Nevertheless, the term is sometimes employed. It is meaningless. If the bond is a general mortgage or a first mortgage, it should be so described. If it is a first mortgage on a certain amount of property and a general mortgage on other equities, the proper term is "First *and* General mortgage." It may be permissible to say General *and* First mortgage, but it is difficult to understand why the phraseology should be so framed as to give precedence to the inferior values.

General Mortgage Bonds. A railroad or other corporation may begin its career with, say $50,000,000 of first mortgage bonds, which is all that can be borrowed on the security while the enterprise is in its infancy. The earnings and value of the property may, through growth of population and traffic, reach a point in future years which will warrant an indebtedness of twice the original amount ($100,000,000). This may be accomplished by a General mortgage on the property. Possibly this mortgage will be authorized to the full amount of $100,000,000, of which only $50,000,000 will be at once offered for sale, the remaining $50,000,000 being reserved to retire the first mortgage bonds when they mature. It is therefore evident that a general mortgage may eventually become a first mortgage. In the hypothetical case given above, if, on the maturity of the $50,000,000 of first mortgage bonds, the remaining authorized issue of $50,000,000 General mortgage bonds should be sold in order to retire the first lien, all of the $100,000,000 of General mortgage bonds would now automatically become a first mortgage on the property, as there are no obligations ahead of them.

Government Bonds. The Government bond is, of course, the very highest form of security as regards either principal or interest. The bond is, in effect, a first mortgage on the entire wealth and property of the issuing nation and the earning power of the country can be taxed for all funds necessary to cover interest payments. There are very few instances on record of repudiation of Government issues, especially as regards external loans, even in cases where a nation is defeated in an expensive and destructive war or when internecine strife has resulted in great political changes.

Improvement Mortgage Bonds. Bonds issued to obtain funds for improvements or betterments—usually a second, third, or general mortgage. These issues may ordinarily be looked upon as a mortgage on the value of the improvements or betterments themselves. For example, a corporation may have a mortgage of, say $10,000,000 on a certain property, which is all it will reasonably bear, but by laying new rails, building new plants, or otherwise improving the property, they may increase its physical value and earning capacity sufficiently to warrant a heavier indebtedness.

Income Bonds. The income bond partakes even more closely of the nature of a preferred stock than does the debenture. Theoretically, the interest on income bonds is paid if earned, but this does not always work out in practice. There is usually some sort of agreement in the indenture of an income bond which permits of a reserve for additions and betterments, before interest is paid on the bonds. In fact, it would be very bad practice to pay out the last dollar of surplus in order to keep up interest payments. That would be exactly the same as devoting the entire surplus earnings to stock dividends. Again, it is possible to make it appear that interest charges were not earned, by diverting surplus earnings to improvement of structures, right of way, etc., and designating such disbursement as "maintenance."

The interest on income bonds is sometimes, but rarely, cumulative. Such bonds have a slight advantage over the non-cumulative issues, but this advantage is not so great as many people imagine. An enterprise which cannot keep up its payments of cumulative charges is not doing very well, and the piling up of deferred interest is more likely to lead to a reorganization which will free the corporation of the incubus than to a liquidation of the accrued sums. The greater the amount of the deferred obligation the more probable the reorganization.

As in the case of many, if not most, other securities, the value and desirability of the income bond are dependent largely upon the ability of the corporation uttering it to earn and pay the interest.

Municipal and State Bonds. It is impossible to offer any general prescription as to the status of this class of bonds. In order to analyze such issues thoroughly it is necessary to ascertain the value of the whole property on which the bond is based, the total amount of outstanding issues, the sinking fund provisions, the credit of the state or community, etc. Care should also be taken to scrutinize the "attorney's opinion" which accompanies all such flotations, in order to ascertain the legality of the bonds. While state, county, township, city or other municipal bonds are generally looked upon as being high grade, it is obviously the case that each issue must stand on its own merits.

Prior Lien Bonds. Strictly speaking, a lien prior to all other obligations of the corporation. This is a much-abused term, however, and should never be accepted literally without investigation.

Refunding First Mortgage Bonds. This is a bond issued for the purpose of refunding and extending an outstanding issue. The new bond is, therefore, of necessity a first mortgage, which is not the case with a First *and Refunding,* or a First Refunding mortgage bond.

Registered Bonds. The registered bond may be registered in the name of its owner on the books of the corporation, either as regards principal, or both principal and interest. When registered as to principal only, the owner may secure a new bond in case of loss or destruction. When registered as to principal and interest, the owner receives his interest payments in the form of a check from the company, the same as a stock dividend.

Unless the owner of bonds has no safe place to deposit them, which is unlikely, or unless he is prone to forget when his interest is due, which is more unlikely still, the coupon bond is preferable to the registered bond, as it can be promptly and easily disposed of, while the registered issue must be put through a red tape process if sold. For this reason, the registered bond usually commands a slightly lower market price.

Second Mortgage Bonds. It is probably unnecessary to consume space in defining the second, third, or other subsidiary mortgages. The second mortgage bond is, of course, a bond based upon the equities of a corporation, subject to the amount due the first mortgage. The third mortgage is a lien on the equities after the first and second mortgages have been satisfied, and so on.

Serial Bonds. A corporation may issue, say, one million dollars of bonds, with the proviso that $100,000 of the issue must be paid off annually. The ordinary method of retiring serial bonds is by giving the various divisions of the issue different maturities and retiring each installment as it falls due. Sometimes, however, the bonds are purchased by lot, or by purchase in the open market, in which case they would more properly be designated as "Sinking Fund Bonds."

Sinking Fund Bonds. A corporation may arrange to retire gradually a debt, mortgage or other, by setting aside a certain portion of its profits each year for the purchase of bonds. If these bonds are called by lot the owner can never be sure just where he stands on his fixed investments. If purchased in the open market, however, his own holdings are not disturbed.

Both the sinking fund and the serial bond should normally become more secure from year to year, as the interest charge on the total issue decreases as time goes on and the equity value increases. If secured by a mortgage, the entire original equity presumably remains behind the residue while the lien grows smaller, thus imparting increasing stability.

Terminal Bonds. These bonds are, generally speaking, a better form of security as to principal than the average railroad or industrial bond. The bonds issued on railroad terminals, stations, freight yards, etc., have a high property value, especially in large cities, as the real estate holdings would bring a much higher price in actual liquidation than would be secured on most railroad or other bonds based on right of way, plants, etc.

General Remarks.

The foregoing definitions cover all classes of mortgages, liens, or other forms of securities which the investor is likely to be called upon to consider. The bonds described may refer to railroad, manufacturing, mining, or general industrial issues, although a great majority of the bonds of this country are based upon the railroads. In the course of a year, almost eight hundred different descriptions of railroad bonds are traded in on the New York Stock Exchange, as compared with about one hundred public utility bonds (street railway, gas and electric) and about one hundred and twenty-five miscellaneous bonds (manufacturing and industrial, coal and iron, telegraph and telephone, etc.).

The railroad bond may safely be considered of the highest grade, with the possible exception of the better class of public utility bonds. The earnings of the railroads, and of the purveyors of water, gas, and other necessities, are far more stable than those of manufacturing, mining, and general industries. Also the equities of these enterprises normally grow greater from year to year, as population, wealth, and traffic density increase. Competition is also a comparatively unimportant factor in its bearing on the fortunes of railroads and public utilities. The railroad construction of the country has no doubt reached its approximate apex for many years to come. The building in future will be largely in the nature of double tracking, and the branch lines or "feeders" will give way to motor truck routes. In the opinion of the best judges, this will help rather than harm the great railroads, as branch lines have frequently proved more expensive than profitable.

There is even less chance of onerous competition in the public utility field. It is often the case that rising costs of materials and labor tend to embarrass these corporations, as it is very difficult to obtain authority or permission to advance the selling prices of gas, water, etc., in a corresponding degree, but this reflects more upon the value and future of the *stocks* than of the bonds. It is seldom, indeed, that legal restrictions will so greatly curtail profits in these lines as to jeopardize bond interest.

The bonds of mining or lumber corporations are not usually safe property, unless ample provisions are made for extinguishment of ore, oil, coal, or timber by means of an adequate sinking fund.

The bonds of steamship companies are also a low form of security, as their principal property consists of steamships, and the depreciation or obsoletion of vessels is rapid.

The manufacturing and industrial corporations vary so greatly in character that it is impossible to group their securities in a single classification. It is certain, however, that these corporations are subject to more extensive and acute competition, and that their profits rise and fall more freely than is the case with railroad and public utility companies.

CHAPTER IX

NOTES, CAR TRUSTS, ACCEPTANCES, ETC.

NOTES. Corporate notes may be either an unsecured obligation of the company which utters them or they may be secured by collateral. In some cases such obligations have been secured by the personal signatures of rich men interested in the corporation. Notes, like bonds, may be issued in either coupon or registered form and may carry the privilege of conversion into other securities during a certain period, at the option of the holder. Notes may also be all of one date or in serial maturities.

There is a quite natural inclination to look upon the secured note as being preferable to the mere debt obligation of the makers, but this is not always the case. A great deal depends, of course, upon the character of the security behind the notes. If this is inadequate, a plain note, issued by a corporation having high credit and sustained earning capacity, may be a superior investment.

Presumably, when a secured note falls due, the collateral behind it may be offered at public sale in order to satisfy the note-holders. But this is not always true. In several instances where notes have been secured by bonds or other values taken from the treasury of a corporation, the courts have declined to sanction the immediate sale of such collateral at a sacrifice, and note-holders have been subjected to long delays. It is fair to state, however, that in a great majority of such cases, the notes have been finally paid, with all deferred interest charges, even when mortgage bonds of the same company have been scaled down in a process of reorganization. In practically all railroad readjustments of recent years the first provision noted in assessments for cash requirements has provided for the liquidation of notes. For example, in the reorganization of the Missouri Pacific Railway Company in 1915, the cash requirements were scheduled as $41,419,792, of which $24,777,000 was employed for the payment of extended short-term notes, although several classes of bondholders were compelled to exchange their securities for the preferred stock of the new company. In this instance, however, as in most similar cases, the securities deposited as collateral for the notes were of great value to the corporation and a forced sale would have been disastrous. If the circumstances had been different, the note-holders might not have fared so well.

The short-term note is usually resorted to by a corporation because of unfavorable capital conditions. A company may require funds, but may be unable to market long-term bonds except at a high rate of interest or a heavy discount, which amounts to the same thing. The directors or the bankers may hold the opinion that capital can be secured on bonds on more favorable terms one, two, or three years later, and the short-term note is adopted as a temporary expedient. This form of financing proves expensive if capital rates remain stable or rise, or if for any reason the notes are extended from time to time. Interest rates on the notes are almost invariably higher than on bonds, and the danger of inability to extend the instruments at maturity is always present.

Investors may favor the purchase of notes for three reasons:—(1) the higher rate of interest, (2) the early maturity, or (3) the comparative ease with which they may be marketed at fair prices. A man or an organization may have surplus funds which must be kept liquid for special employment, say, one year hence. If these funds are invested in bonds of distant maturity, there is a possibility of the market price of such bonds declining between the date of purchase and the date on which the funds are required. The note, however, must be paid in full when it matures, if it is a sound one. And, because of this fact, the market price is not likely to suffer a material decline at any time in the interim. This phase of the subject will be more fully discussed under the head of "Discounts and Maturities."

The buyer of secured notes will frequently encounter difficulty in arriving at a conclusion as to the value of the collateral behind his security. It is often the case that no portion of the bonds and stocks so deposited is in public hands and there are consequently no published quotations from day to day. All that can be done in such circumstances is to arrive at a rough estimate of the value of collateral by comparing the bonds with other quoted issues of similar character, by examining the mortgage or other status of such bonds, and especially by reference to the surplus earnings of the corporation, past and present. The value of unsecured notes may be quite accurately determined by the record of earnings and a scrutiny of the various bond and stock issues of the company. If it is found that all the bonds command as high a price as the general run of other bonds of the same class and bearing the same rate of interest, the notes are probably sound. If the prices of the stocks are high and if dividends are being regularly earned and paid, the situation is still more satisfactory. The dividend test is the best of all. In fact, there is a law which invalidates corporate bonds as savings bank investments unless at least four per cent in dividends is paid upon the stocks of the company responsible for the bonds. This is evidence that the ability to maintain stock dividends is accepted in high quarters as a criterion of the value and stability of instruments of debt. It is also significant evidence in support of the contention that *sustained earnings* are more important than any other factor.

