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CORPORATION FINANCE

PART I

CAPITALIZATION

PART II

DISTRIBUTING SECURITIES
REORGANIZATIONS

BY

HASTINGS LYON

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HOUGHTON MIFFLIN COMPANY

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PREFACE

SINCE the publication of *Capitalization* in 1912 suggestions have been made from time to time that a discussion in the same general manner of other topics of corporation finance would be helpful to students of the subject. Messrs. Houghton Mifflin Company agreed to an extension of the work that would amount to another volume, and to a change of the title to one sufficiently inclusive to cover the new matter. So the title *Corporation Finance* has been adopted for the entire work and the new chapters are being published as Part II.

The new volume deals more especially with two topics, the distribution of corporate securities and the financial side of corporate reorganizations. It also presents some discussion of the disposition made of corporate income. Though both law and accounting must be referred to in explaining financial matters, I hold an opinion that corporation finance has a distinct channel, and that it is the duty of any one undertaking a presentation of any aspect of the subject to steer a course between the legal and the accounting sides of corporate business.

Since *Capitalization* was written, I have changed my mind about the special desirability of using as illustrations existing securities and corporations, and in this second volume have confined the examples mostly to hypothetical cases. The passage of a few years, with their varying economic, social, and personal winds, makes the facts presented in an old corporation manual resemble the snows of yesterday.

The book has been written out of the experience of a number of years in association with banking houses engaged in the business of buying and selling corporate securities and as a lawyer occupied in working out the financial arrangements of corporations. It assumed form in the course of presenting the subject in courses of college and graduate students.

I hope the book will continue to be used by students of the subject, not only in the schools, but especially by the many young men engaged in financial work who find difficulty in getting help to understand the complex matter of their profession. It will be useful, also, I believe, to the large number of people who invest in corporation securities, either on their own account or for financial institutions. The number of investors who want a thorough comprehension of what they are

doing increases rapidly. It may in some cases possibly help a lawyer to get a better understanding of the needs of his client. And all citizens who want to base on knowledge their opinion of the proper attitude of the Government toward corporations will find in the book a statement of the fundamental principles of corporation financing.

In attempting a work of use to so wide a range of people, I have necessarily had to make some parts of it rather elementary for the more informed, and some parts somewhat difficult for those entirely unfamiliar with securities. It omits many things that might properly come within its scope.

I am glad to express my appreciation of the kindness of Mr. John Tatlock, president of the Westchester Avenue Bank, in reading much of the manuscript. My partner in the practice of the law, Mr. William Lilly, helped especially with the discussion of Corporate Reorganizations. For the first volume Mr. Carl Owen, a member of the law firm of Hornblower, Miller & Potter, and Mr. Lawrence Chamberlain, of the banking house of Hemphill, White & Chamberlain, read a considerable part of the manuscript.

HASTINGS LYON

37 WALL STREET, NEW YORK CITY
August, 1916

CORPORATION FINANCE

PART I

CAPITALIZATION

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CAPITALIZATION

A BOOK ON CORPORATION FINANCE

I

THE INSTRUMENTS OF CORPORATION FINANCE

If our inquiry into corporation finance can follow the tree trunk and a few main branches, we shall probably gain a more thorough understanding of the financial structure of corporations than we can get by looking from the outside at the obvious foliage of multitudinous security forms and financial plans. Books on the subject have mostly confined themselves to answering the question "What?" and have largely ignored the question "Why?" So far as possible we shall find the determining causes first, and afterwards consider the results they work out. We shall confine our inquiry to the capitalization of corporations, and not enter on many matters that the general subject of corporation finance might properly lead into.

On pressing the inquiry, we are able to find several main formative influences which

explain the various developments of corporate capitalization. The desire to apportion the elements of risk, income, and control involved in an enterprise largely accounts for the numerous forms of securities. A knowledge of this line of inquiry makes the shortest way to an understanding of the many kinds of stocks, bonds, and other financial paper of corporations. The present and prospective earning power of a corporation, with the desire of those in control of its affairs to make as much as they feel they safely can on their own capital invested, gives another principal influence determining the financial plan. It partly decides the kinds of securities the corporation finances on, and more especially their relative amounts. We shall discuss this relation of capitalization and earnings under the head of "Trading on the Equity." Another line of inquiry follows the relation of assets to capitalization; the extent, that is, to which they determine the form and amount of security issues. We shall take this up under the head of "Watered Stock."

Next after these three forces existing in every case, we find the desire to extend the enterprise of a corporation affecting the financial plan and leading to a number of new kinds of securities. A consideration of "Financing an Expansion" will look into the

working of this influence. In a discussion of "Amortization" we shall see in what ways a desire to pay off long-term indebtedness may shape corporation bond-issues. A number of influences determining details and affecting larger matters naturally group under the captions of "Form" and "The Market and Price." On the subject of "Capitalization and the State" we shall raise the questions involved in government regulation of capitalization and earnings, and describe what the public service commissions of the three states which have carried this matter farthest have done.

Corporation finance has developed through the promoters, organizers, or managers of corporations bargaining with capital-owning members of the community. Usually both these parties deal through a third party, the investment banker. Though not an agent in any legal sense, the banker nevertheless does act as an intermediary, and frequently occupies, with considerable dignity, the rather difficult position of having an interest in both the other parties to the transaction.

As a matter of fact, the banker, rather than really representing either party, almost occupies the position of an umpire, and decides on the fair bargain all round. Of course he charges as much as he can for his services and

any risks he takes. In many transactions his entire concern lies with the investor, whom he calls his client; and it always should lie most in that direction. Whatever his interests, the banker, assisted by the advice of his lawyers, has, without doubt, exercised the chief directive influence in the development of corporation finance.

Since our subject has grown, and is growing, in this way, we can get much help in understanding it by examining this bargaining among the parties, and tracing through the various transactions.

From a financial viewpoint the corporate form of conducting business presents one most significant feature, — the opportunity it affords for dividing and recombining the incidents of ownership in varying proportions. By "incidents of ownership" we mean management, income, and risk.

Personal owners can to a limited extent separate the incidents of ownership. A lease will put management entirely on one side, together with a part of income and a part of risk, and set the rest of income and risk on the other side. In the same manner a mortgage will effect the division, but place the management entirely on the opposite side, with part of the income and part of the risk, and leave together the rest of income and risk.

If a man owns property and leases it, he hands management entirely to others. By mortgaging the property, he retains management entirely to himself. Though a partnership may further divide the ownership after the incidents have been split, it has no means to distribute the incidents themselves in any other manner or proportions. And a trustee holding formal title does not effect any other distribution.

The situation will become somewhat plainer by putting it more concretely. John Smith owns a farm worth $5000. He has all the incidents of ownership. Management and risk rest entirely with him; income goes entirely to him. In the course of time he feels unable to carry all the burden of management. Maybe he would like to keep part of the management, exercise some control, and continue a fairly large share of the risk. By hiring a man to run the farm, he could relinquish administration and retain control, but he would continue all the risk. He would succeed in dividing management into administration and control, but he would not succeed in dividing risk at all. He is unwilling to continue all the risk unless he also continues the entire management, and this is just what he is seeking to avoid.

He can let the farm on shares; that is, the

rental is not to be fixed, but to be a certain proportion of the income. But this would be to relinquish management entirely, yet retain the full nature of his original risk. He has, so to speak, split risk perpendicularly but not horizontally. He can lease the farm for a fixed rental. Through this course he would part with all the management and decrease his risk and income. By selling the farm and taking a mortgage back, he would likewise part with the entire management and further decrease his risk and income. If, instead of a first, he takes a second mortgage, he will not diminish risk and income so much.

Personal ownership affords no course between, on the one hand, an absolute retention of all management, or at least control, in the case of a possible hiring of administration, with the retention of a large share of the risk and income, and, on the other hand, an absolute parting from management, with a consequent parting from a large share of income and risk. Further, the limited number of possible divisions afforded of the incidents of ownership forces the apportioning of income and risk along fairly rigid lines.

Through a peculiar personification of ownership and enterprise, the corporation makes possible a parceling-out of the incidents of ownership in many combinations, an allot-

ment of management, risk, and income in varying proportions. The line of apportionment no longer remains rigid, but becomes very flexible.

Actual practice has already carried far the division, sub-division, and rearrangement. The corporate form immediately divides, or marks the line of division of management, into administration and control. Shareholders possess control, but through directors delegate administration to officers. Varying rights given special classes of stock make a widely varying apportionment of income, control, and risk. Common shareholders accept a maximum of risk in expectation of a maximum of income. They may share the incident of control equally or in varying proportions with other classes of stock. Sharing control in varying proportion does not mean here through unequal divisions in the total *amounts* of common and other classes of stock, but that each share of one class represents an essentially different amount of control from each share of the other.

If two classes of stock enjoy exactly equal rights, except that one has a preference as to income and perhaps assets, they do not divide control, but risk, and the combination of control plus risk in one, as compared with the combination of control plus risk in the other,

makes the ownership represented by one class entirely different from the ownership represented by the other. But the rights may differ, aside from the preference of one as to income and assets or either.

We may speak of these divisions and combinations of income, control, and risk, creating different *kinds* of ownership, as horizontal divisions. With that idea in mind we may make a diagram like this representing a simple case: —

Capitalization, $3,000,000

$1,000,000 common stock	Greatest risk: half present control; no limitation of income.
$1,000,000 preferred stock	Less risk: half present control; limited income.
$1,000,000 first mortgage bonds	Least risk: little or no present control, but contingent complete control; limited income.

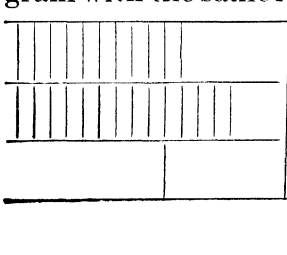
Now, if we make some further stipulations about this corporation, as that its net earnings are $200,000, that the preferred stock is 6 per cent non-cumulative, and that the bonds are 5 per cent, without any rights of control contracted for except the right of foreclosure on default of payment of interest or principal, we can make the diagram a little more definite: —

Capitalization, $3,000,000

$1,000,000 common stock	Great risk: 50 per cent of actual present control; 45 per cent of present income which may increase in amount.
$1,000,000 preferred stock 6 per cent non-cumulative	Much less risk: 50 per cent of present control; 30 per cent of present income, which cannot increase in amount.
$1,000,000 5 per cent first mortgage bonds	Least risk: no actual present but full contingent control: 25 per cent of income which cannot increase in amount.

We have not yet mentioned another division of ownership, that represented by the *number* of shares of stock or the *number* of bonds. Though in practice corporation financing carries this division much further than private financing, the division itself is not peculiar to the corporate form. It appears in the partnership as complete in its nature as in a corporation, and makes a division into *amount* of ownership rather than *kind*, — into *quantity* rather than *quality*. To carry out the metaphor of a horizontal division as indicating a division into kinds of ownership, we may call this division indicating quantity of ownership a perpendicular division.

Further, to carry the metaphor into a diagram with the same facts as before, we have: —



Common stock, par, $100.
Ownership divided into 10,000 parts.

Preferred stock, par, $100.
Ownership divided into 10,000 parts.

Bonds, par, $1000.
Ownership divided into 1000 parts.

Now, these two kinds of divisions of ownership accomplish two very different results. The perpendicular division of amounts of ownership makes possible the fitting of every man's pocket-book or financial ability. As already stated, however, this is not peculiar to the corporation. A partnership can accomplish it, and to a limited extent in practice has accomplished it. One of three or more partners may have one third or one fourth or any other fractional amount of the total ownership. Nothing in the nature of a partnership prevents this from being carried very far, possibly even so far as the quantity divisions of ownership in the United States Steel Corporation or the Pennsylvania Railroad, whose security-holders number tens of thousands.

The horizontal division into *kinds* of ownership makes possible a more difficult fitting than fitting a man's pocket-book. It makes possible the fitting of his type or state of mind. One man may be more or less willing to take a chance than another. The same man may be more willing at one time than another. He may be unwilling to take any risk whatever without having some control. We saw by the example of the man owning a $5000 farm how difficult it might be, under personal ownership even in a very simple case, to meet a man's state of mind regarding

what he wants of the incidents of control, risk, and income.