It is a regrettable fact that the short-term note has sometimes been employed as a means of wrecking a property and permitting unscrupulous men to buy it in at a low figure. As an illustration of this practice it may be recalled that a few years ago certain individuals, through their bankers, loaned several million dollars on short-term notes to a large Western railroad system. These notes were indorsed personally by the individuals referred to. As these men were also dominant in the directorate of the railroad, they proceeded to disburse dividends lavishly and expend millions for unnecessary maintenance charges, with the final result that the corporation found itself unable to retire the notes or pay the interest charges on a portion of their funded debt. The road was thrown into bankruptcy and although afterward pronounced solvent by the courts and the Interstate Commerce Commission, the damage had been done and all the odium, loss of credit, and expense attached to bankruptcy and reorganization followed. It is pleasing to chronicle the fact that the originators of this amiable scheme were duly circumvented and were losers by the operation.

The holders of bonds and other securities of a corporation should look with concern upon large or continually extended note issues on the part of the enterprise in which they are interested. A note issue is not necessarily an evil. It may represent a well-conceived plan of financial expediency, but it may also represent a device calculated to embarrass the corporation and drive out the security owners, as related above. Heavy note flotations are often a sign of weakness—the last resort of a decadent property to obtain money at any rate of interest or commission they may be required to pay. The Missouri Pacific Railway, the Missouri, Kansas and Texas Railway and a number of other prominent systems floated huge note issues a few years before they became bankrupt, and, by the way, the maturing of these notes and the inability to extend or pay them was, in almost all cases, the direct cause of receivership.

The holders of bonds and other securities are also concerned with the drawbacks of high interest and commission charges on note flotations, which act as drains on cash resources, and the fact that secured notes will usually be taken care of at the expense of bondholders is not a pleasant reflection. The holder of bonds will naturally assume that he has a semi-proprietary interest in the treasury securities of his company, or at least that these values fortify his position, but the securities may be withdrawn from the treasury and deposited as collateral in such a way that the notes will finally be paid to the prejudice of the bonds. It, therefore, behooves the owner of every class of securities to examine carefully the nature of and reasons for all important note flotations made by the corporation in which he is interested.

Car Trust Certificates, Equipment Bonds, or Equipment Notes. The term "Car Trust" is derived from the practice of organizing a corporation for the purpose of purchasing rolling stock and leasing it to a railroad company. The railroad pays the rental in installments for a certain term of years, after which the locomotives or cars become the property of the road. The so-called annual rentals are, of course, arranged so that principal and interest on the total amount involved will have been realized by the Car Trust when the specified period has ended. The corporation which organizes the trust will frequently issue its own securities, backed by a mortgage on the equipment, and retire these serially as the rentals are received. In such cases the corporation manufacturing the equipment, or its bankers, usually organize the trust, obtaining necessary working capital by the sale of the securities.

In effect, all equipment notes or bonds are obligations of the operating road. The plan of procedure, whether by means of a car trust or a trustee, is to issue serial notes or bonds maturing in equal amounts each year after the date of the purchase of equipment. The total amount of these certificates is usually about eighty per cent of the cost price of the locomotives or cars. For example, a railroad requiring one million dollars' worth of freight cars will provide $200,000 in cash and will arrange with bankers or underwriters to finance $800,000 of equipment notes, payable in, say, ten equal annual installments of $80,000 each.

The basic principle of the equipment obligation is adequate provision for amortization. As the rolling stock depreciates in value from year to year, the security behind the original loan diminishes in value. This is overcome by the fact that the amount due on the mortgage is also reduced. When the last of the notes falls due it is secured by the full number of cars originally purchased, which have, however, decreased in value through constant use.

Equipment securities are usually very safe investments. In fact, there have been so few defaults on obligations of this character that the exceptions are negligible. The primary reason for this stability is that a railroad cannot continue business without locomotives and cars and a railroad must continue to operate in any and all circumstances. As there is an absolute mortgage on equipment, failure to pay these notes regularly might result in foreclosure and suspension of operations. Therefore, no matter how hard up a road may be, the prompt liquidation of equipment notes is arranged for ahead of everything else. Even when a road is in the hands of the courts, the receivers will take care of the equipment notes as long as possible and the courts will usually authorize the raising of funds on receivers' certificates for that purpose without question.

The method of quoting equipment notes is a rather peculiar one and is not always understood by the uninitiated. The notes will be quoted at a price representing income return instead of the face value. For example, a quotation of certain five per cent equipment notes at 4.75 to 5.25% means that an owner of the certificates is willing to sell them at a price to yield 4.75 per cent on invested capital, while the buyer is willing to purchase at a price to yield 5.25 per cent.

Receivers' Certificates. The receiver's cerificate is a very high type of short-term investment. When a railroad or other public utility company becomes bankrupt, it is placed in the hands of receivers. The courts, under the direction of which the receivers act, will usually authorize the issue of certificates of debt in order to permit of the continued operation of the enterprise as a matter of public welfare. When such certificates are issued, they take precedence over all forms of funded debt, including the first mortgage bonds. It will be seen, therefore, that these instruments are "gilt-edged," and also that a heavy issue of receivers' certificates is more or less prejudicial to the status of all other outstanding securities.

The courts will seldom permit the sale of receivers' certificates except for immediate and imperative necessities, such as the payment of wages, essential operating expenses or equipment notes. There have been instances of a sale being allowed for the purpose of paying interest on bonds, but this practice has been discontinued in recent years.

Receivers' certificates are invariably short-term obligations commanding a ready market.

Acceptances. Although the trade acceptance has been a common form of investment in European countries for two hundred years or more, it is a new proposition in this country. The popularity of these notes is growing rapidly and the volume of available paper is becoming greater from day to day.

The fundamental character of the trade acceptance is simple. A merchant who buys a bill of goods receives a time draft from the seller. The buyer then accepts and endorses the draft and returns it to the seller. The latter may now take the acceptance to his bank and discount it by adding his personal endorsement. The bank has now two sureties.

Banks holding acceptances may then offer them for sale to other banks or to the investing public, and the notes thus become a circulating medium of finance.

The buyer of acceptances may safely assume that the bank offering them for sale has sufficiently scrutinized the credit of the makers and that no personal investigation is necessary. In fact, the acceptance in investors hands becomes a direct obligation of the bank itself and the buyer need look no further than the stability and reputation of the fiscal institution. Even if the accepting bank was to fail, the owner of an acceptance would have recourse against the other endorsers.

There are two forms of bankers' acceptances—"eligible" and "ineligible." The eligible acceptance is so designated because it is eligible for purchase by the Federal Reserve Bank. It cannot have a maturity of more than three months from the date of issue and must be confined to transactions involving (1) the shipment of goods between the United States and any foreign country, or between the United States and its dependencies or insular possessions, or between foreign countries, or (2) the shipment of goods within the United States, provided the bill at the time of its acceptance is accompanied by shipping documents, or (3) the storage within the United States of readily marketable goods, provided the acceptor is secured by warehouse, terminal, or other similar receipt, or (4) the storage within the United States of goods which have been actually sold, or (5) a bill drawn by a bank or banker in a foreign country, dependency or insular possession of the United States for the purpose of furnishing dollar exchange.

Ineligible acceptances do not necessarily conform to the preceding stipulations either as to maturity or express terms. They are, however, a direct obligation of the bank accepting them, the only difference being that they are not available for re-discount at the Federal Reserve Bank.

The ineligible acceptance commands a higher interest rate than the eligible paper—usually about one per cent more. The interest rate is determined by the state of the money markets and loaning rates at the time the paper is offered for sale. As they are choice short-term investments, the interest rate is naturally low.

The individual or institution having considerable sums of surplus cash on hand which may be required at any time can frequently make the best use of these dormant funds by purchasing ineligible acceptances. The business has grown so rapidly of late that it is now possible for the buyer to secure bankers' acceptances in almost any amount from $100 up, and with almost any rate of maturity. The maturity does not really make a great deal of difference, as the time is always short, and the paper is so sound that it passes from hand to hand almost as readily as currency.

CHAPTER X

RAILROAD STOCKS

RAILROAD stocks may be purchased for straight investment, for speculation, or as a combination of the two. Some railroad stocks show a long and satisfactory dividend record, amply secured by a large and gradually increasing "margin of safety," *i.e.*, surplus earnings in excess of dividend requirements, and such stocks may be considered almost as sound as good bonds. The buyer can secure a somewhat larger income return than on bonds, and whether or not he looks at his holdings from the strictly investment point of view, there is always the possibility of increased dividends and consequent enhancement of principal.

The owner of railroad stocks should realize the fundamental difference between his own status and that of the owner of bonds. The bond-holders are merely the *creditors* of a corporation; the stockholders are the *owners*. Their respective relations may be compared to those of the proprietor of a grocery store and the banker who loans the grocer money. The stockholders control the policy of the road through the voting privilege which goes with their stock; they elect the directors and share in all the surplus profits. The bondholders have no voice in the management of a road and receive no compensation except the interest on the money they have loaned.

Railroad stocks as a class are more stable and safe than industrial stocks. The profits of the railroads do not vary so greatly from year to year and competition is no longer a serious factor. It is unfortunately the case that a vigorous propaganda has been conducted in recent years for the purpose of conveying to the public mind the idea that the profits of the railroads have been dwindling and that restrictive legislation and hostility on the part of the Interstate Commerce Commission have been driving the railroads to the verge of wholesale bankruptcy. This propaganda has been so successful that ninety-nine casual observers out of a hundred firmly believe in it and greet with impatience or derision any efforts to controvert the fallacy. Yet it may be stated without hesitation that this popular belief has no foundation in fact. The reason it is so widely entertained is that the railroad orators and publicity bureaus have been engaged in an intensive campaign of one-sided "education" which the Commerce Commission has apparently been too dignified to reply to in a simple and popular manner.

The present writer has on several occasions in the past produced statistical exhibits showing the true state of affairs. These articles have been printed in leading financial magazines and have never been answered. They did not, in fact, admit of convincing replies, as the statements made were based, not upon personal conclusions, but upcn the cold statistics furnished by the accounting departments of the railroads themselves. For example, it was shown that the average profits accruing to the common stocks and the average rate of dividends for the leading railroad systems of the United States for a series of years were as follows:

Years	Average Profits	Average Dividends
1900	5.54%	3.20%
1901	5.84	3.93
1902	6.66	4.27
1903	7.26	4.47
1904	8.31	4.53
1905	8.92	5.17
1906	9.55	5.47
1907	9.68	6.61
1908	8.64	6.29
1909	10.19	6.30
1910	11.01	6.65
1911	9.70	6.87
1912	8.53	6.80
1913	10.27	6.67
1914	8.19	6.80
1915	7.30	6.40
1916	12.12	6.63
1917	12.08	6.87

It is proper to state that these calculations did not include such bankrupt properties as Chicago, Rock Island and Pacific, St. Louis and San Francisco, Missouri Pacific, etc., but it was shown that in all such cases the trouble was obviously due to bad management, bad financing, or looting. It is idle to attribute the downfall of a road like Rock Island to legal or economic drawbacks, while another road like Atchison, serving the same general territory and subject to the same laws and freight rates, has shown rapid and consistent improvement.