We cannot consider corporate financing apart from ownership, nor ownership apart from owners. Ownership and owners enter into the consideration as necessarily as the various gases enter into the composition of water. Personal ownership has not developed the ability to fit types and states of mind closely. The fact that corporate ownership has, accounts for a great part, perhaps for the greatest part, of the success of the corporate form of enterprise.

A corporation's stock regularly carries the largest share of actual present control and also regularly the largest share of risk. Organizers of a corporation may contract out to holders of other classes of securities some of the control exercised by the stock, and to that extent place control with the other class of securities. For example, a corporate agreement may stipulate that the corporation shall not extend its plant until earnings equal at least twice the interest on its first mortgage bonds. Such a stipulation cuts off a very material power, or part of control, from the stock and places it with the bonds. If made at the time of organization the stock never possesses the power. But the stock may possess the power

at the time of organization and later part with it for the sake of gaining some other advantage. The usual gain in parting with an advantage of this kind already possessed is the securing of additional capital in the enterprise, which will not come in except on this stipulation, or because of it will come in on sufficiently better terms than otherwise.

Though regularly carrying the largest share of actual present control, the stock may itself divide into two or more classes having obviously divergent interests, with the result that each class will exercise for different purposes the amount of control it possesses. If there is common stock and preferred stock with a limited dividend, the common shareholders may throw their influence in favor of a more hazardous conduct of the enterprise with an expectation of greater profit accruing to them. Since the preferred shareholders, however, do not get income beyond the limited dividends, if the corporation pays these limited dividends to their full amount, the preferred shareholders will throw their influence in favor of the safer conduct of business against the hazards the common shareholders would gladly undertake for the hope of greater profits.

Interests of both classes of shareholders might coincide. If the corporation should not

earn enough to pay the full dividends the preferred stock is entitled to, the preferred shareholders might desire the more hazardous conduct of the business as eagerly as the common shareholders. If the amount of preferred and common were the same, and each had the same voting power, each class would enjoy control equally. In practice this might not lead to a dead-lock in policy, even though the interests of the two classes were diverse: one shareholder owning a large amount of common and a small amount of preferred might vote his preferred to favor his common.

If the amount of common were twice as great as the amount of preferred, and a share of each class had the same voting rights, the quality of control would in a way differ just as truly as if the amounts of each class were equal but a greater voting power were given the common than the preferred. In either case the common shareholder in a clash of interests would be more likely to have the corporation's policy incline to his advantage. We shall discuss this more fully later.

A corporation having only one class of stock outstanding, and no other securities, offers, of course, the simplest type of stock. Such a security carries all the control, all the income, and all the risk. It effects only a vertical division of ownership, like the division of a part-

nership. An enterprise financed entirely with one class of stock gains, of course, the regular corporate advantages, — an easy separation of administration and control, an easy vertical division into a large number of shares that makes a market possible, and limited liability. Such financing does not take advantage of the appeal to different types of mind. It is the proper form, however, if a satisfactory division of income, management, and risk cannot be made. A mining corporation especially cannot well divide the peculiar hazards of the enterprise. Since any class of mining securities must retain so much risk, investors will not sacrifice anything of income or control. A satisfactory adjustment cannot be made. So it naturally follows that nearly all mining corporations, including oil companies, have only one class of stock and no other securities. If they do have any preferred stock or bonds, such issues are almost always of comparatively small amounts. Coal-mining companies have issued bonds to some extent. The business rests on a more assured basis than mining for metals.

Manufacturing companies frequently issue no securities but their common stock. Probably the general greater simplicity of our industrial corporation financing comes about from the fact that the enterprises they are

engaged in inherit directly old established kinds of business. Traditionally they cling more closely to the form of private enterprise. So far our financial ingenuity has directed itself for the most part to the comparatively new forms of business, — the railroads and other public-service corporations. With the coming of the big industrial combinations more complex forms of financing appear, and will probably make their way generally into industrial corporations. Even of our big industrial enterprises many are still largely family affairs, — such, for example, as the Arlington Mills manufacturing cotton and wool at Lawrence and Methuen, Massachusetts, which have their entire capitalization of $6,000,000 in common stock. The business may have been hazardous in the beginning and, like mining, not have offered the basis for more than one form of security, and subsequently may not have needed any other for its financing. The Mergenthaler Linotype Company has its entire capitalization of $12,786,700 in common stock on which it pays 15 per cent dividends.

Some very large concerns have no capitalization but their common stock. The Singer Sewing Machine Company has its entire capital in $60,000,000 common. The Pullman Company has no securities but its common

stock, amounting to $120,000,000. Though a holding company may have only common stock outstanding, that fact does not necessarily indicate simplicity, for the subsidiary companies may have complex capitalizations.

An issue of preferred stock at once creates two kinds of ownership, — one, that of the preferred shareholder, with the less risk and presumably a corresponding limitation of income; the other, that of the common shareholder, with the greater risk and no limitation of income but the earning power of the business. If a corporation has no securities but stock outstanding, obviously the preferred and the common share the entire ownership. In that case the common shareholder gets the advantage of trading on the equity, or taking a greater risk in expectation of a greater income, which we shall discuss later, without running the risk he would, if there were bondholders, of having the property taken entirely out of his control under adverse circumstances. To offset the advantage just mentioned, the holder of common stock must share immediate control with the preferred stockholder. Conversely, the preferred stockholder gets the advantage of less risk and the advantage of a large share of immediate control. Compared with a bondholder, he accepts the disadvantage of not

being able to get possession of the entire control for his own benefit in case his income is less than he anticipates.

Income on preferred stock is limited usually to some definite amount. Commonly this runs all the way from 4 per cent to 8 per cent. Commonly, too, this limited income offsets the lessened risk gained by the preference. Some large issues of preferred stocks showing varying dividend rates that are fixed are: Union Pacific Railroad, 4 per cent; Baltimore & Ohio Railroad, 4 per cent; Kansas City Southern Railway, 4 per cent; Southern Railway, 5 per cent; Interborough-Metropolitan Company, 5 per cent; St. Louis Southwestern Railway, 5 per cent; American Agricultural Chemical Company, 6 per cent; Boston & Maine Railroad, 6 per cent; United States Rubber Company, second preferred, 6 per cent; Central Leather Company, 7 per cent; Crucible Steel Company, 7 per cent; International Harvester Company, 7 per cent; United States Steel Corporation, 7 per cent; United States Rubber Company, 8 per cent.

Preferred stock may not reach its limit of income at the stated dividend rate, but its preference may end there. It may have the right, after the common receives a certain dividend, to share with the common in any further dividend disbursements. If it has this right

to further income, it adds the name of "participating" stock. For example, a holder of the preferred stock of the Chicago, Milwaukee & St. Paul Railway is entitled to 7 per cent before the company can pay anything on the common. After the company has also paid 7 per cent on the common, the preferred shareholder has a right to share equally with the common shareholder in any further distribution of dividends. If the company should pay the common shareholder 8 per cent, it would also have to pay the preferred shareholder 8 per cent.

It may be that whatever the company pays on the common it will have to pay that much extra on the preferred. That is the case of the Chicago & Alton Railroad, which has a comparatively small amount of preferred stock outstanding. On this stock the company must pay 4 per cent dividends before paying any dividends on the common; then, if it pays 1 per cent on the common, it must pay 5 per cent on the preferred. It did so pay extra dividends of 1 per cent, August, 1908; 4 per cent, August, 1909; 2 per cent, February 1910; August, 1910, none. The present Chicago & Alton Railroad issued the stock when the company in 1906 consolidated the Chicago & Alton Railway and the former Chicago & Alton Railroad, and wanted, by the use of

this security, to get in comparatively small amounts of the preferred and common stocks of the old railroad company then outstanding.

Other examples of *participating* stocks are: Buffalo, Rochester & Pittsburgh Railway Company, 6 per cent preferred; after 6 per cent is paid on both classes, both share equally. Wisconsin Central Railway, 4 per cent preferred; after 4 per cent is paid on both classes, both share equally. Minneapolis, St. Paul & Sault Ste. Marie Railway, 7 per cent preferred; after 7 per cent is paid on both classes, both share equally. Westinghouse Electric and Manufacturing Company, 7 per cent preferred; after 7 per cent is paid on both classes, both share equally. In the case of the Chicago Northwestern Railway 7 per cent preferred stock: after the common stock has received 7 per cent, the preferred is entitled to additional dividends up to 3 per cent more, then common is to receive a further 3 per cent. Under this arrangement the preferred is receiving 8 per cent and the common 7 per cent. Unless there are some further restrictions, this seems a very honest course, as the common stock amounts to nearly six times the preferred, and its holders would naturally rather have a surplus accumulate till the full 3 per cent extra could be paid on both preferred and common stocks. The

right to further dividends may not amount to full participation, but only to receive an additional sum, as in the case of the Pittsburgh, Cincinnati, Chicago & St. Louis Railway 4 per cent preferred stock, carrying the right, after 3 per cent is paid on common, to an extra 1 per cent. The company is now paying 5 per cent on its preferred and 4 per cent on its common stock. Allis Chalmers Company preferred is entitled to 7 per cent, and, after 7 per cent is paid on the common, the preferred is entitled to 1 per cent extra.

Income from preferred stock may vary in another way through a right of conversion into common stock. If a preferred stock is *convertible*, its holder may under certain conditions exchange it for common stock. This is ordinarily called a "privilege" of conversion. Since it is stipulated for and cannot be taken away, it is really a right rather than a privilege. It may be exercised immediately, or after a certain date, or within certain dates, according to the conditions. It may be exchangeable par for par, or in any other proportions provided. Since the right has not been given to preferred stocks nearly so often as to bonds, the conversion idea will be discussed more fully in connection with bonds. It is enough here to note that it is applied to stocks. Of course the conversion of a pre-

ferred stock into common does not make nearly so great a change as the conversion of a bond into stock. As the preferred stock generally possesses equal voting power with the common, conversion of the stock would not ordinarily make any change in the quality of control, except as affected by the quantity of each class outstanding. The holder gives up a lesser risk in favor of a greater income.

The Associated Merchants Company has an issue of 5 per cent first preferred and one of 6 per cent second preferred. The holder of the first preferred may exchange into either common or second preferred. Dominion Iron and Steel Company has an issue of 7 per cent preferred, convertible at any time into common. Dominion Coal Company preferred did carry a right of conversion which expired May 1, 1910. Allis Chalmers preferred is convertible into common any first of May up to and including May 1, 1921.

The element of lessened risk gives preferred stock its name. Of all the stock in the corporation that part which is "preferred" must receive dividends to a certain amount before the corporation can pay any on that other part, which in distinction from the preferred is called "common." If the corporation has no preferred shares, its stock is still frequently called common to indicate the lack

of preference. Such nomenclature, however, seems unnecessary.

If the corporation does not pay the stated rate of dividend on the preferred stock in any year or series of years, and, by stipulation, it must make up the deficiency out of earnings of later years before it can pay any return to deferred shareholders, the stock is called "cumulative." Otherwise it is "non-cumulative."

In the event of a dissolution of the corporation all shareholders without special stipulation, both common and preferred, will share equally in the distribution of assets. The preferred stock may carry the stipulation, however, that preferred shareholders are entitled to receive up to the par value of their stock in any distribution of assets before the common shareholders are entitled to anything. In that case the stock is said to be "preferred as to assets." By statute preferred stock may be preferred as to assets without such special stipulation. This is the case in New Jersey.

Ordinarily the right of control vested in preferred stock ranks equally with the amount of control vested in the common. Sometimes the control vested in the preferred is not as great as that vested in the common. Usually in such cases so long as the income stipulated for remains unimpaired the preferred shareholders accept a less control. If

the control vested in the preferred is greater than that vested in the common, usually it is for some specific purpose; especially, the preferred often can veto any increase of bonds or the amount of the preferred itself. Such an extra power obviously protects the lesser risk the preferred shareholder stipulates for. It will be noted that in many cases the extra control represents a special caution of takers of securities issued as a result of a reorganization.

Examples of this veto power are: —

Atchison, Topeka & Santa Fé: A majority of *all preferred outstanding* must consent to any increase in preferred or to any new mortgage. (Reorganization.)

Erie: A majority of all *first* preferred outstanding must consent to any increase in first preferred or any new mortgage. (Reorganization.) A majority of all *second* preferred outstanding must consent to any increase in either second or first preferred or any new mortgage. (Reorganization.)

Chicago, Great Western Railroad: A majority of all preferred outstanding must consent to any increase in preferred or any additional mortgage. (Reorganization.)

Southern Railway: A majority of all preferred outstanding must consent to any increase in preferred or to any mortgage in excess of $120,000,000. (Reorganization.)

Reading Company: A majority of all first preferred outstanding must consent to any increase in this stock or any additional mortgage; except that if the company paid 4 per cent dividends for two years it could issue 420,000 ($50) shares to convert the second preferred. A majority of all second preferred must consent to any increase of either first or second preferred or any additional mortgage. (Reorganization.)

As examples of cases in which not a majority of total stock, taking all classes together, is necessary for action, but a majority of *each* class must approve, may be cited: St. Louis & San Francisco first and second preferred and common and Oregon Railroad and Navigation Company preferred and common. In both cases a majority of *each* class must consent to the issue of further stock of equal rank, or the placing of any mortgage. This, however, is the common situation.

Two thirds of all preferred stock outstanding of the Norfolk & Western Railway must consent to any increase in preferred or any new mortgage. (Reorganization.)

If the Wisconsin Central Railway should fail for two successive years to pay 4 per cent dividends on its preferred, the preferred shareholders would have a right to elect a majority of directors. This is another example

of special control vested in the preferred further to safeguard the lessened risk.

Control vested in preferred stock may have a *limitation* in that the corporation, on the vote of the common stock, may have the right to redeem the preferred under stipulated conditions at a stipulated price. In that event the stock is called "redeemable." Such a limitation takes away much of the value of the stock for purposes of control of the corporation, but does not affect the power of the preferred shareholders to protect their interest while the stock remains outstanding. Common shareholders exercised their right to redeem the preferred in a most dramatic way in the course of the conflict in 1901 between E. H. Harriman and J. J. Hill for railroad ownership in the Northwest. A group of men known as the "Harriman-Kuhn, Loeb Syndicate" endeavored to get control of the Northern Pacific Railroad. The road had outstanding $80,000,000 common stock and $75,000,000 preferred. J. J. Hill and J. P. Morgan owned common stock amounting to $26,000,000. Harriman and his backers bought into Northern Pacific until they had $37,000,000 common and $42,000,000 preferred, — a clear majority of $1,500,000 of all the stock of the road. The Hill interests bought further into the road until they had

$42,000,000 common, — a clear majority of $2,000,000 of the common. Then the Harriman people discovered their weakness. The preferred possessed equal voting power with the common, but was subject to redemption at par up to January, 1917. The Hill interests, having a majority of the common, announced their intention of redeeming the preferred! They did redeem it. All the Harriman people got out of their contest was one representative on the Northern Pacific board.

The Southern Pacific Company had an issue of nearly $75,000,000 ($74,866,463) 7 per cent preferred stock, redeemable at the option of the company at 115 at any time between July, 1905, and July, 1910. The company redeemed the stock in July, 1909. This stock, by the way, was convertible; holders had the right after July, 1905, to convert into common at par. When the company called the stock for redemption, it gave holders the choice of taking the redemption price of 115, of converting into common under the convertible right, or of taking 4½ per cent bonds par for par plus $20 in cash for each share.

Whether one large preferred stock issue, that of the Southern Railway, is redeemable or not, is perhaps open to question and has not been officially decided.

The May Department Stores Company, operating department stores in St. Louis and other cities, put out a preferred issue, for the retirement of which they created a sinking-fund. The issue amounted to $5,000,000. The company must set aside $150,000 yearly before any dividends are paid on the common, in order to retire preferred at not over 125, at which the stock is callable. For the first three years the company may add the sinking-fund to the general surplus. It could not, however, declare a dividend on the common till it had $250,000 in the special surplus, nor more than 4 per cent in any year till the special surplus account amounted to $1,000,000.

Examples of issues of *redeemable* preferred stock are: — Erie first preferred, redeemable at par; Erie second preferred, redeemable at par; St. Louis & San Francisco first preferred, redeemable at par; St. Louis & San Francisco second preferred, redeemable at par; Dominion Coal, redeemable at 115; American Smelters Securities Company, subject to call on any interest date after 1930. National Lead Company, redeemable at par beginning 1910; The Mackay Companies, redeemable at any time at 106; American Cotton Oil Company, subject to call at 105; Borden's Condensed Milk Company, subject to call at 110.

Instead of having extra control the preferred may have less control vested in it than the common. The American Tobacco Company preferred shareholders had no right to vote at any meetings except those convened for increasing or decreasing the capital stock, dissolving the corporation, "or passing upon other matters with respect to which the statute expressly gives the power to preferred stockholders to vote." The American Smelters Securities Company gives its preferred shareholders no voting power unless dividends for one year remain unpaid.

Since it is the essential idea of a stock that its holders possess immediate control of the company, such securities as these are on the border-line between stocks and bonds. They help show, however, the possibilities in a corporation of dividing and recombining the elements of ownership. A stock like Dayton & Michigan Railroad preferred, which carries no voting power whatever, is hardly a stock at all, but essentially an income bond.

So far consideration of particular stocks has brought out only special features of each. Several representative stocks, giving all the features of each, are: — Boston & Maine Railroad 6 per cent non-cumulative preferred; Atchison, Topeka & Santa Fé Railway 5 per cent non-cumulative, preferred

both as to dividends and assets, requiring consent of a majority of the preferred outstanding for any increase in the preferred or any further mortgage; Interborough Metropolitan Company 5 per cent cumulative, preferred both as to assets and dividends; Minneapolis, St. Paul & Sault Ste. Marie Railway 7 per cent non-cumulative, sharing equally with common after common pays 7 per cent; The American Cotton Oil Company 6 per cent preferred, non-cumulative, subject to call at 105; Associated Merchants Company 5 per cent cumulative first preferred (preferred both as to dividends and assets), convertible at par into either common stock or second preferred.

On first thought it may appear that the only control bonds have is purely contingent. If the corporation does not pay interest the bondholders possess either a right to have a receiver appointed to manage the property in their interest, or to foreclose and sell the property for their benefit; that is, they have a right to assume the entire control, but only under certain contingencies. As a matter of fact, the corporate mortgage has become a most elaborate document, and through it the bondholders secure to themselves very substantial amounts of actual present control. This does not mean that bondholders have a

right to appear at shareholders' meetings and cast a vote in any way. The control they possess is of a definite kind and consists not of the right to initiate policies, but rather of limitations, in favor of the bondholders, on the power of the shareholders. If the corporation has only voting stock, the general law and the corporation's charter lay down the only limitations on the shareholders' control or direction of the business. When the corporation issues bonds, however, investors will probably insist, as a condition precedent to purchase, on limiting within narrower lines the scope of action of the shareholders.

The very issuing of bonds is in a way a granting of control to the bondholder. It compels the shareholder to be in the position of a borrower for the term of the bonds. It gives the bondholder control to the extent that he can for a term of years insist that a certain part of the corporation's income be used in a special manner, namely, to pay interest on his debt. If the bonds are callable the shareholder has refused to part with so large an amount of control as giving the right to the stipulated income for the maximum term involves. Suppose an issue of 5 per cent 20-year bonds callable at any time as an entire issue at 105. In the absence of other limitations the shareholders can by paying the

amount stipulated cancel all the ownership of the bondholders.

As illustrations of the way in which a part of control may rest in the bondholder through limiting the power of the shareholder, we may call attention to several issues. Armour & Company has outstanding $30,000,000 real estate first mortgage 4½ per cent 30-year bonds, due June 1, 1939. They are a first mortgage on real estate valued at $40,000,000. The mortgage provides that the unincumbered quick assets of the company and its auxiliary companies shall at all times exceed the aggregate debt of the company and auxiliary companies, including the outstanding bonds of this issue. The company can pay dividends only from earnings made subsequent to the fiscal year ending October 24, 1908. Such a stipulation gives the bondholders a very definite share of control in the conduct of the business. Shareholders have parted with control to such an extent that they can create further indebtedness only under special conditions, namely, that the corporation has quick assets of a certain amount. They have so far parted with control that they cannot realize on their quick assets to an extent that will reduce them below a certain proportion.

American Telephone and Telegraph Com-

pany has 4 per cent debenture bonds, due March 1, 1936, outstanding to an amount of $22,724,000 out of an original issue of $150,000,000. They are convertible into common stock at 126.44 before March 1, 1918, and are redeemable after March 1, 1914, at 105. The company cannot create any mortgage, or any collateral trust indenture covering securities now owned, or purchased with proceeds of these bonds, without including these bonds as also secured on the new assets. During the term of the bonds the company cannot have outstanding unsecured bonds or notes in excess of $150,000,000, except obligations payable within one year not exceeding $10,000,000, unless additional money from the sale of stock shall be paid into the treasury, in which case the company may issue additional unsecured bonds or notes to an amount equal to the money paid in. So the bondholders again in this case exercise control to the extent of limiting the debt-creating power of the shareholders.

Bondholders of the Westinghouse Electric and Manufacturing Company exercise control in many directions. The company has an issue to the authorized amount of $20,000,000 of 5 per cent bonds, due January 1, 1931, convertible into assenting (now common) stock at 200. These are debenture bonds and

contain a covenant that no mortgage shall be placed on the properties described in the trust indenture. The company cannot issue notes in addition to the outstanding $6,000,000 except against after-acquired securities of the appraised value of 120 per cent of the new notes issued. It cannot issue further bonds unless net earnings are at least double the interest charge of the company and its subsidiaries, including the securities proposed to be issued. The company may issue these bonds, up to an amount of $5,000,000, beyond the $20,000,000 immediately authorized, equal in amount to the proceeds paid in from the sale of new stock. Quick assets must equal the aggregate amount of indebtedness, including the indebtedness of subsidiary companies exclusive of collateral notes. Indebtedness outside of the bonds cannot exceed 25 per cent of the par of the bonds outstanding. The company cannot issue any stock entitled to preference over the assenting (now common) stock. It cannot sell any stock for less than 10 per cent below the market price of the assenting (now common) stock.

Chicago Bell Telephone Company first mortgage 5 per cent bonds, due December 1, 1923, $5,000,000 outstanding, $50,000,000 authorized, carry control in several respects: 1. The company cannot issue bonds additional

to the $5,000,000 for one year after their issue; then not in excess of $5,000,000 per annum. Such a provision is common. It is an assurance to the underwriters or purchasers of the security that the company will not throw more bonds on the market within a given period. This gives time for the public to absorb the issue, and guards against the price-depreciating influence of an additional supply of the security, which is particularly acute if the first amount issued is not fully absorbed. It also gives the corporation a chance to get the benefit of the capital raised by the bonds already issued and reflect it in larger earnings, so that the price of the security will not be further depressed by lowering the percentage of earnings above fixed charges. 2. Total outstanding bonds of the company must not exceed 50 per cent of the value of its property, or 60 per cent of the value of its real estate. 3. After the company has $15,000,000 of these bonds outstanding, it cannot issue further bonds to exceed 75 per cent of the cost of additional improvements and extensions.

Of the Nashville (Tennessee) Railway and Light Company Refunding and Extension 5's, due July 1, 1955, $2,000,000 are issued, $6,000,000 are reserved to retire underlying bonds, and $7,000,000 are issuable only: (1) For 80 per cent of the cost of improvements

and additional property acquired since January 1, 1908; also on condition that (2) the outstanding bonded debt must not exceed five times gross earnings for previous twelve months; (3) net for previous twelve months must equal at least one and one half times total interest charges; (4) at least 10 per cent of gross earnings for the preceding twelve months must be expended for maintenance and included in operating. Birmingham (Alabama) Light and Power Company 6's contain similar provisions.

York (Pennsylvania) Railway 5's, due December 1, 1937, authorized to the sum of $10,000,000 and outstanding to the amount of $3,400,000, stipulate: "Of the balance of the bonds $2,000,000 are reserved for the specific purposes provided in the mortgage and the remaining bonds, $4,600,000, can only be issued at the cost price of the purposes specified, provided the net earnings, after payment of all interest and taxes for twelve months prior to the date of issuance, shall be at least equal to interest and taxes for one year on all outstanding bonds and any or all of the purposed additional bonds."