There is no intention of entering upon a long and tiresome discussion of the railroad situation here. It is well, however, for the investor in railroad bonds and stocks to realize that the prevalent opinion regarding general decadence is wholly unsupported by anything but words, credulity and misdirected sentiment. The declining tendency of railroad bond and stock prices just prior to and during the war was due to high and rising prices of capital and extensive liquidation of our railroad securities by European holders. Yet these declines were seized upon by the calamity howlers as veritable proofs of the truth of their former claims and predictions. Later on, when the railroads were placed under Federal control as a war measure and freight rates were advanced, the exponents of the theory of approaching ruin pointed to these increases as proof positive of the correctness of their contentions. This was another plausible but unsound argument. The higher freight rates were made necessary by a rapid increase in labor and commodity costs, growing out of abnormal conditions, and the increases would necessarily have been granted whether the roads remained under private or national control. In fact, a fifteen percent increase had been practically granted by the Commerce Commission before the President's proclamation appeared.

Volumes of plausible arguments and contorted statistics might be produced on the subject without enabling the compiler to get around the very simple tables of average profits and dividends. No matter what else is proved, we can return to these figures and establish beyond cavil the final fact that the net earnings and cash distributions of all important and well-managed roads have steadily increased, with only the occasional reversals to which any line of business is subject.

The preferred stocks of well-managed railroads may reasonably be looked upon as the highest form of investment security outside of bonds, notes, and other certificates of debt. Most of these stocks have paid dividends without interruption for a long period of years and are favored by important investors and institutions.

In determining the value of a preferred railroad stock attention should be first directed to the records of surplus earnings and the so-called "margin of safety." If these earnings are two or three times the amount required for the payment of the preferred dividend, and if the surplus has gradually increased over a period of years, the stock may generally be considered a safe one. Whether or not such stocks are advantageous purchases at any given time will depend largely upon the return on money invested and the condition of the capital markets. If capital is in demand at, say six percent, a four percent preferred stock would not be a desirable investment at a price above 67, at which figure it would return about six percent. These stocks cannot be considered on the same basis of income return as in the case of bonds, for the stocks have no maturity, while the bonds must be paid off in full at a given date. A four percent bond selling at 67 would, it is true, offer the same immediate income as a four percent stock, but the owner of the bond will, at some future date, receive an additional bonus of 33 points, or $330 per $1,000 bond.

Some preferred stocks may be subject to retirement at par or a higher specified price, as in the case of a callable bond, but there is no assurance that the option will ever be exercised.

A preferred stock is usually limited to the stated amount of dividend, but it sometimes shares with the common after certain dividends have been paid on both issues. It is then called a "participating" stock. Thus, the preferred stock of the Chicago and Northwestern Railroad pays a dividend of seven percent before anything is distributed to the common. After the common has received seven percent the preferred is entitled to an extra three percent, then the common an extra three percent, after which both issues share pro-rata in any further distribution of profits.

A preferred stock may be preferred as to assets, in which case it partakes of the nature of an income or debenture bond. Unless this preference is stipulated in the indenture, the preferred and common stocks share alike in the event of liquidation.

A preferred stock may be convertible into common stock at par or some other specified price, at the option of the holder. When this proviso exists, it gives to the preference an added speculative value. A preference may carry a voting privilege, but ordinarily the votes are confined to the common stock. The dividend on the preferred stock may or may not be cumulative.

The terms and covenants mentioned in the preceding paragraphs cover the essential points which should be scrutinized by the buyer of a preferred stock. The necessary data will be found in any good manual.

Railroad common stocks are based upon the equities and profits of a railroad's business. The property value is theoretically the amount per share which would be distributed to the stockholders in case of sale or liquidation, after all mortgages, notes and prior obligations of whatever nature were paid off. The theory is sound enough, but as it is never crystallized into practice, it is of little importance. Like most other securities, but in a greater degree than other securities, the true value of a common stock is largely dependent upon the ability of the corporation to earn and pay dividends.

All surplus profits earned by a railroad belong to the common stockholders in one form or another, whether or not they are paid out in the form of dividends. If, say, twelve percent is earned in excess of all charges and six percent is distributed in the form of dividends, the additional six percent of increment may be carried to treasury surplus, invested, or expended for improvements and betterments. In any event, if the excess funds are wisely administered, they should eventually redound entirely to the benefit of the holder of common stocks, except in cases where there are participating preferred stocks, as explained heretofore. The late Henry Villard is accredited with the statement that every dollar plowed back into a railroad property is finally worth twice as much to the stockholder as a dollar paid out in dividends. The ultimate reward may come in the form of more liberal dividends, extra cash distributions, greater stability of existing dividends, or valuable rights to subscribe to new stock issues. When rights are received, the owner may either exercise them in order to obtain more stock at a price below the prevailing quotations, or he may dispose of them in the open market and pocket the proceeds. The Great Northern Railway Company has turned over to its shareholders since 1900 rights or stock certificates which, if sold at prices midway between the highest and lowest quotations established for such bonuses, would have brought the owner of the stock an aggregate of no less than $154 per share in addition to his regular dividends. Owners of Atlantic Coast common stock have received, in the same period and calculated on the same basis, $28 per share, Chicago and Northwestern $52 per share, Pennsylvania $22 per share, Northern Pacific $31 per share, and so on through a long line of distributions which passed to the shareholders with no expense or effort on their part. Apparently the official statisticians engaged in proclaiming the hard fate of the owners of railroad stocks have overlooked these submerged emoluments as well as the gradual increase in the average rate of dividends and surplus profits, which had reached the highest point in history when war conditions brought about Federal control.

It has been stated by some writers that railroad stocks represent a potential liability, in that ill fortune or bad management sometimes results in assessments. This is not strictly true. There is no such thing as an assessable railroad stock. If a road is reorganized and the stockholders are requested to pay an assessment, they may do as they please about it. They may dispose of their old shares for what they will bring, or may decline to take any action whatever.

A great majority of the holders of dividend-paying common stocks are actuated by the double motive of income return and possible or probable increase in quoted values. The banker, the trustee, or the institution owning such stocks will primarily consider the return and look upon the excess earnings largely as a factor of safety. But the public owner is pretty sure to show a lively interest in the prospects of larger dividends or advancing prices. He combines, in a quite legitimate manner, the functions of both the investor and the speculator and his success is almost wholly dependent upon intelligent discrimination as to the choice of securities, recognition of the proper time for effecting purchases or sales and a reasonable amount of *patience*. Determination as to the right time to buy or sell is the most important equation of all, and it appears to be the most difficult, although there is no good reason why it should be. It is a remarkable fact that most men who are capable of exercising acumen and discernment in every other line of business will fall into astonishing errors in buying stocks. If one of these gentlemen wished to acquire a piece of real estate, his first concern would be to see how cheaply he could effect the purchase. He would await a favorable opportunity to secure a bargain and would refuse to consider purchasing in boom times. But in buying stocks, the whole proposition is reversed and the heaviest public purchases are made after a great advance and in competition with numerous other excited buyers. Also, the dreams of possible or probable market profits are usually grotesque and unreasonable. If a man of ordinary intelligence decides that a certain piece of realty or other property can be sold two or three years hence at an advance of fifty or one hundred percent over the purchase price, he does not hesitate to buy, but in the stock market fifty or one hundred percent is a mere bagatelle and two or three years is an age. And in this connection it may be stated most emphatically that the far-sighted and well-balanced men who do buy when stocks are cheap, quietly await the inevitable reconciliation of prices and values, and are content with reasonable profits, are the *only* ones who ever make sustained successes in the speculative arena.

The buyer of non-dividend-paying stocks is a speculator pure and simple, whether he pays for his securities outright or carries them on margin. He can have no reason for acquiring such property except the hope that at some future time dividends will be paid or the price of the stock advanced. Therefore, he speculates. But he may be a *speculator* and not a *gambler*. Possessed of sufficient foresight, and unhampered by undue greed or impatience, the man who has a degree of vision without being visionary may frequently make good returns in the so-called "cats and dogs."

As the factor of immediate investment return is entirely absent, the buyer of non-dividend-paying stocks should look first to the records and progress of increment, *i.e.,* the annual surplus earned for the stock, but his success depends even more upon his clearness of perspective. If the territory served is prosperous, with abundant natural resources, and is rapidly growing in population, the road will eventually prove profitable. Even when the evil of over-capitalization exists, a well managed property will grow up to and absorb the excess in time.

To those who contemplate placing a portion of their funds in the low-priced non-dividend-paying issues an interesting and important fact may be pointed out. This is that the greatest and most quickly acquired profits of the past have been made by those who had the courage and foresight to buy the stocks of reorganized roads. These opportunities are seldom taken advantage of by the public because of the prejudice and odium inspired by bankruptcy. What the uninitiated fail to see is that bad management, bad financing or dishonest practices, or a combination of these evils, are responsible for receivership in almost all cases, and that a drastic reorganization removes the abuses without curtailing the territory or prejudicing the prospects of the rehabilitated road. Physical decadence is a drawback which is overcome with comparative ease, and expenditures for maintenance and improvements are always liberal while a property is in the hands of the courts.

It is a matter of record that after all our great reorganization periods both the earnings and the securities of reorganized roads have advanced much more rapidly than those of the sound and solvent properties. For example, in the three years following the reorganization period of 1897-99 the net earnings of Atchison increased at an average rate of 24.90 percent per annum, while the net of all solvent roads increased only 7.63 percent. The Baltimore and Ohio net increased 11.45 percent as compared with 7.55 percent for all roads. Northern Pacific's net increased an average of 41.87 percent as compared with 11.64 percent. As to stock prices, if we assume that about $10,000 was in 1898 devoted to the purchase of either of the two standard dividend-paying roads which were at that time considered the highest grade stocks on the list, as compared with an equal sum placed in the stocks of three reorganized roads, the stocks being disposed of in 1901, we get the following results:

No. Shares	Bought in 1898 Stock	Price	Cost
90	Pennsylvania	111	$9,990
95	New York Central	105	9,975
222	Baltimore & Ohio	45	9,990
1,000	Atchison	10	10,000
525	Northern Pacific	19	9,975

No. Shares	Sold in 1901 Stock	Price	Profit	%
90	Pennsylvania	158	$4,230	42%
95	New York Central	175	6,650	66%
222	Baltimore & Ohio	110	14,430	144%
1,000	Atchison	91	81,000	810%
525	Northern Pacific	150	68,775	688%

These are not picked examples, but are truly representative. We need not seek far for the explanation. The reorganized roads, which had for years been laboring under severe financial, physical, or managerial drawbacks were at one stroke relieved of these incubi and placed in a position to handle business profitably and to meet competitors on equal terms. But if any prophet had been bold enough to suggest in 1898 that Baltimore and Ohio, Atchison and Northern Pacific would in three short years be dividend payers selling around or above par he would have been popularly considered a fit subject for an *inquirendo lunatico.* Those who contemplate buying low-priced stocks should reflect that it is better to own the securities of roads which have their troubles *behind them,* than those of roads which are held back by present or prospective troubles.

CHAPTER XI

INDUSTRIAL STOCKS

THE owner or prospective buyer of industrial securities faces one serious impediment which conservative men would never countenance nor endure in any line of business except the stock market. This impediment arises from the impossibility of keeping track of the progress of an industrial corporation's business and profits. Practically all the large corporations which are, in the last analysis, owned by the shareholding public, decline to issue full and frequent reports as to their condition and earnings. The orthodox method of enlightening the owners of the securities is to issue an annual report covering the fiscal year, several months after the year has been completed. The business of a manufacturing corporation is more volatile than that of a railroad. Its fortunes swing from one extreme to the other very quickly on the "prince or pauper" basis outlined by Mr. Carnegie. It is, therefore, vitally important to the owner of industrial shares that he should be able to note the rising or falling trend of profits, volume of business, etc., constantly. But such information is beyond his reach. He is a partner in a business about which he can secure nothing but infrequent and insufficient after-event knowledge. The very worst feature of this state of affairs is that a few "insiders" are at all times in possession of the facts and are able to act upon them marketwise. No one who has observed the stock markets, even in a perfunctory way, has failed to note instances of vigorous advances or declines in certain stocks, wholly unexplained to the bewildered public owner. Later on, when the opportunity to increase or dispose of his holdings to advantage has passed, the "annual report" reveals the true reasons.

There is no valid excuse for this lamentable state of affairs. The condition exists simply because no steps have been taken by the stockholding public or the legislators to overcome it. The owners of railroad securities have for many years been informed from week to week and from month to month as to the progress of the gross and net earnings of the various roads. When laws were passed making these exhibits obligatory, the railroad securities made up ninety per cent or more of public investments. There were only a half dozen industrial stocks on the list. But the financing of industrial corporations by the public has now grown to such proportions that the volume of securities exceeds the aggregate of railroad issues.

In the few cases where it has been feebly suggested that the industrial corporations produce monthly reports, the orators of these enterprises have protested energetically that such action would be ruinous. Their principal argument is that their competitors must be kept in the dark, and a supplementary argument is that the expense of compiling and distributing monthly reports would be burdensome. Neither of these pleas deserves serious attention. If *all* corporations were required to issue monthly reports no undue benefits would be gained by any particular unit and, furthermore, it is probable that every important corporation in any line of activity is fully aware of what its competitors are doing. The publication of reports of earnings would not involve the revealing of patent or secret processes or like disadvantages. If the monthly reports could be properly considered a source of disaster, the same thing would hold measurably true as to the annual reports, but no complaints have been registered on that score.

The talk of undue expense in connection with the publication of monthly reports is sheer nonsense. The accounting department of every large corporation lays before its officials at least once a month a condensed balance sheet and income account. This is all the stockholder requires, and the expense of printing and distributing this document on a single sheet of paper would be negligible. For that matter, the entire expense would fall upon the stockholders themselves and it is impossible to conceive of any objection on their part.

When we reflect upon the magnitude of public ownership of industrial stocks it appears astounding that intimate knowledge of the progress of these corporations should be confined to a few individuals, giving them the power, whether they exercise it or not, to reap huge advantages in the security markets. Neither investment nor speculation in industrial stocks can ever be conducted on a wholly safe basis by outsiders until this evil is remedied, and the remedy will necessarily be effected only through the insistence of the shareholders.

A few of the most progressive and far-sighted industrial corporations have indifferently reformed this practice of concealment by issuing quarterly reports of some kind. The greatest enterprise of all—the United States Steel Corporation—has modified its former methods by issuing a monthly report of unfilled orders on hand and a quarterly report of earnings, showing the results for each month of the quarter separately. This enables the owner or prospective buyer to keep a fairly good line on the trend of the corporation's business. No doubt the astute men at the head of the big concern realize that it is advisable to inspire general confidence in their securities and it is certain that they have succeeded, as the United States Steel issues are easily the most popular of all the listed industrial stocks.

It may be contended that as the stockholders elect the directors they must look to their chosen representatives for protection and fair treatment. To this two answers may be made: (1) that in a great majority of instances the stockholders do not elect the directors at all. They merely sign the first proxy they receive and send it in without knowing anything about the man or men they are voting for. (2) The directors, if they were truly the representatives of the stockholders, could best serve the interest of their followers by insisting on that "ample and accurate information" which the late James J. Hill stated was "the first step toward success." What would we say of a man who appointed a manager for his business with the understanding that he would be refused all information regarding finances, profits, or anything else except at such widely separated intervals as the manager might see fit to enlighten him?

Finally, we may inquire, in the satirical words of Juvenal *"quis custodiet ipsos custodes?"*

INDUSTRIAL PREFERRED STOCKS

In 1913, which may be considered as a representative normal year, the average return on ten seasoned dividend-paying railroad preferred stocks was 4.90 per cent. In the same year the average return on ten dividend-paying industrial preferred stocks which had a long and satisfactory record of earnings and distributions was 6.61 per cent. The average return on the industrial preferences was therefore about 35 per cent greater than on the railroad preferences. Making due allowance for the comparative flexibility of the earnings of manufacturing corporations this appears to be an unwarranted hiation, especially in view of the fact that there had been no reduction or disturbance of the dividends on any of the stocks selected during a period of ten years. It is probable that the higher rate commanded by the industrial stocks was to a considerable extent due to the meagre and infrequent reports of earnings and financial condition. Admitting the serious character of this drawback, it still appears that the prejudice arising therefrom has been somewhat overdone, so far as the preferred stocks are concerned. The fluctuations in profits from year to year, or from cycle to cycle, may be very large without endangering the status of the preferred issue. Preferred dividends may be paid even when not earned. The common stocks suffer far more from such fluctuations and from the policy of concealment than do the senior issues. As an illustration of this we may refer to the earnings and dividends of the United States Steel common and preferred stocks for ten years.

	PREFERRED		COMMON	
Years	Earnings Per Cent	Dividends Per Cent	Earnings Per Cent	Dividends Per Cent
1908	12.69	7	4.04	2
1909	21.94	7	10.59	2¾
1910	24.26	7	12.23	5½
1911	15.35	7	5.92	5
1912	15.05	7	5.71	5
1913	22.55	7	11.02	5
1914	6.52	7	Nil	3
1915	21.04	7	9.96	1¼
1916	75.39	7	48.46	5 and 3¾ Extra
1917	62.23	7	39.15	5 and 11¾ Extra

The percentage of earnings for the preferred stock shows the total amount earned, although the dividends are limited to seven per cent. The surplus represents the margin of safety. It will be observed that the seven per cent dividend was covered by a liberal margin in every year except 1914, when the outbreak of war brought about a temporary suspension in all lines of activity. From the listing of the stock in 1901 to the present date, 1914 was the only year in which the corporation failed to earn the full preferred dividend with something to spare, and in no case have payments on the preferences been deferred or reduced.

The record of the Steel Corporation is by no means an exception. Other industrial preferred stocks have made equally satisfactory exhibits. American Car and Foundry preferred has paid seven per cent uninterruptedly since 1899; American Locomotive seven per cent since 1900; American Smelting and Refining seven per cent since 1899; American Sugar seven per cent since 1891, and so on through a long line of well-managed corporations.

The first step taken by the buyer of industrial stocks should be an investigation of the dividend record and the progress of earnings in normal times. It is a great mistake, however, to attach too much importance to the huge earnings during an abnormal period of profits. It is usually the case that a rapidly acquired surplus of this kind is partly distributed in cash to the shareholders and partly reinvested in plant extensions or improvements. The money distributed in the form of dividends or extras has no bearing on the future profits of the corporation. It has been earned and disbursed and is no longer a factor. The money plowed back into the property increases the statistical book or property value, it is true, but the rapidly increased plant capacity is temporarily more of a drawback than an advantage when normal conditions return. This capacity, which has necessarily been greatly expanded to meet the abnormal demand, will prove redundant when the demand disappears or falls off. Competition will then become keen, and the profits will be consequently reduced. Portions of the plant will be idle and so become an expense instead of a revenue producer. In the fullness of time, the natural increase in population and volume of business will grow up to the oversupply of capacity but there is invariably a period of comparative stagnation and a recession of profits and stock prices after a boom.

In examining the property value of an industrial stock three items found in the balance sheet merit particular attention. These are: (1) good will, patents, franchises and other intangible assets; (2) inventories, and (3) accounts and bills payable or receivable.

It is not considered good practice by the higher school of accountants to consider good will, patents, etc., at all in estimating the equity value of industrial securities. Good will, in particular, is a misleading and much-abused term. A corporation is formed, or a merger of several corporations is effected, the real capital value being covered by the funded debt, or preferred stocks, or both. A large amount of common stock is also issued. This common stock is all, or mostly all, water, but a method must be found for offsetting the stock liability by a corresponding entry on the assets side of the balance sheet. This is usually adjusted by writing in a sufficient amount of "good will."

It is true that the good will of a business has value, but that value is represented wholly by the ability of the corporation to secure business and make profits. When that ability declines or vanishes, or when, perhaps, it has never existed, the fixed value attaching to it is a farce. Yet we will frequently find a corporation having, say $10,000,000 of common stock with a par value of $100 per share carried as a full liability on one side of the balance sheet and offset by $10,000,000 of good will on the other. This stock may decline to three or four dollars a share in the open market, reducing the estimated value of the good will to a few hundred thousand dollars, but there is no reduction whatever of the rigid bookkeeping assets and liabilities. Obviously, the value of the good will has been lost, if, indeed, it ever existed. If an uninsured plant had burned or losses had been suffered in any other way, they would have to be written off and a true statement of affairs laid before the security owner, but not so with the lost or non-existent "good will."

The proper way to do with this good-will item is to issue common stocks of no stated par value, and let the owners or purchasers decide for themselves what prestige and ability is worth. That is what happens in any event, but the perpetuation of false statistics serves to confuse or mislead the uninitiated. They observe that the assets of a corporation fully cover the par value of all its $100 per share stock, although the stock may in reality be worth little or nothing.

In attempting to arrive at a fair figure of equity value, the investigator will do well to strike from the assets all good will, patents, etc., and base the tentative value of the stocks on the tangible assets remaining, and on the record of profits over a number of normal years.

Included in the "working capital" or "current assets" of an industrial corporation we will find the inventories of materials and supplies on hand. The accepted rule of higher accounting is to value these items at cost or at the market, if the current market for such materials is *below* the original cost. This is a rule which is not always adhered to. Many corporations will, in order to make a good showing, mark their inventories *up* in case of higher quotations for materials and include this increase in the profits shown for a certain period. Perhaps the market price will fall as quickly as it has advanced, in which case the next report will show a loss of "profits" which were never secured.

Even when materials are purchased in large quantities at high prices, and are carried at cost, there is danger of a slump in prices of commodities. If an inventory has doubled or trebled in the course of a few active years there is particular reason for apprehension, as any losses must be promptly written off. Swollen inventories should always be given careful attention and the possibility or probability of a decline which will reduce both book values and profits should be accorded due consideration.

In examining the "accounts and bills receivable" or "accounts and bills payable," it should be realized that *all* of the amounts receivable are not likely to be collected, while all amounts payable must of necessity be liquidated, if the company is to remain solvent. Corporations which follow the strictest laws of accountancy will write off annually all bad or doubtful debts and will so state in their reports.

A brief example covering all the foregoing points may prove helpful to the reader.

CONDENSED BALANCE SHEET

Assets		Liabilities	
Property and plant	$2,000,000	Funded debt	$1,000,000
Cash	1,000,000	Preferred stock ..	2,000,000
Accounts receivable	2,000,000	Common stock ..	4,000,000
Inventories	2,000,000	Accounts payable .	2,000,000
Good will, etc. ...	3,000,000	Surplus	1,000,000
Total assets ...	$10,000,000	Total liabilities	$10,000,000

Striking out the item of "good will, etc.," and taking the property and plant account and accounts receivable at their stated value, the tangible assets amount to \$7,000,000. Assuming liquidation, we first retire all the funded debt and preferred stocks—total \$3,000,000, and liquidate the \$2,000,000 of accounts payable—total \$5,000,000. This leaves \$2,000,000 for distribution to the common stockholders, or a so-called statistical value of \$50 per share.

Further investigation may show, however, that the corporation has been gradually increasing its earnings from year to year and has always maintained a good dividend record, with good management and conservative business methods. In that case the statistical value becomes a secondary consideration, as there is no reason to anticipate liquidation, and good reason for expecting a continued high income return, together with a constant appreciation of property value and surplus which will enhance the demonstrated equity value from year to year. The preferred stock has a statistical value sufficient to cover its par of \$100 per share and a margin of asset safety amounting to \$100 per share. If the corporation has earned an average of, say six per cent net on total capitalization for ten years, with the surplus earnings gradually increasing, the earnings applicable to dividend payments on the preferred would average eighteen per cent after paying six per cent on funded debt. A seven per cent dividend on the preference would therefore have been earned more than two and a half times.

The buyer of industrial stocks should look carefully to the amount of funded debt (bonds, notes, etc.) as these constitute a lien on both property and earnings. He should also examine the status of the preferred shares. In a majority of cases preferred dividends are cumulative, which is an advantage to the senior issue and a disadvantage to the common stocks. In many cases the preferred is entitled to a bonus in case of dissolution or liquidation, sometimes as much as twenty-five per cent over the par value. This is also advantageous to the preferred and detrimental to the common. A preferred stock may be retireable at par or slightly above that figure, which is in favor of the common. The senior issue may be, and frequently is, preferred as to assets, and may have equal or superior voting rights. It will, in fact, be found that in a great majority of cases industrial preferred stocks are originally framed in such a manner as to give them a high investment value, while the junior shares are more speculative.