As another example of control vested in bonds for the purpose of limiting the power of the shareholders to create debt, the National Enameling and Stamping Company

has authorized and outstanding $3,500,000 refunding, first mortgage real estate, sinking-fund 5's, due June 1, 1929, which provide that the liquid assets of the company must at all times equal the aggregate debts of the company, including outstanding bonds of this issue.

Peoria Railway Company first and refunding 5's, due serially, February 1910–26, authorized $3,600,000, contain a stipulation controlling the disposition of part of the earnings in the covenant of the company to maintain a depreciation and maintenance fund from 1909 to 1925 to aggregate $1,865,000. The serial maturity retires only 40 per cent of the issue before 1926.

So far the examples given have illustrated only how in particular cases the bondholders of a corporation exercise control. The nature and amount of control that they exert vary according to special stipulations. Bonds, however, divide into several distinct classes, each with its identifying control characteristic. Only such general characteristics will enter into the further discussion. Of course, in addition to these, each issue, as already shown, may carry further peculiar restrictions of the shareholders' power. Of these classes (1) mortgage, (2) debenture, and (3) income bonds naturally group together.

A mortgage bond, as the name indicates, represents a fraction of a mortgage placed upon part or all of the property of the issuing corporation. It gives the strongest kind of contingent control. Under the stipulations of the mortgage, in case of failure of the corporation to pay principal and interest when due, or on any other default of like rank, bondholders, acting by such majorities and in such manner as the mortgage provides, can take possession and operate the property themselves, or sell it under their right of foreclosure. In this way they can directly take the mortgaged property entirely away from the shareholders.

So far as the incidents of ownership are concerned, obviously a second mortgage differs from a first in accepting a greater risk and demanding a compensating greater income. The control it exercises is the same in kind as the control of a first mortgage: namely, the actual present control in limiting the freedom of action of the shareholders by the obligation to pay principal and interest, and complete contingent control, in case the shareholders' management should fail in this obligation. The contingency giving the second mortgage bondholder active control happens sooner than the contingency giving the first mortgage bondholder active control. The same

principles apply to a third or any subsequent mortgage.

It should be mentioned here that a bond may have the security of a first mortgage as to part of the property, and a second mortgage as to the rest. Such bonds do not call for special discussion at this time. They are generally recognizable under names like "first and refunding mortgage bonds," or "first and consolidated mortgage bonds."

Debenture bonds, on the other hand, do not bestow upon their holders the powerful right to contingent direct control conferred by a mortgage right of foreclosure. The holder of a debenture, speaking broadly, and assuming the absence of special stipulations, has only the rights of a general creditor, and has less power than the mortgage bondholder to take control from the hands of the shareholders. Usually the debenture bondholder has the advantage of particular stipulations that put him in a stronger position than an ordinary creditor, but still leave him far from being as firmly intrenched as a mortgage bondholder. The existence of debenture bonds usually indicates one of two very different situations, — either from the unavailability of mortgages, which seldom are considered of any advantage beyond the second and almost never beyond the third, or because the corporation

is so strong that it does not need to offer a mortgage security. As an example of debenture bonds may be mentioned the New York, New Haven & Hartford convertible 3½'s, 1956, and various other issues of this company. It may be noted that this corporation has no mortgage bonds of its own outstanding. Subsidiary companies have mortgage bonds. The Boston & Maine has debenture 4½'s, 1929, and other debenture issues. This corporation also has not issued any direct mortgage bonds. The Boston & Albany has debenture 4's, 1933, and others. This road (now leased to the New York Central) presents a case of a line financed, as it stands at present, without any mortgage. The Chicago, Milwaukee & St. Paul has debenture 4's, 1934, $28,000,000 issued, $50,000,000 authorized. The Chicago & Northwestern 5's, 1933 ($5,000,000). The New York Central & Hudson River Railroad 4's, 1934 ($34,000,000).

Income bonds give the holder almost no control, either immediate or contingent. The stipulation of their issue is only to pay interest if earned. So failure to pay interest, unless earned, does not confer upon the holder any right to take control from the owners of the stock. Obviously the income bondholder has less control than the owner of any other secur-

ity we have discussed; and together with this minimum of control he assumes considerable risk. It results that the income bondholder may find that he has purchased a lawsuit rather than a security.

The Central of Georgia Railway furnishes one of the best-known examples of the income bond. That corporation has outstanding three issues, all put out in 1895 and due in 1945. They are non-cumulative and bear interest, payable only if earned, not exceeding 5 per cent in any one fiscal year. As a matter of fact, the corporation did not pay the full 5 per cent on the first incomes till 1901, paid only 3 per cent in 1902, then 5 per cent till 1908. It did not pay anything on the second incomes till 1904, then 2 per cent; 5 per cent in 1905 and 1906; 3.73 per cent in 1907; then entirely stopped paying. On the third incomes it paid 5 per cent in 1905 and 1906, nothing till then and nothing after. The income bondholders took the matter into the supreme court of Georgia. An auditor appointed by the court found that the railway company had wrongly kept back $542,000 net income of a subsidiary, the Ocean Steamship Company, and other items, making a total of $860,909 available beyond what the corporation itself had shown. The court thereupon held the company liable for full interest on

the three classes of income bonds from earnings of 1906–07, and in February, 1911, the corporation paid the balance of 1.27 per cent on the second preferreds and the 5 per cent on the thirds.

In November, 1909, the bondholders again brought action to recover full income interest on the three classes of bonds from earnings of 1907–08. In May, 1911, the company offered to pay, and did pay in June, the full income on the firsts for 1908, and 2.821 per cent on the seconds, and for 1909 and 1910, 2.312 per cent on the firsts. These payments were made without regard to any further claims the income bondholders might make.

It is interesting to set down the operating ratios in comparison with the interest payments on these income bonds before the decision of the court.

	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09
Interest														
First incomes	1.5	2.25	2	2	3.25	5	3	5	5	5	5	5	0	
Second incomes	0	0	0	0	0	0	0	0	2	5	5	2.73	0	
Third incomes	0	0	0	0	0	0	0	0	0	5	5	0	0	
Operating ratio					66	69	71	74	73	72	70	76	74	79

These high operating ratios, especially the 76 per cent in 1907, the 74 per cent in 1908,

and the 79 per cent in 1909, would raise a question, at least, if the company, in addition to holding back the net earnings of its subsidiary, were not also, under the guise of maintenance (operating), sinking earnings in really capital expenditures expected to show results later in the form of dividends on stock.

We have gone into this at such length to show a case of ill-advised apportionment of control, risk, and income. Omitting the question as to whether the anticipated income would compensate for the risk, very apparently the investors who bought the bonds should not have taken the risk without getting more control. If they had insisted on either the contingent control of a right of foreclosure, or the active control of voting power, they would not have got into a position offering such possibilities of disputes.

Other examples of income bonds are: Florida East Coast Railway, $20,000,000 ($25,000,000 authorized) 5 per cent non-cumulative second mortgage, due 1959; New Orleans and Northeastern Railroad, $1,500,000 4½ per cent non-cumulative income mortgage, due 1952.

Apparently the mortgage lien was stipulated for in these cases to give the right of foreclosure on failure to pay principal. Fail-

ure to earn and pay interest does not give a right of foreclosure. All these bonds present the astonishing feature of being non-cumulative without any active control.

Convertible bonds present a further class with respect to control. We have already discussed the somewhat limited class of convertible preferred stocks. The number of convertible bonds is much greater and offers a more significant form of security. When a holder converts a preferred stock into a common, he ordinarily affects only his risk and income and does not change the quality of his control. If a convertible bondholder, however, changes his bonds into stock, he jumps immediately from a control that is merely restrictive or contingent to a control that is active and immediate. He has also probably made a greater change in his risk than a converting preferred shareholder.

Conditions governing conversion are numerous, and the profitableness of converting under allowed conditions is a matter of calculation. Convertible bonds offer a large enough field for a volume to themselves. We shall examine only several prominent issues to get an idea of the working of the class. The purpose of making any security convertible into one of junior rank is to gain present safety combined with a chance to get some

of the benefit of speculative profits on condition of giving up the preferred position.

We would call attention to the fact that the "participating" idea combines present safety in the senior security-holder with the benefit of sharing future speculative profits. The holder of a participating security does not have to give up the preferred position to enjoy the greater income, and in that respect the common shareholder has made a less advantageous bargain. In the case of a convertible security, if the holder takes a share of the enhanced profits, he has to give up his advantageous position as to risk. The common shareholder has then lost some of his profits, but has gained a position of less risk. Take a concrete case to show the point: Suppose two corporations, A and B, capitalized: —

Corporation A	*Corporation B*
$3,000,000 5 per cent convertible bonds.	$3,000,000 5 per cent participating bonds.
5,000,000 common stock.	5,000,000 common stock.

Suppose in corporation A the bonds may be converted into common at 150, and that when the corporation makes 10 per cent on its total capitalization the stock does go above 150 in the market.

In corporation B the bonds participate equally with the common above 5 per cent.

Assume that in both corporations earnings advance to 10 per cent on the total capitaliza-

tion, and in corporation A none of the bondholders convert. Then: —

Corporation A		*Corporation B*	
Net	$800,000	Net	$800,000
Interest	150,000	Bondholders get	300,000
Surplus	650,000	Shareholders get	500,000
Bondholders get	5 per cent	Bondholders get	10 per cent
Shareholders get	13 per cent	Shareholders get	10 per cent

In corporation A the bondholders cannot share directly in the prosperity of the company without giving up their priority. Suppose they all convert. They get 5 per cent more income and the shareholders 3 per cent less and all security-holders get 10 per cent, the same as in corporation B.

Now suppose a severe depression in the business sets in, and earnings on the total capitalization drop to 3 per cent. Then: —

Corporation A		*Corporation B*	
Net	$240,000	Net	$240,000
Former bondholders, now shareholders, get	3 per cent	Bondholders get	5 per cent
Former shareholders and still shareholders get	3 per cent	Shareholders get	1.8 per cent

If net earnings should drop 2 per cent more, they would not be sufficient to pay the 5 per cent to bondholders in corporation B. The shareholders' equity is wiped out, and the bondholders would get control. In corporation A the former shareholders would still be getting 1 per cent and cannot be wiped out.

So much for the advantage to the common shareholder of the convertible bond over a possible bond with a participating stipula-

tion. It has the disadvantage of projecting another element of uncertainty into the affairs of the corporation. It adds something incalculable from the financial scheme to the already many incalculable considerations in the nature of the business. As a matter of fact, for example, not every convertible security-holder gives up his priority in order to gain a greater income. Very many do not. The directors of the corporation cannot calculate how many will. They cannot foresee just how much will be required for interest, and consequently how much available for dividends and how many shares it will have to be distributed among. On an actual conversion also the common shareholder suffers a lessening of the quantitative control in his stock. In the case of corporation A we have just taken, the shareholder having 10,000 shares starts out with one fifth of the active control. If all the bondholders convert, this owner of 10,000 shares finds that he now has only one eighth of the active control. This makes a very appreciable difference in the value of his holdings from a control standpoint.

Some specific examples of convertible bonds are: —

Atchison, Topeka & Sante Fé convertible debenture 4s, due June, 1955. They are re-

deemable on any interest date after published notice at 110 and interest, and are convertible at par, at any time prior to June 1, 1913, into common stock at 100. If they are called for redemption in the mean time the conversion privilege may be exercised, but not later than May 31, 1913, and shall cease upon the day preceding the one named for payment. At the time of writing, the stock is on a 6 per cent dividend basis and selling at 103. The right of conversion is operative. A thousand-dollar bond can be exchanged for ten shares of stock worth $1030. We should expect to see the bonds selling at 103. As a matter of fact, they are selling at 104¾. Convertible bonds do not always follow the price of the stock down. Notice, too, that it does not follow that a convertible security will always be converted as soon as it is profitable to do so. These Atchison bonds cannot, at the time of writing, be considered worth more than par on their merit as an investment.

Delaware & Hudson Company convertible debenture 4s, due June 15, 1916, are convertible up to June 15, 1912, into common stock at 200. The stock pays 9 per cent and is selling at about 162. Since the bonds are worth on their investment merit 97⅛, the price they are selling at, the stock would have to ad-

vance above 194½ plus commissions in order to reach a profitable conversion point.