In the absence of clear and frequent reports of earnings and fiscal conditions, the buyer of industrial common stocks finds it impossible to trace the current trend or progress of the business and is reduced to the necessity of basing his operations largely upon deductive inferences. If he decides that a certain line of business, or business generally, is about to enter a period of prosperity, he may do well in the industrials both as to income and market profits. And just before such a period appears he will find security prices at their low ebb. A study of the barometrical indices explained heretofore will assist him in arriving at an intelligent conclusion. If he has the facilities at his command, he may also gain an advantage by scrutinizing the statements of pig iron production from week to week. Pig iron production is an excellent barometer, in that the signs of an approaching period of activity or depression are visible in the raw material before there is any pronounced reflection in the business or earnings of the manufacturing corporations. To illustrate this point, a great steel and iron manufacturing corporation may have orders on its books sufficient to keep its plants running at capacity for two or three months, even if very few new orders come in, and they may have supplied themselves with all or practically all the raw materials required for the fabrication of these orders. In such circumstances pig iron production will begin to fall off long before there is any cessation of manufacturing activity or profits. On the other hand, an increase in new orders, or confidence in the early appearance of more prosperous conditions will result in a stimulated demand for raw materials and a consequent acceleration of production. As activity in steel and iron manufacturing is almost invariably accompanied by general business improvement, the pig iron figures will be found a valuable guide.

CHAPTER XII

MINING AND OIL STOCKS

THE owner of securities issued by a railroad or manufacturing corporation may reasonably assume that the property on which his stocks or bonds are based will grow in value and earning power from year to year. Granted good management and normal conditions this is the natural expectation. With mining or oil securities the situation is reversed. The supplies of ore or oil are constantly being consumed and will eventually be entirely exhausted. When the end of the supply is reached the residue property usually has little or no value. This rule may be modified in cases where corporations acquire new properties from time to time as the old ones are depleted, or in cases where mining or oil corporations derive a portion of their revenue from refineries, smelters, distributing organizations, etc., but what is here discussed is the status of mining properties *per se*.

It is obviously the case that the investor or speculator in securities which consume themselves must contemplate realizing in dividends before the property is exhausted not only the interest or profit, but the whole of his invested principal. If he pays $100 for a share of mining stock expecting to make a return of, say ten per cent on his funds, and the mine lives for ten years, his dividend must average $20 per share, or twenty per cent per annum. This is the principal reason for the comparatively large dividends on mining and oil stocks, and failure to understand the true state of affairs results in much loss. Credulous or uninformed people are attracted by the large current returns and do not appreciate the fact that each payment is partly interest or profit and partly liquidation of principal. The very greatest dividend paid by a mining corporation may be its last. Suppose, for example, that a certain copper stock is quoted at $30 per share and is paying dividends at the rate of $10 per share. This would show a statistical return on investment of 33 1-3 per cent. But if the mine should be exhausted in one year, the purchase of the stock at 30 would be a losing proposition. If the mine should live three years, the buyer would merely get his principal back, without interest. The record of former dividend payments may show that the stock has paid $10 per share per annum regularly for ten, twenty, or even fifty years, but that would be no reason for expecting the dividends to continue. The fact that past performances constitute one of our best guides in judging of the merits of railroad or industrial securities misleads many people who attempt to measure liquidating propositions with the same yardstick.

Those who understand and appreciate the drawbacks outlined above adopt a method called "amortization" as a basis for investments in mining property. This process may be simply described as follows:

The amount of ore in the mine, the metal contents per ton of ore, the cost of production, the annual productive capacity and the probable selling price of the product are all estimated. The figures of ore tonnage and average metal content per ton presumably indicate the total amount of metal contained in the property. The annual productive capacity shows how long it will take to mine and market this metal. The difference between the production and selling prices indicates the profit per ton. Combining these factors with the rate of interest or profit required on investment, the buyer arrives at the price he is willing to pay for the property. This may appear to the tyro as a rather complicated and formidable task, but not so. The prominent mining corporations offering their securities for public sale provide in their annual or special reports all the figures necessary for such examinations, and a few arithmetical calculations will afford at least a working basis. A simple illustration may clarify this point.

Assuming a hypothetical copper mine with the following preliminary estimates.

ESTIMATES

Ore Contents (tons)	1,000,000
Metal Contents (tons)	50,000
Cost of production per ton of metal	$200
Market price per ton	$300
Total value	$15,000,000
Total cost of production	$10,000,000
Total profit	$5,000,000
Annual capacity (metal tons.)	5,000

The mine has an indicated life of ten years with profits at the rate of $500,000 a year. The man who paid $2,500,000 for the property would therefore have the expectation of having his capital returned to him with interest at the rate of ten per cent. As a matter of fact the rate of interest would be considerably higher through the compounding of the sums annually returned in the form of dividends, but the present object is to explain the basic principles rather than the technicalities and refinements of the method of amortization.

The foregoing illustration assumes the purchase of the property *en bloc,* but the buyer of a portion of the shares may make his calculations of value on the same basis. If he finds the total capitalization of the property greatly in excess of $2,500,000 he may consider it overcapitalized.

It will easily be realized that amortization is not an exact science. In many cases the process is applied in a purely arbitrary way. The buyer of the property or the shares cannot determine the life of the mine, so he bases his calculations on the ore actually in sight. In such cases the mine will probably have a much greater ultimate value than that indicated. Even where the total ore contents and average amount of metal per ton is quite definitely known, as in the case of porphyry copper mines, the selling price of the metal must be arbitrarily arrived at. The cost of production may also vary, but this is not so important, as the selling price of a commodity will naturally advance in proportion to increased costs, except in the case of gold mines. The selling price of gold is always a fixed and known equation.

The leading mining stocks listed on the Stock Exchange are those of the so-called porphyry copper companies. These differ from the vein mines in that their metal contents are quite accurately determined and the principal speculative consideration is in the future selling price of the product. We might compare a porphyry mine with a basin or box holding a known number of cubic yards of ore. This ore has been sampled at numerous points by means of the diamond drill and the average run of metal per ton estimated. The mill capacity and the approximate cost of production being also known, the work of amortizing is greatly simplified and the results are comparatively accurate. Experimental tables can easily be erected based upon various market prices of the metal, fifteen cents, sixteen cents, twenty cents, etc., and the buyer of the stocks may then judge of the value based on what he considers a probable or a conservative expectation in the way of metal prices.

Gold mines are always most profitable when prices of labor and commodities are low. The cost of production is lowered by cheap labor and materials and the product can be exchanged for a greater amount of goods of any class. In the final analysis gold represents nothing but its value in exchange for something else, and the lower general prices are, the better for the producer. If wheat is selling at two dollars per bushel, a gold dollar will only exchange for half as much wheat as when the price of the cereal is one dollar per bushel, and this applies to everything money will purchase.

On the other hand, when the costs of labor and materials rise rapidly the producer of gold has a very hard time of it, because of the rigid price of what he has for sale. We have had a striking illustration of this during the European war. Many gold mines were compelled to suspend operations and others were operated at a loss or on a very meager margin of profit.

The coal mining stocks are usually in much the same position as the porphyry coppers. That is to say, the acreage of coal lands owned and the probable contents of marketable coal are fairly well known and the future selling price is the chief speculative equation.

Oil stocks are, generally speaking, highly speculative propositions and cannot be properly described as investments. Great fortunes have been occasionally made in the past by the finding of "gushers" or the locating of valuable oil fields, but the chances of acquiring sudden riches in this way grow increasingly remote as the extensive work of exploration and prospecting goes on. A great deal of money is lost in speculation in oil stocks. The promoters of the new corporations present alluring statistics showing what the Standard Oil Company or other large concerns have done for their shareholders, leaving out of sight the fact that the greatest profits of these corporations were made through their buying and selling organizations, pipe lines, refineries, distributing stations, etc., rather than through prospecting for oil.

It is true of all speculative propositions that public opinion usually tends to extremes. This attitude is especially marked as regards mining stocks. One class of people favors such securities to the exclusion of all others because they believe that such ventures offer the only opportunities to get rich quick. The other class insists that ventures in mining securities are extra-hazardous and that those who indulge in such operations are sure to lose. Both classes are wrong. Their reasoning is unsound or prejudiced. It is true that millions have been lost in mining enterprises but it is also true that many more millions have been made. The trite statement that "more money is put into the ground than is taken out of it" is frequently heard and widely accepted, yet it is utter nonsense. Of minerals we annually produce close to two billion dollars' worth. Including oil, coal, etc., the grand total of mine production in the United States in 1916 was $3,315,339,409. In that year it was estimated that $250,000,000 of questionable securities were sold, not all of which were mining stocks and not all of which were entirely worthless. We may stretch the estimate to cover the odd $315,339,409 and still have the round figure of three billions remaining. The discredited flotations, considering them wholly worthless, would not represent ten per cent of the total of mine production. Mining is one of the greatest industries of the country and fortunes have been made, not only by the large interests but by outside purchasers of such issues.

The greatest danger and the greatest source of loss to buyers of mining securities lies in the inability of the average outsider to discriminate between mines and prospects. A great majority of the stocks offered for sale by unknown promoters are prospects and nothing else. In the nature of things, they are usually poor prospects, for the large exploration companies carefully examine and try out all promising districts. These corporations have efficient scouts and engineers constantly on the lookout for bargains, either undeveloped or partly developed. They acquire most of the good propositions and underwrite the necessary capital before offering the securities to the public. The wildcat promoter, on the other hand, ordinarily has little or no money and he turns to the public or his friends for funds. In nine cases out of ten the owner of what he sincerely believes to be a good prospect will go to the big corporations first, and he can always get a hearing. If he is turned down, he attempts to do his own financing and the property is usually a failure. There are just enough exceptions to keep the cupidity of the public stimulated and to keep the promotion game alive. We may safely adopt the rule that a mine or a prospect which cannot be sold to the large interests at a fair price is a very questionable investment. Another good rule is to invest only in mining stocks which are listed on a reputable stock exchange. Not all the listed stocks turn out satisfactorily, but the percentage of failures is infinitely smaller than in the outside field. Keep the fact in mind that mining is a business—a highly specialized business—and that a really good property will never need to go begging for development funds. The rich specialists are constantly on the lookout for good mines of any kind and they make very few mistakes in their judgment as to the value or prospects of any proposition laid before them.

The modern method of capitalizing mining stocks is to underwrite and issue bonds in sufficient quantity to take care of the initial expenses of development. Mining bonds generally have a poor investment status, considered in the ordinary acceptance of the term. The fact that the property declines steadily in value until it is exhausted would require an abnormal rate of bond interest in order to permit of amortization. These bonds, however, are made convertible into common stock on very favorable terms and, if the enterprise is successful, the bond issue soon disappears through the exercise of the conversion privilege. An alternative process is to provide a sinking fund out of profits sufficient to retire the bonds serially or at maturity, but the method first described is now the most popular.

Sometimes a mining company will undertake to do its own amortizing by writing off ore depletion from year to year and reserving all profits over and above a fair dividend in the treasury of the corporation. In the writer's opinion there is no good reason for this sort of paternalism. In the case of a railroad or industrial corporation liberal cash reserves are advisable, as funds can frequently be employed to advantage when borrowing for capital purposes would be onerous. But in a merchandising proposition the working capital is constantly supplied by the marketing of the product and large reserves are unnecessary. Also, the talk of "stabilizing dividends" on mining stocks is absurd and cannot be upheld by any logical argument. A railroad or other corporation which is continually in the market for new funds and which finds it expedient to popularize the status of its securities as permanent investments through a uniform and long-continued dividend record may find reasons for keeping reserves during the fat years in order to maintain the established dividend rate in the lean years. But this does not hold true of mining stocks. The profits belong to the stockholder and, so long as they are not needed in the operation of the company, they should be promptly distributed. Furthermore, the piling up of huge sums of cash subject to the orders of the directors is a temptation to invest in outside properties. There are many cases on record where such ventures have proved disastrous, and a few well-authenticated instances of dominant interests personally acquiring new properties at low prices and selling them to the parent organization at double or treble their value.

Unless one is capable of arriving at sound conclusions regarding the value and prospects of a mining company and unless he is willing to devote a reasonable amount of time and study to the investigation, he would better confine his attention to other classes of securities which can be more easily analyzed and which will naturally increase in value as time goes on.

CHAPTER XIII

DISCOUNTS AND MATURITIES

THE owner of a dividend-paying stock arrives at the return secured upon his investment by the simple process of dividing the dividend rate by the price paid for the stock. Thus a six per cent stock purchased at $90 per share nets the buyer about 6.66 per cent ($600 \div 90 = 6.66 +$).

The owner of bonds, notes, or other certificates of debt cannot properly follow this process. Very frequently, however, small investors, or even advisors, ignore or overlook this fact and consequently arrive at wholly incorrect conclusions as to values. To assume that a four per cent bond selling at 80 is the equivalent of a five per cent bond selling at par, because the return on investment is five per cent in both instances, is an error so glaring that it would appear unnecessary to refer to it, but as palpable as the mistake may appear, it is nevertheless a common one.

In examining the relative status of stocks, as compared with bonds, notes, etc., two fundamental divergences are found. First, the bonds, etc., have a specified face value and the full amount of principal must be eventually paid off. This law does not apply to stocks, which may be given a par value of $10, $100, $1000, or any other amount per share without establishing any definite value or promising to pay the owner any certain amount at any time in the future. Second, bonds and other certificates of debt have fixed dates of maturity, like any other promise to pay, while stocks will presumably have a perpetual, or at least an indefinite, life. The buyer of stocks receives no positive or demonstrable advantage in buying at a figure far below par, nor can he assume that his principal will be returned to him on a certain date.

In order to determine the "yield," or net return, on bonds it is necessary to consider both the cost price and the date of maturity. The actual *income,* meaning the annual rate of return on investment, may be calculated by the same method as is applied to stocks. But if the bond is purchased at a discount, *i.e.,* at a price below its face value, a further tangible profit exists. To illustrate this in the simplest manner, let us assume that a $1000 bond paying four per cent interest is quoted at 80, which means that the bond can be purchased for $800. This bond, we will further assume, matures just ten years after the date of purchase.

The immediate income return on the investment is five per cent ($400 \div 80 = 5$) but in ten years the investor will receive $1000 in return for his investment of $800. There is consequently an added profit of $200 in ten years, making the actual yield 7.50 per cent per annum. In case the buyer pays a premium for his bonds, the process explained above must be reversed. For example, if a five per cent bond with a maturity of ten years is purchased at 110, it will be necessary to deduct approximately one per cent per annum from the ultimate yield, as the original investment of $1100 will be liquidated by a payment of $1000.

The principles expounded above do not exactly follow the accepted methods of arriving at the effects of discounts or premiums. The scientific and detailed process involves more complicated calculation. It is assumed by some compilers of bond tables that interest, as received, will be reinvested, thus introducing the factor of compound interest. This may be essential so far as insurance companies or other large investors are concerned, but it does not appear to be either necessary or logical in ordinary cases. A great majority of the public owners of bonds use all or a portion of the income received to cover living expenses, in which case the assumption of reinvestment and compounding is a false one, and attempts to employ the laboriously erected tables of bond values are more likely to mislead or confuse than to enlighten. The average investor will find his purpose served by the simple mathematical methods outlined in the foregoing paragraphs.

People who have not given particular thought or study to the finer points of investment are frequently at a loss to understand just how they should view the profit represented by bonds purchased at a discount. Unfortunately, most competent writers on such subjects have either considered it unnecessary to explain the matter at all, or have addressed themselves to the actuaries or expert accountants rather than to the general reader. The proposition, like most other apparently abstruse problems, is simple enough when the basic principle is understood.

The man who pays $800 for a four per cent bond having a ten-year maturity finds it easy enough to understand that the immediate return on investment is five per cent, but he balks at the statement that the real yield may safely be called seven and a half per cent. He admits that if he holds the bond to maturity he will receive the $200 bonus and that the seven and a half per cent assumption will be verified. But in many cases he does not hold, nor expect to hold his bonds until the date of maturity has been reached. In most cases he does not know whether he will do so or not, and therefore denies that he is justified in considering the ultimate bonus.

As a matter of fact, it does not make any difference whether he holds to maturity or sells at some earlier date. He may reasonably assume that the quoted price of the bond will naturally advance in the ratio dictated by the progress of time. One year after he purchases the bond at 80 it should, in the nature of things, be quoted at 82. In five years the quotation should be 90, and so on. No doubt some non-conformist will arise to state that this may be quite correct theoretically but that precedent will show that it does not work out in practice. To such we may reply that no theory can fail to work out in practice unless (a) the theory is incorrect, or (b) the results are altered by extraneous influences which cannot be foreseen or governed. If the gradual rise in price of a bond purchased at a discount does not appear, it is because changes in the demand for or price of capital, or some other foreign element, has disturbed the working out of the proper adjustment of prices and values. Such fortuitous influences cannot be taken into our reckonings at all.

It is not infrequently the case that a four per cent bond maturing in ten years can be purchased at 80 to yield seven and a half per cent, but unless some abnormal conditions obtained we could not expect to buy a four per cent bond maturing in *five* years, at a price of 80, as the return would then be ten per cent. Such a return is unreasonably high, unless there is something wrong with the bond—some doubt as to the integrity of principal or interest.

To carry the contention to an extreme analysis, if we could purchase a four per cent bond maturing in *one* year at a price of 80, the return would be at the rate of thirty per cent per annum—$40 interest plus $200 premium.

The buyer of bonds is quite justified in assuming that his accrued bonus will be measurably reflected in the quoted price of his holdings from year to year, and that he can dispose of his property at any interim date and secure his pro rata, in addition to his interest. The price may be more or less than the exact ratio, because of economic changes which give a higher or lower value to capital, but, everything being equal, the established price of the bond will be governed by the value of capital, and this price will steadily advance until the quoted figure is 100 on the day of maturity.

The question of the advantage or disadvantage of early as compared with distant maturities has been much discussed. One very large school of observers holds that it is wiser to invest in bonds which will not be paid off for forty or fifty years. This view has even been extended to favor securities which have no maturity at all and which are, in effect, perpetual, but transferable, annuities. British Consols form the best and most familiar illustration of the class of securities last named.

Another school contends that it is better to keep funds comparatively liquid by purchasing securities having an early maturity. They point out that a bond or note payable in a year or two will not shrink much in marketable price in any circumstances, while forty or fifty year bonds may sell at a heavy discount. Those who can always convert their investments into cash on short notice without any great sacrifice of principal, say these students, are in a position to take advantage of any unexpected opportunities to place funds to better advantage elsewhere.

All this "great argument about it and about" comes to nothing. The problem of the relative advantages of early or distant maturities is determined by conditions which may be wholly different at different times. When conditions point to a long period of low money rates, with capital in plentiful supply, we may confidently purchase long-time securities, especially those selling at a discount and showing a high rate of return. These securities will inevitably advance in price when the influence of the expected over-supply of capital becomes operative. On the other hand, any developments which indicate a period of high prices for capital and a scarcity of funds will seriously depress the market prices of long term securities. When the European war broke out, it was perfectly clear to bankers and the more sophisticated class of investors that bond prices would fall rapidly. They therefore sold their holdings promptly and placed the proceeds in one or two year notes or other instruments of early maturity. Unfortunately, the rank and file of public investors did not understand or realize the inevitable working out of these phenomena and, of course, those who had bonds to *sell* did not go to any particular pains to enlighten the outsiders.

Perhaps this problem of early or distant maturities may be most easily understood by reducing the proposition to an individual and personal status.

Suppose a man is working for a salary of $5000 per year which is considered fair and normal compensation. Suppose circumstances so shape themselves that there is a great demand for expert services in his line of activity and he finds that he can secure $7500 a year, for a time at least, with the possibility of receiving even $10,000 or more if he is free to move. Naturally, he makes the change. But later on he is convinced that the demand for his services and the abnormal rate of compensation will soon disappear and that competition for employment will become acute. He now seeks to secure a long term contract, even at lower wages. There is no essential difference between his personal policy and the policy he would, or should, follow with his funds. Capital works for wages, just as a man does, with the important difference that capital can move more easily and freely from one locality or line of enterprise to another than can the individual. The man who owns surplus funds owns, so to speak, a wage earner who can always find employment and who is under his personal direction at all times. If he is content to put this servant to work at fair wages and to take no advantage of changed conditions, that is his affair. He may tie him up to a long term or life-time contract which can only be broken by the payment of a heavy penalty. For many years British Consols have been designated by financial writers as "the premier investment security of the world." Yet no class of well-to-do or rich people have suffered so much in pocket as the holders of these same sacrosanct annuities. They have sat stupidly by while the purchasing power of money was gradually decreasing through steadily advancing costs of labor and commodities. Because of the high character of these securities the return on investment is low, but that is not the worst of it. The holders have not even secured the low rate of interest, but have actually been living on the principal. Thousands of people purchased Consols at or above par years ago, and have seen them gradually decline in price year by year until they cannot be sold in the open market to-day at much better than sixty cents on the dollar. What has happened to their principal? The estate which purchased £10,000 of Consols at par years ago and employed the interest for living expenses can now be liquidated for say £6000. Therefore the owners of these funds have been living on the principal to the extent of £4000. It is idle to attempt to combat this statement by arguing that the price of Consols may again rise. They may either rise or continue to fall. The only measure of the value of an estate is what it will bring in liquidation at a given time and where an estate consists of quoted securities, we know exactly what it will bring.

What has happened to the owners of Consols has been happening to many owners of high-grade securities throughout the world, and while the process has been going on there has never been a time when money could not have found employment at six or seven per cent—sometimes more—without unduly sacrificing the factor of safety. To those who are satisfied to let their money work for half the wages it should command we have nothing to say, but to those who are not, the precept may be reiterated that the greatest essential of satisfactory investment is *constant change.*

Whether we should buy securities of early or distant maturities must be determined by conditions, or more properly speaking, by *prospects.* Any attempt to apply rigid rules which will fit all circumstances will prove abortive.

The holder of corporate stocks is vitally interested in the terms of a bond flotation. A company in need of funds may offer bonds at a discount because certain authorized or "open" issues are available for flotation, on which a certain rate of interest has been specified, or it may be that the directors do not like to expose the weakness of the financial standing by paying a high rate of interest. The casual observer is more likely to notice a high rate of interest than the terms of discount.

If a four per cent ten year bond is sold at 80 the corporation must, if good practice is observed, set aside as a reserve fund two per cent each year, in addition to the payment of interest, so that, when the date of maturity arrives, the amount sacrificed by discounting the bonds will be fully amortized and available for liquidation of principal. It may at first glance appear that the funds cost no more than if the bonds had been floated at 100 and five per cent interest paid. But when we observe that the *proceeds* of the discount sale are not equal to the face of the bonds, the incorrectness of this view is at once apparent. A corporation which floats $10,000,000 of four per cent ten year bonds at 80 receives only $8,000,000 in cash. If $10,000,000 of five per cent bonds are sold at par, the full face value is realized in cash or its equivalent. Aside from any question of interest rates, the additional sum of $2,000,000 should, if advantageously administered, make a profit for the borrowers.

The marketing of bonds at unduly high rates of interest, or, what amounts to the same thing, at heavy discounts, is always prejudicial to the status of stocks and other junior securities. The sums required to pay the high interest charges, or diverted to the sinking fund, are of necessity subtracted from the profits which would otherwise be available for surplus, improvements or distribution. Stockholders should therefore carefully scrutinize the character of and reasons for all flotations which introduce fixed charges ahead of their own holdings.

Reverting to the much-mooted question of the expediency of buying long term or short term maturities, the answer may be summed up in a few words.