Union Pacific Railroad Company convertible debenture 4s, due July, 1927, are redeemable as a whole, but not in part, on or after July 1, 1912, at any interest date after ninety days' notice, at 102½. The right of conversion continues up to thirty days of the date of redemption. They are convertible at par, on or prior to July 1, 1917, into common stock at 175. The bonds are selling now at 101, somewhat above the present investment value, though the stock is selling at only 161, or considerably below the par of conversion.

Pennsylvania Railroad Company convertible debenture 3½s, due October, 1915, are redeemable at 100 and interest at any interest date on ninety days' notice, with a right to convert up to thirty days before the redemption date. They are convertible at any time into stock at 75 (par value, 50), equivalent to 150 as quoted on the New York Stock Exchange. The bonds are selling at 96¼, the stock at 120¼. The bonds would have to be at 80 in order not to lose by conversion with the stock at that price.

American Telephone and Telegraph Company convertible debenture 4s, redeemable March, 1915, or on any dividend date thereafter, on twelve weeks' notice, at 105 and

III

WATERED STOCK

THOUGH not intending to be controversial, we may seem, nevertheless, in discussing the subject of watered stock, to be putting ourselves in the position of *advocatus diaboli* when we say we purpose here to name the perfectly right and proper things stock-watering may accomplish. To show, however, that we know about the evils charged against the practice we shall state them at the very outset.

It is charged that stock-watering works a fraud on the investing public through enabling unscrupulous men to deceive people, by a certificate marked "par value, $100," with the idea that the corporation has assets of equivalent value. Such deception is common. Promoters of "fake" corporations have a thoroughly organized business. It must be owned that those who are deceived have only taken the view that, nominally at least, the law itself takes. For the law generally says that when a stock certificate of the par value of $100 is issued, it shall have back of it assets of the value of $100. To be sure, the law goes

on to say that it will not inquire too closely into the actual value of those things which the corporation states to be of the value of $100. Having opened the door so far, the camel, if we may use this metaphor from the arid desert when speaking of watered stock, has thrust his whole body in, till we have certificates of "the par value of $100" that did not represent any assets at all when issued, yet are perfectly law proof. Doubtless "of the par value of $100" does deceive many people. It is only fair to ask if we cannot do away with the evil without doing away with the thing itself and whatever good it may have.

Two possible remedies suggest themselves. One is to do away with the statement "of the par value of $100," and let the certificate stand simply as, say, one share of ten thousand, representing $\frac{1}{10000}$th of the total ownership. That should put the prospective purchaser on inquiry as to whether the total ownership is worth anything, and consequently how much $\frac{1}{10000}$th is worth. Several eminent financiers came out against this idea and several in favor of it in a recent congressional inquiry. The proposals seem to me in accord with the facts, and I should favor it even aside from whatever its adoption would accomplish towards doing away with

the deceit practiced on innocent purchasers. If the certificate did not describe itself as of the par value of anything, it would not represent itself as having any special amount of assets behind it. Under such circumstances watered stock would be like the Kantian conception of time and space, a category of the human mind, with the mind taken away.

A second proposed remedy for this deception of the unsophisticated purchaser is a prospectus act requiring a statement in any public offering of stock of the exact way it became "fully paid up," commissions paid, and other information sufficient to enable the prospective owner to see just what assets do stand back of the stock, and form some estimate of its probable value. Though this remedy does not seem quite to strike at the root of the matter in the way that removing "of the par value of" does, still, might not this do away with the evil complained of without destroying the good there may be in the thing itself?

A second charge made against watered stock is that it enables corporations, by giving a false appearance of large capital expenditures, to charge more for their services than they otherwise could. It must be owned that corporation managers do take advantage of large capitalizations to give an impression that the enterprise is making a small or very

moderate return on invested capital. Generally speaking, people do not press this charge of evil against watered stock except in the case of public service corporations possessing a monopolistic or quasi-monopolistic character. The fact that many public service corporations are not paying any dividends at all, and that some occasionally fail to pay interest, proves that the possibility of raising rates under the cover of any given capitalization is not unlimited. It is not part of our purpose at this point to discuss the relation of rates and capital investment. We simply raise the question now whether the abolition of watered stock, if means can be found to effect it, would prove helpful enough to make it worth while. There is this much at any rate to be said, that some of the meritoriously useful results of watered stock can be gained approximately in other ways, so that corporation finance would not be so enormously the loser by its abolition as it would be if that were not the case.

One needs to remember, too, that a par value of capitalization greater than the value of assets may arise from other causes than stock-watering. Suppose a corporation with a capitalization of $1,000,000 has a plant that fairly cost $1,000,000 and is capable of earning the anticipated return on the investment.

Assume that on account of a high fire hazard and consequent very high premium charges the managers decided not to insure. If a fire now destroys one half the assets, the corporation has outstanding a capitalization of $1,000,000 against assets of the cost of only $500,000.

Again disclaiming any intention of entering on a discussion of proper capitalization, we may still perhaps fairly raise one of the elementary questions to keep in mind as a background of our discussion. Take two corporations: —

Corporation A

Capitalization	$1,000,000
Actual cost of assets	1,000,000
Net earnings	50,000

Corporation B

Capitalization	$1,000,000
Actual cost of assets	500,000
Net earnings	50,000

Assuming that one corporation is as likely to continue its earnings at $50,000 as the other, and that the relative difference in earning power is not due to a difference in management but to other conditions, obviously the assets of one are *worth* as much as the assets of the other.

Though some may incline to disbelieve the

statement, there are, nevertheless, perfectly straightforward and proper reasons for watering stock. Promoters and financiers resort to it under circumstances in which they could not possibly take advantage of the dollar mark to sell for more than real value or use the diluted capitalization as a cover to conceal excessive rates. They cannot take advantage of the dollar mark when they are dealing with too sophisticated people, and they cannot use the diluted capitalization as a cover for excessive rates if the issuing corporation is engaged in manufacture and subject to active competition.

Watered stock can take a very useful and entirely proper part in corporation finance through affording a still further means than those dealt with in the earlier chapters of effecting divisions and recombinations of the incidents of ownership, — income, control, and risk. The commonest resort to stock-watering is in so-called underwriting, or syndicate, operations. They afford the easiest way to illustrate the situation.

Assume that the promoters and bankers are arranging the financial plan for a corporation to engage in a new enterprise which requires the expenditure of, say, $3,500,000. The bankers are ready to advance $3,000,000 secured by a mortgage, provided the promoters will put

$500,000 in the enterprise. This equity of the promoters, however, is too thin for the bankers to be content with nothing but a fixed interest return. On account of the thinness of the equity the bankers assume a considerable risk and want a compensating share of speculative profits.

We have already seen several ways in which they might procure this. They might make the bonds participating. The bankers are not, however, going into this enterprise as a permanent investment; they look forward eventually to selling their securities, making their profit on the transaction, and using their funds in a new enterprise. Though participating bonds would assure them a share in the speculative profits, such bonds are a comparatively unfamiliar security and would sell at a disadvantage in the investment market. The bankers might take convertible bonds, which, as we have seen, would give them an opportunity to take advantage of the future prosperity of the company. Neither of these forms gives the bankers any means of separating what we may call the speculation from the investment. The participating bond indissolubly combines the two, and the convertible bond will not yield any profit through increased income from the speculation so long as the holder retains any advantage from the

investment. In the case of the convertible bond the holder must give up entirely his investor's prior claim and come out wholly from the protection of the equity, or he must continue content with an income limited entirely to the investment basis. Neither the participating bond nor the convertible bond accomplishes what the bankers desire. They want eventually to separate the investment and the speculative parts of their bargain. They may sell the investment and retain the speculation, as part of their bankers' profits. Or they may sell both. In that event they would dispose of the investment to one set of people having the type of mind or requirements calling only for an investment, that is, a limited risk with an assured though limited income, and dispose of the speculation to another entirely different set of people who are willing to assume the greater risk for the chance of the greater profit. If in return for their funds they receive both stock and bonds they can do just this.

An adjustment of the situation becomes a matter of bargaining between the promoters who are advancing $500,000 and the bankers who are advancing $3,000,000 for the enterprise. Assume that the promoters want the same possibility of later separating their interest in the corporation into more speculative and less speculative parts. They cannot

take part bonds and part stock for the funds they supply to the corporation, because the bankers insist that the bonds must have an equity back of them of a full $500,000. The bankers consent, however, to giving the promoters a claim that will come in ahead of the speculative interest the bankers want as part of their return for the funds they supply. Let us suppose as a result of the bargaining that the promoters and the bankers come to an agreement on this plan as satisfying their various requirements.

In return for the $3,500,000 of funds supplied for its purposes the corporation will issue: —

$3,500,000 5 per cent 25-year bonds;
1,000,000 7 per cent preferred stock;
4,500,000 common stock.

Of these securities the bankers, in return for supplying $3,000,000 of cash, will get: —

$3,500,000 5 per cent bonds;
3,500,000 common stock.

In return for supplying $500,000 in cash the promoters will get: —

$1,000,000 7 per cent preferred stock;
1,000,000 common stock.

That is, the bankers, in return for funds, for every $100 supplied, get: —

$116.66 par value 5 per cent bonds;
116.66 par value of stock.

The promoters, in return for funds, for every $100 supplied, get: —

$200 par value 7 per cent preferred stock;
200 par value common stock.

As a matter of fact, the way the parties will view the transaction is that the bankers get 5 per cent 25-year bonds at 85.71, and with the bonds get a bonus of 100 per cent of common stock, and that the promoters get preferred stock at 50, with a bonus of 100 per cent of common.

Assume now that the corporation gets to a point where it can earn 10 per cent on the cash invested. Its earnings will then amount to: —

Net	$350,000
Interest	175,000
Available for preferred	175,000
Required for preferred	70,000
Available for common	105,500

or only a little over 2 per cent on the common, hardly sufficient out of which to pay a dividend.

If the business is of the type not subject to large declines in gross, now that the corporation is earning 60 per cent above interest charges the bankers may begin to market the bonds. Suppose they are able to get an average of 95.71 for the bonds. They have made in the transaction, 10 points gross, or 12½ per cent on the funds involved, and have besides

a possibility of further profit in the common stock they hold. In order that this may not be thought an enormously profitable transaction for the bankers, it is only fair to say here that it has perhaps cost them between four and five points to sell the bonds.

The promoters are getting 14 per cent on their cash invested, and have their further possibility of profit in the stock they hold. Presumably they cannot yet on this showing of earnings dispose of their preferred stock advantageously.

Assume now that the affairs of the corporation continue to prosper till it can earn 15 per cent on the funds invested. Earnings increase to: —

Net	$525,000
Interest and preferred dividends require	245,000
Available for common	$280,000

or a little in excess of 6.2 per cent. Probably the directors of the corporation will not declare a 5 per cent dividend on this showing. To do so would leave little available for emergencies, or to build up the property against future recessions in business. So far, too, we have said nothing about a sinking-fund to amortize the bonds. Earnings available for dividends have, however, given the common stock a substantial value. The directors may

declare a dividend at the rate of 4 per cent, and so enable the holders to make, if they wish, a market for the security.

We have assumed that this is a new enterprise, and at the time of the negotiations between the promoters and the bankers had yet to go through the construction process. It would be at least two years before the project got on an earning basis, or, say, two and a half to three years before the bankers could begin to place the bonds with the investing public on the basis of assured earning power. The bankers do not want to tie up so large an amount of funds for so long a time. Having assumed the responsibility for supplying $3,000,000 of funds, they may now proceed to get the amount underwritten. That is, they will find people who will advance the money till the corporation can show established earning power, when they may either place their securities with the general lot for the bankers to offer for sale, or may withdraw them from the general mass and keep them for personal investment. Terms of these underwriting agreements vary a great deal, and we shall not attempt to go into them. The amounts taken by each underwriter or member of the underwriting syndicate, as it is called, may also vary widely, both within one syndicate and between one syndicate and another. In

the case of some underwritings a comparatively few members may form the entire syndicate; it may comprise only other bankers who are taking participations. The members of other underwriting syndicates may be private capitalists widely scattered, and some of rather small resources, so that many participations may amount to as little as $5000. It seems to be the tendency to scatter the underwriting more broadly, and make the amount required for participation smaller and smaller. Often now, in fact, the idea of a syndicate with the original bankers subsequently making a general market issue to investors is hardly even pretended, and the so-called underwriting amounts really to the issue of the securities. So far as that gives the people who are supplying the money a larger proportion of earnings it seems desirable. The danger lies in the possibility of people, not familiar enough with financial matters to discriminate between a speculation and an investment, supplying funds at this point when they cannot afford to assume the amount of risk necessarily accompanying the transaction.