If conditions point to a period of active demand for capital, at high and rising rates of interest, early maturities are decidedly preferable. If the outlook is for a plentiful supply of funds at low rates distant maturities are the best. We may, in fact, reduce the whole proposition to a perfect syllogism, thus:

(A) When interest rates fall, prices of interest-bearing securities rise. (B) Interest rates will fall: (C) Prices of interest-bearing securities will rise. Or, (A) When interest rates rise prices of interest-bearing securities fall. (B) Interest rates will rise. (C) Prices of interest-bearing securities will fall.

CHAPTER XIV

EMPLOYMENT OF SECURITIES AS COLLATERAL

THERE is probably no phase of intelligent investment or of conservative and scientific speculation which is so imperfectly understood as the use of securities as collateral. The methods employed by thousands of shrewd and wealthy men to great advantage are a sealed book to the general run of small investors. If, perchance, a public owner of bonds or other high-grade securities figures out the possibility of increasing his income by hypothecating his holdings he is more likely to be discouraged than encouraged when he lays the proposition before his bankers or other advisors. In some cases those from whom he seeks advice are hampered by that ultra-conservatism which keeps the owner of funds on a dead level of four per cent, first mortgage mediocrity. In other cases they may decline the responsibility of offering decisive or confirmatory opinions, even if they are satisfied of the soundness of a client's judgment. In still other cases, they may possess a constitutional antipathy toward a too general education in the methods of usufruct which they themselves exercise profitably.

Let us experiment in a simple manner with the possibilities which are open to the owner of securities, assuming always that such possibilities are made use of with full regard for the reasonable conservation of the factor of safety.

Example 1. The owner of, say $10,000 worth of sound five per cent bonds wishes to increase his income somewhat without disposing of these bonds and without involving the whole of his principal. He takes the bonds to his banker as collateral and borrows $5000 at five per cent interest with which he purchases outright at $100 per share fifty shares of a preferred stock paying dividends of seven per cent per annum. His income on his original capital is now six per cent. Thus:

Original capital	$10,000
Interest on same at 5 per cent	500
Dividends on 50 shares 7 per cent stock	350
Total income	$850
Cost of $5000 loan at 5 per cent	250
Net income	$600

Example 2. Instead of paying for fifty shares of preferred stock in full, one hundred shares is purchased on a fifty per cent margin.

Original capital	$10,000
Interest on same at 5 per cent	500
Dividends on 100 shares 7 per cent stock	700
Total income	$1,200
Cost of $5000 loan at 5 per cent	250
Broker's interest charges ($5000 at 5 per cent)	250
Total charges	500
Net income	$700

or seven per cent on original capital. In this case the owner of bonds borrows $5000 or fifty per cent of the face value of his bonds and purchases $10,000 worth of preferred stock, upon which he also borrows fifty per cent of the face value. It is assumed that this last $5000 is borrowed in the orthodox way through the broker, but there is no reason why the entire transaction should not be effected through his own banker if that course is considered advisable. The principal advantage of following the latter plan is that the stock will be registered in his name and the dividends remitted to him direct by the corporation. In case the loan is made through the broker the stock is registered in the broker's name and the dividends, when received, are credited to the client's account.

If the owner of $10,000 worth of bonds wishes to effect the entire transaction through his own banker the process would be as follows:

The $10,000 of bonds are first taken to the bank and a loan of $5000 arranged for. The borrower now remits this amount to his broker with instructions to buy one hundred shares of stock at par (or whatever the price may be). This operation being effected the buyer now arranges with his own banker to borrow an additional $5000 with the one hundred shares of preferred stock as collateral. This being done, he notifies his banker, who pays the amount of the new loan of $5000 to the broker, requesting that the stock be transferred to the name of his client and delivered to the banker. Or, the broker may ship the one hundred shares of stock, on which he has already been paid fifty per cent, or $5000, to the banker, with a draft for the additional $5000 attached.

When the operation described has been completed, the original owner of $10,000 of five per cent bonds now owns in his own name property with a market or face value of $20,000 against which he has borrowed $10,000. His income, which was originally $500, has been increased to $700, because he has borrowed money at five per cent and reinvested at seven per cent. His income has been increased exactly forty per cent with no expense to him, except a negligible amount of commission.

There is nothing extraordinary or extra-hazardous about the form of investment described. Money has simply been borrowed in order to invest it at a higher rate. That is an everyday commercial transaction and is never subjected to criticism except when applied to the security markets. The danger, and the only danger, lies in the possibility of selecting for purchase unsafe securities, but the equivalent of that danger exists in every enterprise in one form or another. If proper care is exercised in the selection of the securities to be purchased there is no reason why the result should not be satisfactory. The banker or adviser has no more reason to shake his head or predict disaster in such undertakings than if the loan was effected for the purpose of making a corresponding profit in the grocery business. In a majority of cases the risk would really be less than in an ordinary commercial venture, as the borrowed funds are placed in an established business which is already a demonstrated success. Going into debt intelligently is the foundation of many, if not most, fortunes.

It is very easy, however, to overstep the boundary lines of safety in conducting such operations. When the investor discovers that the more money he can borrow at a low rate, the greater his return will be, he will frequently borrow so heavily that an unforeseen flurry in prices will embarrass him. To make this clear, leave the factor of collateral out of sight for a moment and assume that a certain individual is possessed of cash resources amounting to, say, $2000, which he wishes to invest for a high return. He buys a four per cent stock at $50 per share to show a return of 8 per cent and deposits his $2000 as a $20 per share, or 40 per cent, margin, paying the broker 6 per cent interest on the unpaid balance. If the casual observer is asked what the buyer gains by this transaction he will usually reply promptly that he gains the difference between the return of eight per cent and the six per cent interest paid, or two per cent. But not so. The return is eleven per cent. Thus:

Example 3:

Cost of 100 shares at 50	$5,000
Cash deposit 20 points, or 40 per cent	2,000
Interest on unpaid balance (3000 at 6 per cent)	180
Dividends received	400
Net income	220

or eleven per cent on $2000 actually employed.

If the right time and the right securities are selected, there would be nothing exceedingly dangerous about such a purchase as this, although obviously not so conservative as in the two former examples. But carry the process further and we soon begin to get into the danger zone. Assume that a 20 per cent margin is employed instead of a forty per cent margin.

Example 4:

Cost of 200 shares at 50	$10,000
Cash deposit 10 points or 20 per cent	2,000
Interest on unpaid balance $8,000 at 6 per cent)	480
Dividends received	800
Net income	$320

or sixteen per cent on $2000 actually employed.

A decline of twenty points in a sound stock or second-grade bond which shows a return as high as eight per cent on investment is extremely unlikely. For that matter, so is a decline of even ten points in such a stock unlikely but not impossible. Wholly artificial conditions, having no bearing on the intrinsic value or the maintenance of interest or dividends, might arise to depress the price as much as ten points temporarily. Furthermore, if a decline of even five points should occur the broker would probably call for an additional deposit sufficient to keep the original ten point margin intact.

In the above illustrations, speculation, in the ordinary acceptance of the term, does not enter into the calculations at all, as we have looked only to the rate of interest or dividend return, with no reference to the possibility or probability of profits being secured through a rise in the quoted values of the securities purchased. In this connection, however, it may be pointed out that just *because* such a high rate of return is shown there is good reason for expecting an advance. When reasonably safe securities sell on such a basis the situation is artificial and the conditions which produce it are of a more or less temporary nature.

Perhaps some members of the ultra-conservative party will contend that it is never possible to buy really good securities at prices which will show returns on investment of seven or eight per cent. But we may produce literally hundreds of precedents to disprove their views. In all our panic years such opportunities have appeared and sometimes they have appeared in years when no panicky conditions obtained. Stocks and second-grade bonds which have paid interest or dividends without a break for many years and which have always shown a comfortable surplus or margin of safety over and above the sums necessary to pay their regular rates have frequently sold, not only on a seven or eight per cent basis, but on a ten per cent or even on a higher basis. Prices are carried down, not because of anything wrong with the securities themselves, but because over-extended holders were compelled to liquidate in poor markets or because of general apprehension or fright. A great demand for capital at high rates of interest will automatically depress prices at times, as capital will desert securities showing an ordinarily good return in order to seek employment elsewhere. The demands for capital due to the abnormal conditions created by the European war caused a severe decline in even the gilt-edged bonds, but as soon as it became evident that these abnormal conditions were drawing to a close, funds immediately began to return to the depressed issues, and, of course, prices began to rise. One great mistake made by most investors or speculators in all such periods is that they are inclined to await actual developments before making their purchases. This plan can never be followed in a profitable way. If a man decides to his own satisfaction that the conditions which have brought about the depression will soon disappear, he should back his judgment by immediate purchases *in anticipation* of the favorable developments. Thousands of courageous people will buy while the timid are looking on, and their aggregate purchases will advance prices before the actual developments occur. There is an old proverb which the disciples of a Fabian policy may well reflect upon. It reads "He who waits until all things are proved will have experience only to reward his patience."

Whether or not it is advisable to follow the conventional method of borrowing through the broker, or to effect the loans through others, may depend upon several motives of expediency or individual desire. If stocks are registered in the broker's name, the dividends will, as we have seen, be remitted to him and credited to the customer's account. If registered in the buyer's name he will receive the dividend checks direct or, in the case of registered bonds, the periodical interest payments will be mailed to him by the corporation. He will also receive, without request, the annual and other reports as published and will vote his own proxies at annual or special meetings.

While the stereotyped method of borrowing through a broker leaves the security in the broker's name, it is usually possible to make arrangements otherwise. If the client wishes to do all his business with his broker and still have the securities in his own name, he may arrange to pay in full for such securities, have them properly registered to his account on the books of the corporation and then effect a loan with the broker by signing the certificates in blank or giving a blank power of attorney which will permit the broker to rehypothecate the stocks or bonds. It would be impossible for even the richest brokerage concern to loan heavily to its customers without re-borrowing. The possible risk or injury to the owner of the securities so loaned is, of course, measured by the reliability and integrity of the concern through which his transactions are effected.

As a matter of expediency, it is sometimes advisable for the owner of securities to effect loans himself, either with his banker or through outside money lenders. The brokerage house will usually maintain a fixed rate of interest from year to year, so far as the small accounts are concerned, quite regardless of the fluctuating conditions of the money market. Sometimes this is to the advantage of the borrower, as his rate of interest will not be increased in the occasional money flurries or periods of temporary stringency. But at other times, when funds are in plentiful supply at low rates, he may be able to borrow from outside sources for six months, nine months or a year at three or four per cent instead of paying the five or six per cent demanded by the broker.

It is advisable, therefore, for those who carry a considerable amount of securities to closely watch the quoted rates for time money and be governed accordingly.

Another point of expediency is found in the fact that by effecting time loans through his own banker, the owner of securities may be more liberally treated in case of acute temporary disturbances affecting the level of security prices. His banker may be more fully acquainted with the individual resources or credit of the security owner and consequently will not follow the rigid rules adopted by all brokerage concerns.

One drawback connected with the borrowing from outside sources is that this can be effected in ordinary cases only by means of time loans, and if the owner of securities desires to dispose of his holdings at some intermediate date he may be held for the interest until his note matures. This may be avoided by a special agreement that the note shall be payable "on or before" a certain date. Loans made through the broker in the customary way may be terminated at any time, and the entire account closed at the will of the operator. It will be seen, therefore, that the policy of borrowing from local bankers or outsiders should be determined to some extent by the intentions of the security owner as to maintaining his holdings indefinitely or disposing of them whenever favorable opportunities present themselves. A note payable "on demand" is to all intents and purposes the equivalent of "call" money and, in normal times, the rate of interest should be somewhat lower than for time loans.

Whether loans should be made for long or short periods is dependent upon the future outlook for money rates. If, in the judgment of the borrower, conditions point to an increased supply of money and credits, and falling interest rates, the shorter the time the better. If, on the other hand, an increased demand for money and credits is expected, it is advisable to arrange for longer maturities. In the latter case, if interest rates should advance, the borrower will seldom encounter any difficulty in terminating his loan before maturity, as the banker can employ the funds so released to better advantage elsewhere.