Assume that the bankers offer participation in the underwriting and the capitalists take it on these terms: the capitalists, in return for funds supplied the bankers, for every $100 supplied, get: —

\$111.10 (approximately) par value of bonds;
55.05 (approximately) par value of stock.

Since the named terms of the underwriting would be bonds at 90 with a bonus of 50 per cent of common, we can state the matter accurately. The capitalists, in return for funds supplied to the bankers, for every 900 supplied, get: —

\$1000 par value of bonds;
500 par value of stocks.

We are assuming that the promoters are keeping their preferred and common, either because of their confidence in the future of the company, or because it was part of their bargain with the bankers that they should keep them for a stipulated time in order that their securities might not interfere with the bankers' market.

If under no further obligation in the way of taking these securities off the underwriters' hands and placing them with the "ultimate consumer," — that is to say, in the hands of investors, — the bankers have made their profit and are out of it. They have made over four and a quarter (4.29) points on the bonds, which they bought at 85.71, and have disposed of at 90, and they have \$2,000,000 par value of common stock, which will be worth something if the company prospers.

In the case of a genuine underwriting, the

bankers have a moral obligation at least to do their utmost to take the securities off the hands of the underwriters and place them in the hands of investors. Assuming that capitalists have underwritten the securities, and the corporation has established an earning power equivalent to 10 per cent on the $3,000,000 of funds supplied, the bankers will then receive all bonds the underwriters wish to turn in for the public issue and offer them to investors at, say, 95. We will suppose the offering successful and the "public" buys all the bonds. If not, the underwriters have to take them up on their own account. The underwriting capitalists have made five points on their bonds and have still in their hands an amount of common stock equal to half the amount of bonds they underwrote. That is, if a capitalist's participation in the syndicate had been to take up $50,000 of bonds and $25,000 of common stock, he would have put the bankers in funds to the extent of $45,000, have made a cash profit of $2500, and have $25,000 of common stock with speculative possibilities.

We have had to touch on the matter of underwriting in order to bring out the way in which water in the securities of a corporation may act as a solvent to effect divisions of risk, income, and control for results otherwise im-

possible to get exactly. By means of the stock bonuses the bankers, in the first place, and the underwriters, in the second place, have been able to separate the resultant of income and control coming originally into their hands. Everyone has got what he wanted out of the transactions. Bankers and capitalists, with regard to this particular project at least, show the speculative type of mind. If they were not willing to assume the greater risk in expectation of the larger profit they would not have gone into the undeveloped enterprise. Each in turn has passed on the less risk and the limited income and kept the potentially unlimited income as a compensation for the risk he ran when embarking his funds in an enterprise while it was yet problematical whether the corporation would ever return a fair income on its capital.

During the bargaining between the bankers and the promoters, the bankers saw that they were contributing three things. In the first place, they made the enterprise possible at all; in the second place, they assumed, for a time at least, a large risk; in the third place, they undertook a definite labor of distributing securities of the corporation to investors. Perhaps without reasoning over the matter in detail their minds ran somewhat in this way: For the labor of selling these securities we

want a specific sum of money. We shall add something to this sum partly to pay for the risk we run. To make the payment for the risk adequate we want some kind of an interest in the company, in case, as a result of our assuming this risk, the company, when operating, proves successful; and finally (just hinted in this last statement), since the promoters cannot get more favorable terms elsewhere, and cannot go ahead without accepting our terms, or their equivalent, we shall exact a still larger interest because we make the project possible at all. Watering the stock has enabled the making of a fair compensation for services performed. If the bankers had exacted a larger cash compensation to cover fully their estimate of the risk, they would have placed a further handicap on the corporation. By agreeing to take, for part of their compensation, their chance on the prosperity of the corporation, they by so much give a pledge of their good faith to purchasing investors.

Underwriters reason in much the same way. They are content with a smaller compensation for thus secondarily supplying the funds than the bankers required in case they had to find the funds directly. The bankers have already done the work of investigating the project in order to draw a conclusion about its

merits, and can pass on the results of this investigation with their expert opinion to the underwriters. The project could not go ahead without the support of the bankers. They occupied a better strategic position in bargaining, and made a corresponding exaction. They agreed to supply the whole of the required funds, in this case $3,000,000, whereas each of the underwriting capitalists agrees only to supply part, some, say, $25,000, and some, $50,000. No particular underwriter was necessary to the bankers. These reasons sufficiently explain why the bankers could make a better bargain with the underwriters than the promoters could make with the bankers. The underwriters want a cash compensation, which, when secured, they can count as so much certain. They would not assume so large a risk for a cash compensation of the size they are hoping for. Again the stock bonus serves to complete the pay.

Everyone taking this common stock, so far, knows perfectly well that it represents only a right to earnings made above a certain amount. If the earnings never exceed a certain amount, the stock will never be really worth anything. As the expectation grows better and better founded that the corporation will earn in excess of the sum required for prior charges, the common stock may com-

mand speculative prices based on the probability that the corporation will be making something available for dividends.

If the underwriting were without restriction as to sale, were not, in fact, really an underwriting, but essentially a placing of the securities in the hands of capitalists, any one of the capitalists, without waiting for the corporation to establish an earning power, might resell part, or all, of his participation. He might find someone ready to purchase the underlying security, the lien on the property with the promise of a definite income, but not ready to pay anything for the speculative chance. The capitalist might sell some of his bonds, without any stock, to this investor for 85. Remembering that the capitalist paid $900 for each $1000 bond and $500 par value of stock, we may infer that the investor valued the stock as worth not in excess of $10 a share, and the capitalist valued it as being worth at least that. Accepting this as a fair appraisal of the speculative value involved, we can estimate a cash equivalent of the bargain the bankers made with the promoters. For each $857.10 the bankers received a $1000 par value bond and $1000 in par value of stock. According to the estimate just made the money equivalent for this stock would be $10 for every $100 par value. So, if, instead

of accepting part of their compensation in the speculative possibilities of the stock, the bankers had made a straight loan, taking a mortgage, or bonds issued under a mortgage, as security, they would have paid $757.10 for each $1000 5 per cent 25-year bond. In other words, they would have demanded interest at the rate of about 7½ per cent to compensate them for the risk assumed.

To continue arranging a financial plan in accord with this idea, we will assume that the promoters take their compensation, for the $500,000 of funds they supply, in common stock at par. Holding strictly to the idea of an absolutely "dry" capitalization, we will not allow the bankers to take bonds at a discount, but for the $3,000,000 of funds they advance to get only $3,000,000 par value of bonds. These bonds will have to bear about 7½ per cent interest to meet the bankers' estimate of the worth of capital and compensation for the risk involved. The corporation would then be capitalized at: —

$3,000,000 7½ per cent bonds;
500,000 common stock.

When the corporation now makes 10 per cent on the funds supplied, the 2½ per cent advantage over the 7½ per cent paid for the borrowed money, which the promoters have gained by trading on the equity, will make

earnings available for dividends on their stock amount to 20½ per cent, and if earnings rise to 15 per cent on the funds supplied, they will be 60 per cent, whereas under the "watered-stock" scheme of financing the promoters would have available for their securities approximately 18 per cent and 26 per cent, respectively, in the two cases.

Looked at from the standpoint of probable permanence of organization, which makes the better plan? Under the "watered-stock" plan the corporation would continue without foreclosure or receivership so long as it earned, net, $175,000. It will have to earn over 22 per cent more, under the "dry" plan, or $225,000, net, to keep out of reorganization.

When earnings of the corporation reach a point where the public will purchase its bonds and stock for income, they will sell at a relative disadvantage compared with lower yield securities. Investors dislike to purchase bonds at a high premium because, to keep their principal unimpaired, they must set up an amortization fund to provide for the premium. Even stock above $100 a share sells at some disadvantage because the standard blocks of 10, 50, and 100 shares mount up to sums that tend to keep many people from buying.

So far, in the transactions described, watering the securities has accomplished only use-

ful results. Can we retain these advantages and not suffer the evils alleged? Heretofore the doctrine of *caveat emptor* has enjoyed pretty general application to securities. A consideration of how far the state should go in protecting the individual gets on debatable and long and much debated ground. Would not a publicity requirement, calling for a statement of the manner of issuing the stock, with an independent certified valuation of assets turned over for securities, — something, in short, along the line of the English law covering prospectuses, — afford all the protection the state ought to give the unsophisticated investor? Even without this publicity, would not a removal of the dollar mark from the stock certificate put the uninformed purchaser of stock sufficiently on his guard? In the matter of rates, would not the removal of the dollar mark take away the obscurantism of watered stock? The rate question raises another question difficult, if indeed possible, to answer, that must be settled first: What constitutes an adequate return on invested capital?

When beginning this discussion of watered stock, we stated our intention of not getting into controversial areas. Just as a matter of opinion, however, it may be said that the removal of the dollar mark from stock certifi-

cates seems to accord with the logic of the facts and to promise greatly to improve the situation. Even if the state should see fit to enforce the transfer of assets really worth $100 to the corporation for every share issued, it would still seem worth while to remove the statement from the certificates, "of the par value of $100." I also incline to the opinion that the real usefulness of stock-watering outweighs the possibilities of harm resulting from it. Probably a requirement of further publicity would prove beneficial.

In the problem we have just been considering we will assume that owing to the nature of the project the promoters could not engage in it with funds of less than $3,500,000. They have only $500,000 available and feel so confident of its soundness that they want to trade on as thin an equity as they can. We have seen that the proposed capitalization of $3,000,000 7½ per cent bonds and $500,000 common stock does not work out as safe a financial plan as the one including the watered stock. If the enterprise is not capable of subsequent extension, the promoters must arrange for their thin equity at the start. We are not stating essentially preposterous conditions at all in assuming that an enterprise may, on the one hand, require at least $3,500,000, and, on the other hand, cannot

profitably employ more than that amount. An illustration we have already used will show this. A hydraulic electrical company might require that amount to develop a water power at all, and might not be able subsequently to use essentially more than that. The stream might not afford any more power to develop, or the communities within reach of the company's transmission lines might not offer a market for more power than that already developed. Unless the promoters arrange now to trade on a thin equity, how can they do so later? Suppose they can get the $3,000,000 they require on this plan: —

6 per cent bonds, $1,750,000;
Common stock, $1,750,000.

Notice that under this plan the promoters have less than a third (28 per cent) of the voting power and under the watered-stock plan they kept nearly a half (42 per cent). This takes in the $500,000 of the promoters and places a dollar of assets back of every dollar par value of securities issued. When the corporation reaches an earning power of 8 per cent on this capitalization, let us say that a majority of the shareholders want to trade on a thinner equity. Since the company cannot use any more funds, they cannot get a thinner equity by issuing preferred stock or more bonds. They might form a new corporation

with a capitalization arranged for trading on a thin equity and sell the plant out to it. On the basis of "replacement value" this plan would water the stock just as frankly as the original plan, and besides would run into legal difficulties, questions of authority, etc., that might make it hard or impossible to carry out.

IV

FINANCING AN EXPANSION

UNDER the head of "Trading on the Equity" we discussed the general principles governing the capitalization of a corporation formed to engage in a new enterprise. We have not considered what provision the corporation might make to finance a possible future extension of the business, nor, when this possibility was not foreseen and provided for, how it might meet the emergency.

After the corporation has established an earning power, it may wish to extend its business, build an addition to its plant, erect a new plant, lay its tracks farther, or do whatever other thing the nature of the enterprise may make necessary for expansion. Such an extension of operation requires financing of some kind. What can the corporation do?

It might issue and sell common stock. To do this it must either have some authorized stock still unissued or must get its charter amended to authorize more stock. It may be in place here to call to mind that the statutes governing incorporations regard capital stock as a fundamental matter, and require the

charter creating the corporation to limit to a definite amount the number of shares it may issue. Though these statutes may make many other regulations about a corporation's capital stock, it is not necessary to our purpose here to go into them. Organizers of the corporation may have considered the possibility of expansion and have provided for a much larger authorized capital stock than they expect immediately to issue. Through a misnomer this often goes by the name of "treasury" stock. But, of course, it is not an asset as that name implies. A more careful terminology calls it "authorized and unissued." If the corporation has not exhausted its authority to issue, it may finance by selling such stock. In case it has already put out all the stock it had authority to issue, the corporation may apply for an amendment to its charter increasing the amount authorized.

Financing an extension of business on common stock would increase the equity the common shareholders are trading on. The decision to expand may have come as a result of assured and increasing earnings, in view of which the managers of the enterprise might feel justified in trading on a thinner equity. Besides, the demonstrated earning power would enable them to finance on more favorable terms than in the beginning. They may

avoid adding to their equity by financing either on preferred stock or on bonds. We have already discussed principles that will influence their decision between the two. Besides the consideration of (1) whether or not they can safely increase their fixed charges by issuing bonds, on the one hand, and on the other (2) whether they want to cut down their percentage of the total voting power by issuing stock, add (3) the question of the relative price they can secure in the investment market for bonds and preferred stock, and we have the influences that will determine their decision.

Since the question of relative market prices of classes of securities has arisen in our discussion, we may properly give it a brief consideration at this point. Fashions change in investing as well as in other matters, so that the relative prices obtainable for different classes of securities vary somewhat from time to time. During a period of dull or declining business people may be attaching more importance to the security afforded by a mortgage lien. Through a time of active and expanding business they may be readier to see the advantages rising out of participation in profits.

When current interest rates are running high, bond interest rates tend to follow them. At such a time the managers of a corporation

will feel reluctant to commit their enterprise to the issue of bonds which will carry a high interest for their entire life, twenty, thirty, or fifty years. They are then likely to temporize by financing on short-term notes, which will impose a high rate of interest, to be sure, but will fall due in several years. The corporation managers hope they will be able by that time to finance on long-term securities at more favorable rates. During the period just before the panic of 1907, when interest rates were running high, the corporations issued many millions of notes running three and five years. Once a special financial practice of this kind starts, it acquires a momentum not easy to check. People get a liking for short-term securities, say, and in their desire for this class of paper will not readily subscribe for long-term bonds. So they tend to prolong the situation when the condition creating it has ceased.

Whatever the cause, the financial market from time to time offers better relative prices for one class of security than for another. We have gone into this question simply to explain the third consideration, that of the market, in deciding whether to finance on stock or on bonds. This would determine the decision of corporation managers only when the other influences were relatively neutral. Aside from

the general market, what this particular corporation might be able to get in the way of relative prices for its preferred stock and its bonds would be only the reverse of one of the other two considerations. If increasing the amount of bonds outstanding would raise interest charges to a height endangering the continuance of the shareholders in control during a period of depression, the bonds of the corporation would probably sell at a disadvantage as compared with its preferred stock. Bond-buyers want a practical assurance of income. A strong probability of income satisfies a preferred-stock buyer. If these several influences result in a determination to finance on preferred stock, the same questions of authority arise as in the case of common stock. Does the capitalization stipulated in the company's charter authorize preferred stock at all, or any more preferred stock than the corporation already has outstanding? If not, the corporation must get its charter amended.

On the other hand, if those in control decide to finance on bonds, they have a different set of considerations to face. Are there bonds outstanding already? Is the mortgage under which they are issued open or closed? Is it a blanket mortgage? Are the outstanding bonds subject to call or not?

If the corporation has no bonds outstanding

the matter is simple. Though a lawyer, in the absence of express statutory permission to issue bonds, likes well enough to find an authority expressly stated in the charter, he can, in the absence of either, fall back upon the sufficient principle that creating indebtedness and issuing bonds to secure it is one of the ordinary ways of conducting business that does not need express statutory or charter authorization: a vote of the shareholders and a resolution of the directors will cover the matter.

How many bonds shall they sell? Shall they authorize more than the immediate need requires? What interest shall they bear? How long shall they run? Those in control of the affairs of the corporation must decide these and many other matters of detail. A later chapter on "Form" will discuss considerations affecting the decision.

If the corporation already has bonds outstanding, the situation may be much more complex. Is the authority under which they are issued exhausted or not? That is, has the corporation issued all the bonds authorized? If the bonds are mortgage bonds, this question becomes: Is the mortgage open or closed? In case the amount of "bonds authorized but not issued" covers the sum needed for the expansion, the corporation needs simply to issue

a sufficient quantity for its requirements. When a corporation has no "bonds authorized but not issued," the first question, in the absence of such special restrictions as we discussed in the chapter on "The Instruments of Corporation Finance," would be whether or not the outstanding bonds were issued under a blanket mortgage. For the few who may not be familiar with the phrase "blanket mortgage," we may explain that such a mortgage covers both "present and future acquired property." In the case of bonds so secured, no matter what new property the corporation may get, it comes under the existing mortgage, and the corporation cannot issue bonds on the property of equal rank as a lien on it with those already outstanding.

Perhaps the bonds outstanding under such a blanket mortgage are "subject to call," and when the desire for expansion comes, the corporation managers may find it expedient to call in the outstanding bonds in order that they may put out a new and larger first mortgage issue with as many bonds authorized as needed to cover the expansion, and more if thought desirable. This possibility of contingencies not immediately foreseen makes highly desirable the reservation to the corporation of the call privilege. We shall discuss elsewhere other considerations affecting the

right of call. Bankers for the corporation may have insisted on the blanket mortgage. Their doing so shows that they looked for security not merely to the present value of particular assets, but to the value of the enterprise as a whole. In case the necessity of foreclosure arises, they want to be able to take over everything required to run the business. Conceivably the corporation, through changing conditions, or as a result of experience, might find it expedient to move the location of its plant and install newer machinery. Advantages gained might amply compensate for the loss in abandoning the old plant. Under such circumstances the holders of bonds secured by a mortgage covering only the assets owned at the time of its execution might find that, however ample such assets were when the bonds were issued, they are now worth very little. Though an extreme case, this is quite within the bounds of possibility, and shows why corporations, under the insistence of bankers, so commonly place blanket mortgages on their properties.

A like insistence on the part of the bankers also accounts for the fact that corporations do not oftener create mortgages authorizing the issue of more bonds than they require for immediate purposes. Suppose a corporation has assets worth $2,000,000, and bonds outstand-

ing to the amount of $1,000,000. The claim of the bondholders amounts to only 50 per cent of the value of the property on which they can enforce it. If the corporation has $2,000,000 bonds authorized under the mortgage, and now issues the other $1,000,000 at par, the assets rise to $3,000,000, to be sure, but the claim of the bondholders now amounts to $66\frac{2}{3}$ per cent of their value. Besides vitiating the security, additional authorized bonds coming into the market in this way tend to depress prices below the point representing the difference they cause in the strength of the security. These considerations explain why corporations do not oftener have "authorized bonds" ready to finance expansions.

It may be, however, that if the corporation has bonds outstanding they are not secured by a blanket mortgage. If in such circumstances it wants to finance an expansion it can create a new first mortgage covering the new assets. When corporations have closed but not blanket mortgages, they most frequently finance an extension on bonds called "first and consolidated mortgage," or "first and refunding," or some similar name. All mean the same thing, namely, that, since the existing mortgage is not of the "blanket" variety, the corporation can place a first mortgage on the new property. Instead, however, of limiting

the authorized issue under the new mortgage to just the amount needed for the extension, the shareholders, at the request of the directors, probably authorize an amount equal to the existing bonds and enough more to finance the extension. The mortgage stipulates, however, that an amount of these new bonds equal to the old outstanding bonds can be issued only to refund the old bonds. Although it may be made possible, so far as the new mortgage is concerned, to use the new bonds at any time to retire the old, ordinarily those in control of the affairs of the corporation have no intention or expectation of retiring the old bonds before they fall due. When the old bonds do mature, the corporation managers will simply replace them with the authorized and unissued bonds under the new mortgage. Until that time the new bonds will be a first mortgage on the new property and a second mortgage on the old.

New bonds issued under such a "first and refunding mortgage" may vastly exceed the amount needed for the new construction and the proceeds go to meet other requirements of the corporation. Often, indeed, the bonds have the security of a first mortgage on only an insignificant amount of property, just enough to permit the corporation to use the term "first mortgage" in the title of the

bonds. Investors like the sound of "first mortgage." It stands for everything safe. "Second mortgage" sounds abhorrent. When the bankers of the corporation arrange for a new issue they avoid it and substitute some euphemism. So far as names go, one would hardly guess that second mortgages exist in corporation finance.

Occasionally, if the security has come down from early days, its title confesses the remoteness of the lien. Outstanding bonds of the Erie Railroad, for example, run up to an acknowledged fifth mortgage before they begin to get the word "first" into the title of remoter securities. Its capitalization presents: —

$2,482,000 New York and Erie Railroad first mortgage 4s, 1937; a first mortgage on the main line from Piermont to Dunkirk, 446.78 miles.

$2,149,000 New York and Erie Railroad second mortgage 5s, 1919; a second mortgage on the same mileage.

$4,617,000 New York and Erie Railroad third mortgage 4½s, 1923; a third mortgage on the same mileage.

$2,926,000 New York and Erie Railroad fourth mortgage 5s, 1920; a fourth mortgage on the same mileage, and besides a first mortgage on the branch from

Graycourt to Newburgh, New York, 18.73 miles. (It seems decidedly odd to-day that the bankers missed the opportunity to call this a "first and" something mortgage.)

$709,500 New York and Erie Railroad fifth mortgage 4s, 1928; a fifth mortgage on the main mileage and a second on the Newburgh branch.

Apparently the period of unsophistication ended when the road changed from the New York and Erie Railroad to the Erie Railway, for the next and *sixth* mortgage issue becomes the

($16,891,000) Erie Railway *first consolidated mortgage* 7s, 1920.

However true that this is the first *consolidated* mortgage, it is not a first mortgage on anything. After this issue comes the $80,342,000 Erie Railway first consolidated 4s, 1996, which "get by" apparently because, though not the first consolidated issue of the road, they are the *first* consolidated issue *to bear interest at the rate of 4 per cent.* When the Erie changed from the Erie *Railway* to the Erie *Railroad*, and came to issue an eighth mortgage, it put out the ($22,000,000) Erie Railroad *general mortgage* convertible 4s, 1953. Acting on the principle under which the bankers had named the two preceding issues,

this should carry the name *first general* mortgage. Apparently, however, the idea of breadth of lien serves sufficiently to indicate strength without any attempt to draw attention away from the altitude, or distance above the ground, of the security. We took the Erie for discussion nearly by chance. Almost any large railroad system would afford examples of such rather blind names.

So far, we have discussed the possibility of expansion only through the one original corporation. We have now to consider what may be done through the creation of other subsidiary corporations; and through mergers, consolidations, and combinations of various kinds. First, we shall take up only the creation of new corporations for the extension of the original business and leave for later discussion the financing incidental to joining established businesses.

Even when a corporation has a blanket mortgage, it can, by the intervention of a construction company, finance on essentially a divisional first mortgage. The construction company can build the extension, of whatever kind it may be, and borrow the money on temporary loans with its bonds as collateral. Owning all the stock of the construction company, the original corporation stands back of

it and lends it credit. When the time comes, which may be whenever the property of the new company has been assembled and the lien of the bonds attached, the original company can vote all the stock in the new company to sell all the new assets to itself. It will thereupon assume the bonds secured on the new assets. First mortgage bonds of the original company, though issued under a blanket mortgage, never become a first mortgage on the new assets, because the new assets never become the property of the original company until after they become subject to the lien of the new bonds. The new bonds are secured on the new assets, and on their assumption become a direct general obligation of the original company. Consequently the purchasers of the new bonds are in just as good a position as if the original company had no blanket mortgage. Of course, the blanket mortgage will cover the new assets as a second mortgage. So the corporation cannot now create a second mortgage on the new property, as it could have done if there had been no blanket mortgage.

The original corporation need not assume the new bonds. It can leave the subsidiary corporation in existence and still sell new bonds having a first right against the new assets and also having the credit of the original

company back of them. Without the general credit of the original company the bonds of the subsidiary would sell at a disadvantage. They need the better-known name, and the assurance of a going concern with an established earning power. Particularly in the case of the expansion of a railroad by branch lines, the branch-line bonds need the obligation of the main-line company to assure the continuance of favorable traffic relations. The managers of the enterprise can give the bonds of the subsidiary the credit of the original company in two ways.