Those who wish to avoid all annoyance and personal effort in connection with transactions or who carry only small accounts, will do better to leave the whole matter in the hands of the broker, assuming always that a reliable broker has been selected. Those who borrow more heavily and who are willing to devote a little time and care to their investments in order to secure the maximum results, will do well to pay close attention to changes in money conditions and prospects and to keep in touch with one or more local or outside bankers or money brokers.

CHAPTER XV

CONCLUSION

IN looking over what has been written, the thought arises that the reader may find what appears to be an undue amount of dissent and protest, especially as regards theories which have long been generally accepted. To strike at the sanctity of first mortgages; to deny or even modify the theory that safety of principal must decrease in inverse ratio to increase in income; to suggest the employment of securities as collateral; to tolerate the use of the pernicious words "speculate" or "margin"; to confidently proclaim that the prevalent and almost unanimous view regarding the decadence of railroad property is a popular delusion—these and other apostasies must inevitably subject their exponent to criticism.

There has, however, been no strained effort at dissent or non-compliance. The statements made are the crystallized results of many years of close observation, active experience and reflection. In arriving at the conclusions offered, general views, no matter how widely accepted, have not been considered a sufficient basis for personal decisions.

No credit is taken for any great amount of perspicacity in formulating the opinions reached. One of our greatest analysts has said, "In one case out of the hundred a point is excessively discussed because it is obscure. In the ninety-nine remaining cases it is obscure because excessively discussed." And, again, "The best mode of investigation is to forget that any previous investigation has been attempted." The principles of investment, the rules, laws, and theories on which the science is based, have been obscure because excessively discussed and few independent and unbiased investigations have been undertaken. The result has been a mere parroting of a great deal of perverted logic and specious nonsense.

It is the writer's desire, above all things, to disclaim any intent to submerge the lessons of precedent, experience, and reflection in order to open the door to extravagance and fanciful speculation. The purpose in producing the work has been a serious one, and sincere regard for the influence it may have on the minds, actions, or fortunes of those who read it has at all times been uppermost in the mind of the inditer. Any effort to employ the word "speculate" in a constructive sense is sure to meet with disapproval, yet a very large majority of the purchases made by either large or small investors are made with the hope or intention of securing a profit through accretion in principal in addition to the income return. Statements to the contrary are the result of misunderstanding or hypocrisy. In this connection a few words on the subject of speculation, in its truest and broadest sense, may be acceptable.

There are two distinct major forms of what is colloquially known as speculation. They are as far apart in method and consequence as are the poles. One form is based upon sound principles and is usually successful. The other is inherently false and can never succeed in the long run. To the lay mind the two methods have become confused and the reasonable process is unjustly stigmatized.

A man may buy the securities of an established enterprise on the same basis as he would buy a partnership in any line of business, exercising the same care and thought in one case as in the other. He may examine the history and financial status of the concern, form a decision as to its future prospects, and decide to become a partner in the business through the purchase of stocks, or a secured creditor through the purchase of bonds. This class of buyers consists mostly of thoughtful men, and their chief concern is to "buy cheap," confident that if prices are below values, the hiation must inevitably be reconciled in the fulness of time. These are the real speculators. Whether they buy outright or on a margin does not alter the definition.

Others, and unfortunately a great majority, of those ordinarily called speculators, pay little or no attention to values. They do not know how to interpret the fiscal reports of a corporation. They waste their time and energy hanging over tickers or discussing "the market" with people no more competent than themselves. They depend upon superficial appearances, charts, tips, etc., and invariably they hope and believe that they will secure a huge return on their capital in a short time. Because of the activity, excitement, rumors and advertising which are always present when prices are high, most of the buying done by these mistaken people is at the approximate top of a movement. They are not speculating at all; they are merely gambling, and they are gambling with the same chances of success as would be found at a race-course or at the roulette table. To see these deluded men, otherwise possessed of intelligence and judgment, rushing about the brokerage offices, opening and closing transactions every day or two, multiplying commission charges, feverishly pawing over the daily grist of inconsequential "gossip," and attempting to "read the tape," would be amusing if it were not pathetic.

In the preceding chapter an illustration was given of a hypothetical purchase of a dividend-paying preferred stock at a low price on a ten point or twenty per cent margin. This method was characterized as being too hazardous. But it may be confidently asserted that if so-called "speculation" had always been confined to the process as outlined, there would be no considerable aggregate of loss. Such methods, which cannot be recommended as safe or desirable, would, in the estimation of the average speculator, be looked upon as ultra-conservative and calculated seriously to abridge the opportunities to make money. As a matter of fact, they would, if employed, greatly *increase* the probability of a successful outcome.

So much for the two practices commonly called speculation. Reverting to the question of investment, the opinion is repeated that by exercising a reasonable degree of study and care the owner of surplus funds can, quite aside from any expectation of increase in principal, so place his funds as to secure a materially higher return than the nestors of the conservative school will ever be willing to designate as "safe." It goes without saying that unless this increased income could be secured with due conservation of the factor of safety it would be idle, or worse than idle, to advocate any such performance. While the positive view offered is based primarily upon theory and statistical evidence, it is pertinent to add that the writer's judgment has been amply confirmed by personal knowledge and experience. The contention that it can be done is supplemented by the more convincing statement that it has been done, not for a year or two, but over long periods of years by men not possessed of any extraordinary amount of acumen, inside information, or other advantages.

Those to whom investors are wont to turn for advice, particularly bankers or bond dealers, will no doubt condemn the view offered above on the ground that most men are not qualified or equipped to pass competent judgment on the merits of securities. This is merely to beg the question. If a man decides that he cannot devote a reasonable amount of study to the subject or that he has not the capacity to understand ordinary business conditions when they are laid before him, he would better make no attempt to increase either his income or his principal in the security markets. Advice which can be given him by others cannot be considered of much value unless he *understands* it and confirms by his own judgment every point to which his attention has been directed.

But there are a great many men who fail to make the best use of their funds through a slavish acceptance of time-honored fallacies rather than through any lack of ability. They imagine mystery or danger or evil where none exists and seek security in a policy of inaction. If they will do a little personal probing and independent thinking they will soon acquire a more rational and profitable perspective.

No pretense has been made in the foregoing chapters of this work to cover any ground except that suggested by the title, *i.e.*, the simple principles of investment. But those who are sufficiently interested to assimilate these elementary facts will find themselves possessed of a good working basis, and will quite naturally extend their field of study and research. In this connection a few comments are offered.

Without presuming to measure the mental endowments of others by his own limitations, the writer suggests that the average investigator will get the best results by taking his intellectual medicine in homeopathic doses. It is better to confine attention to a half dozen good works with the determination never to pass over a point without understanding it, than to indulge in discursive reading of a hundred volumes. Diluted understanding is never satisfactory.

If the student is not already versed in the basic principles of political economy, his first step should be to secure and carefully read a clear and simple work on the subject. Such books may be found in any book store or library. The unfortunate nomenclature applied to this fundamental branch of knowledge has resulted in frightening many people away from an examination of its principles. If it had been called "The Science of

Wealth," which is exactly what it is, the study would have been much more popular.

The reason for recommending a preliminary study of the principles of political economy may be stated in a few words. The greatest of all influences affecting security values and prices is the rental demanded for capital. As has been explained in another part of this work, security prices will rise when interest rates are low, and fall when interest rates are high, as surely as water seeks its own level. And the security price movements do not await the actual appearance of higher or lower interest rates. They *precede* them. To get the best results, therefore, we must know what to *expect*, and a knowledge of political economy will greatly aid in arriving at correct calculations. Those possessed of a fair knowledge of the rationale of economic laws thoroughly understand that the value of money is measurable only by its power in exchange for other things. When the cost of commodities rises so also do the wages of labor. Everything that money can be exchanged for has been advancing for many years, which is tantamount to saying that the purchasing power of the dollar has been shrinking. The effects of this phenomenon began to assert themselves in visible form more than twenty years ago, and since that time the rise has been steady and gradual, excluding such abnormal price movements as that occasioned by the European war. The basic cause for this advancing price trend has been attributed to various influences, a majority of competent observers adhering to the theory that the world's increasing gold supply has been the responsible factor. But whatever the cause, the results have been inexorable. It is quite easily seen that if the trend of commodity and labor prices is upward, the price demanded for the use of money should also rise. If, to draw a simple illustration, the things money will buy rise in price at the rate of two per cent a year, the man who loans money at four per cent interest will have his principal returned to him at maturity with its purchasing power so reduced that he has, in reality, had no more than two per cent interest.

It follows, therefore, that interest rates must be advanced enough to overcome this drawback. As a matter of fact, that is exactly what has occurred, but a great many people have failed to see it and have gone on holding low-yield securities. Many owners of British Consols and other issues of like character have had no occasion to question the *character* of their property, but they have had ample reason to demand a higher rate than two and a half or three per cent for funds. The low rates were fair enough at the time they were established. The huge bond issues uttered by nations during the European war have all been at a rate of interest which is liberal, considering the character of security, exemption privileges and maturity dates. Such bonds are not subject to criticism now, but their status ten or twenty years hence, as well as the status of all other securities bearing a fixed rate of income, will be determined by economic changes. If commodity prices continue to rise, so will interest rates, which means that bond prices will fall. If, on the other hand, commodity prices should fall, bond prices will rise. Of one thing we may be certain, which is that there will be several wide fluctuations in the price levels of bonds and other securities during the period covered by the work of reconstruction and the succeeding period of acute depression. It behooves all forehanded men to devote some thought to the working out of these problems and the consequent effects on their individual fortunes.

A few books and other publications which should be found helpful to those who wish to amplify their knowledge of the subject are mentioned below.

"Elementary Principles of Political Economy." By Professor Irving Fisher, of Yale.

This work sets forth the most important principles of the Science of Wealth in a clear and comprehensive manner.

"The Increasing Gold Supply." A symposium. Papers by Byron W. Holt, Maurice L. Muhleman, Dr. A. Selwyn-Brown, W. G. Nicholas, Dr. H. Pease Norton, Charles A. Conant, Alonzo E. Cottier, and Thomas Gibson.

A perusal of this little work should result in a clear understanding of this important factor.

"The Earning Power of Railroads." By Floyd W. Mundy.

This book, which is published annually, contains valuable suggestions as to the interpretation of statistical reports, together with comparative tables of earnings, maintenance expenses, fixed charges, etc.

"The Mines Handbook." By Walter Harvey Weed, E.M.

This excellent work contains all the salient data regarding the copper, gold, silver, lead, and other mines of the world. Also a glossary of mining and mineralogical terms.

"Holders of Railway Bonds and Notes." By Louis Heft.

In this work the writer, who is a member of the New York bar, has set forth in non-technical terms the legal status and the rights and remedies of security owners of all classes.

"Money and Investments." By Montgomery Rollins.

This volume has especial value as a financial dictionary or encyclopedia. It contains full explanations of all technical terms, the status of all classes of bonds, notes, etc.

The Manuals.

Every investor should possess a good manual covering railroad and industrial securities of all classes. The leading manuals are "Moody's Manual," "Poor's Manual," and "Moody's Analyses."

Current Publications.

The student will find it advisable to subscribe to one or more financial magazines, of which there are a number. His course of reading should also include important detached articles on the subject which appear in trade or other publications from time to time. In his search for such articles he will be greatly aided by perusing the BUSINESS DIGEST section of the BUSINESS DIGEST AND INVESTMENT WEEKLY, in which is set forth each week a brief digest of all leading articles, together with the names, dates, addresses, and prices of the publications in which the full text of each article appears.

Current Statistics.

The Standard Statistics Company of New York publishes in card form the individual status and condensed statistics of all leading corporations, as well as the press comments, statements of officials, etc. The matter is kept up to date by the issue of new cards from time to time. For a small outlay the owner of securities may keep posted on any or all issues in which he is interested.

There are, of course, many other books and publications of value but those suggested cover the preliminary necessities pretty thoroughly, or will at least form a nucleus for a financial library.

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