The original company can *guarantee* the bonds of the subsidiary.

In another way the managers of the enterprise can put the credit of the original company back of bonds secured on the property of the subsidiary. They can use the bonds of the subsidiary as collateral against which the original company can issue its own bonds. This, of course, makes the new security sold a direct obligation of the original company, — not, as in the other case, an indirect obligation. This gives them an advantage from a market standpoint just from the fact that they directly carry the name of the older, better-known corporation that has the established earning power. Probably the fact that they are collateral bonds instead of having

their lien directly on the property to some extent offsets, from the market standpoint, the advantage of being the direct obligation of the parent company. In actual security they have all the effect of a direct first mortgage, but the fact that they have to be described as "virtually a first mortgage," or something to that effect, certainly does not help them market-wise. The public knows that a direct first mortgage is, at any rate, a first mortgage, for whatever it may be worth, but a collateral bond may be almost anything.

For an illustration the St. Louis & San Francisco Railroad Company showed both forms of financing an expansion by branch lines. Ozark & Cherokee Central first mortgage 5s, due October, 1913, $2,880,000, are secured by first mortgage on the road from Fayetteville, Arkansas, to Okmulgee, Oklahoma, 143.65 miles. The St. Louis & San Francisco Railroad Company guarantees both principal and interest. St. Louis & San Francisco Railroad 4½s, due February, 1912 (called for redemption August, 1911), $3,351,000, were secured by the deposit in trust of the entire capital stock and first mortgage bonds, $4,500,000 each, of the Arkansas Valley & Western Railway Company, 175.25 miles, running from Western Junction to Avard, Oklahoma.

A modification of this second form, illustrated by the St. Louis & San Francisco 4½s, due August, 1912, seems almost ideal for a corporation looking forward to systematic expansion of this kind. Such comparatively small issues, as railroad finance goes, of two or three millions sell at a disadvantage compared with a larger issue. They are not large enough to form a basis for general active trading such as the big issues afford. Any bonds which have a really active market sell at a considerable advantage over bonds of equal security which may have a good, but not a quick and very close market. An investor can at any time either buy or sell a really quick bond at a selling price of not more than a quarter of a point less than the price at which he could buy. With a less active security, though still one with a good market, in trying to make a quick sale he might find that he would have to take a point or more less than the price at which he could buy. The constant quotation and the close market make a really active security much more desirable collateral at the bank.

Such issues as the $14,376,000 Missouri Pacific Railway Company 5 per cent 30-year gold bonds, due January 1, 1917, show an appreciation of these principles on the part of those controlling the finances of the cor-

poration. The authorized issue amounts to $15,000,000, and the right to put them out is limited to so much per mile of actually completed mileage of railroads whose first mortgage bonds are deposited in trust to secure bonds of this issue. The bonds outstanding are secured by the deposit in trust of $17,215,000 first mortgage bonds covering 1120.43 miles of railway of seven subsidiary companies. A similar issue of the Missouri Pacific, the $9,636,000 of an authorized $10,000,000, are protected by a stipulation that they shall not be issued to exceed 80 per cent of the par value of the first mortgage bonds of the subsidiary companies deposited to secure them. This issue is secured by the deposit of the first mortgage bonds of no less than twenty subsidiaries ranging from two miles to one hundred and thirty-one miles of line.

A general collateral mortgage of this kind provides an issue large enough to assure active close trading in the market. It has all the advantages of being a direct obligation of the well-known parent company and essentially a first mortgage on the property of the subsidiaries. By having a large authorized amount, with proper restrictions as to issuing only on the deposit of stipulated quantity of collateral comprising securities of actually operating properties, the parent company can keep on

financing extensions out of the one issue. As it requires new funds from time to time, it has an actually existing market for the securities it wants to finance on. In case of default, the bondholders occupy a better position in bargaining on a reorganization than the bondholders of small properties not bound together in this way. That is to say, a railroad needs all its branches more than it needs any single one.

So far the discussion has assumed a corporation expanding simply through an extension of its own enterprise. We have not touched on the possibility of expanding through joining in some way with an existing independent enterprise. The words "consolidation," "merger," and sometimes "combination," are loosely used to indicate such an expansion without any discrimination as to the manner of joining. They may indicate one of two very different things: (1) physical merger, or (2) combination through stock ownership. That is, a corporation may extend either through acquiring title to the assets of another corporation or by acquiring all, or a controlling amount, of the stock of another corporation.

We shall leave for a little later consideration the matter of creating a new corporation for the purpose of consolidating two or more

existing corporate enterprises through taking over their assets, or combining them by stock ownership.

Provided the shareholders of one corporation act in a situation giving them the legal right, they can vote to sell the assets of their corporation to another corporation. Under such circumstances any of the methods of financing already indicated will serve to finance the acquisition of the new assets. If the selling corporation has bonds outstanding that are not to be retired before the merger, the purchasing company can assume them, just as an individual might purchase any property subject to a mortgage and assume the mortgage. When the purchasing company has an existing blanket mortgage, which is, say, a first mortgage, it will become a second mortgage on the new assets.

If legal difficulties prevent a physical merger, or other considerations make it undesirable, one corporation may combine with another through stock ownership. The financial problem then is: How shall one corporation acquire the stock of the other? Perhaps the stockholders of one corporation will take the shares of the other in payment for their own. They swap stock. Then the stock of the "combined" corporation goes into the treasury of the "combining" corporation,

and the amount of "outstanding" stock of the "combining" corporation becomes so much larger. When this procedure is impracticable, the purchasing corporation may sell its own stock to raise funds for the purchase of the stock of the other corporation. Or it may acquire part by swapping and the rest by purchase.

Collateral bonds afford a means of financing the purchase of stock in another corporation. The purchasing corporation may borrow money on temporary loans to make the purchase, then fund the temporary loan into the permanent one of bonds, with the purchased stock as collateral security. American railroad finance affords some rather notable examples of extension by this means.

The Atlantic Coast Line Railroad owns $30,000,000 of Louisville & Nashville Railroad stock out of the total issue of $59,917,220, and has outstanding, secured on this stock, $35,000,000 Atlantic Coast Line Railroad, Louisville & Nashville collateral, 4s, October, 1952.

The Northern Pacific Railway and the Great Northern Railway are both obligors on the $215,227,000 of bonds known as the Chicago, Burlington & Quincy joint 4s, July, 1921, by means of which the two obligor roads own approximately 98 per cent of all

the capital stock of the Chicago, Burlington & Quincy Railroad.

The Oregon Short Line Railroad has outstanding $45,000,000 ($100,000,000, authorized) refunding 4s, December, 1929, secured on $108,000,000 Southern Pacific Company stock ($374,451,800 outstanding); also on $7,206,400 preferred and $10,255,400 common stock of the Baltimore & Ohio and $8,000,000 New York Central & Hudson River Railroad stock, besides $23,443,000 San Pedro, Los Angeles & Salt Lake 4s.

Remembering that the Union Pacific Railroad Company owns $27,350,700 out of $27,460,000 capital stock of the Oregon Short Line Railroad Company, recalling also that the Southern Pacific Company owns the $13,800,000 preferred stock and $67,274,200 of the $67,275,500 common stock of the Central Pacific Railway Company by means of $30,618,500 Southern Pacific Company, Central Pacific stock collateral 4s, 1949, we can begin to get an idea of how useful some financial organizers have found this stock collateral bond device in acquiring control of and combining properties.

Rock Island furnishes the standard model of pyramiding in this way to acquire control of large properties with a relatively small amount of capital.

One corporation hardly combines with another unless the other owns all the stock, except directors' qualifying shares. In a looser sense the acquisition by one corporation of a majority of the stock of another may be considered a combination, possibly the ownership of less than a majority, if enough to give control on the principles already discussed, may be so called. From that point the ownership by one corporation of stock in another grades off through all the degrees of intercorporate relationship, till it may become so small as just to indicate a sense of friendliness.

Financial plans suggested so far for expansion have not contemplated the creation of new corporations except as subsidiaries. Incorporating a new company, to which two or more existing corporations become the subsidiaries, will accomplish any of the results of combination already spoken of. It should be borne in mind that if one corporation acquires absolute control of another through owning all the capital stock of the other, the owning or principal corporation can at will turn the combination by stock ownership into a physical merger or consolidation by taking the necessary legal steps.

A new corporation can combine two or more others with itself through any of the devices already spoken of, as swapping its stock

for the stock of the others, or acquiring the stock of the others through the issue of collateral bonds. The United States Steel Corporation was, as everyone knows, a new corporation formed to combine a number of others. Most of the big consolidations of the past two decades were effected in this way.

Long-term leases afford another simple form of combination. Railroad finance especially takes frequent advantage of them. They are applicable, however, to combinations of industrial enterprises and are sometimes used for that purpose.

Most commonly the transaction takes the form of the shareholders of one corporation voting to lease its property to another corporation in return for the other's agreement to pay a rental equal to a certain percentage on the stock of the lessor company. Ordinarily the lessee company directly guarantees the payment of a stipulated dividend on the stock of the lessor, which thereupon sells in the market as *guaranteed* stock. If the lease is for a long term, as ninety-nine or nine hundred and ninety-nine years, the combination on its face does not differ very much in results from a physical merger financed by bonds secured on the new assets. In the case of the lease, if the lessee corporation fails to pay the guaranteed dividend on the lessor's stock,

the shareholders of the lessor corporation can take back their property. Likewise in the case of the physical merger, the purchasers of the bonds secured on the assets of the merged corporation can take the property on any failure of the purchasing corporation to pay interest. There is one important difference: A receiver of the lessee corporation, generally speaking, can repudiate the lease, but a receiver of a corporation which has issued bonds to pay for new assets cannot repudiate the bonds.

Looking at the matter from another standpoint, a lessee corporation conceivably might take advantage of a lease to make the leased property relatively unimportant, but the shareholders of the lessor corporation, in event of a receivership of the lessee, would have no recourse except to their own property. On the other hand, holders of bonds issued to pay for the property of the merged corporation very likely would occupy such a position with regard to the risk as to be the first to move for a receiver of the consolidated corporation, and would have recourse to the earning power of all the assets to recover their interest.

Provided the shareholders of the corporation which it is desired to merge can and will authorize the lease, the financing problem, of

course, becomes very simple. In fact there is none. The lessee does not have to provide any funds to put the transaction through. It assumes a larger obligation in expectation of a still larger income. Presumably the leased property is more valuable to the lessee, for one reason or another, than to the shareholders of the lessor corporation. Whatever reasons would apply for a merger or consolidation of any kind might apply for a combination by lease. We have not undertaken to go into these reasons, but simply to indicate how, when found desirable, the managers of the corporations concerned might carry it out.

We may examine several examples of guaranteed stock which sufficiently indicate the purpose and scope of this form of financing. The American Telegraph and Cable Company has $14,000,000 guaranteed stock outstanding. The property of the company is leased to the Western Union Telegraph Company for fifty years from May 12, 1882, at a rental of 5 per cent on the stock. The lessee is to maintain and renew the cables and equipment. The line of the Boston & Albany Railroad extends from Boston, Massachusetts, to Albany, New York, and makes, with branches, a total of 304 miles. The corporation has capital stock outstanding to the

amount of $25,000,000, and has leased its property to the New York Central & Hudson River Railroad for ninety-nine years at a rental of guaranteed dividends of 8 per cent on the stock, organization expenses, interest on bonds, taxes, expenses of maintenance, etc. The Boston & Albany Railroad Company received $5,500,000 New York Central 3½ per cent 100-year debentures to pay for certain property not included in the lease, the income from which yields about .77 per cent additional per annum on the stock. Dividends are paid quarterly at the following rates: 2 per cent in March, 2½ per cent in June, 2 per cent in September, and 2¼ per cent in December.

The line of the Boston & Providence Railroad extends from Boston, Massachusetts, to Providence, Rhode Island, with branches, making a total of sixty-three miles. The property is leased to the Old Colony Railroad for ninety-nine years from April 1, 1888, at a rental of interest on bonds, dividends of 10 per cent per annum on the $4,000,000 stock, and $3000 per annum for organization expenses. The Old Colony Railroad is leased to the New York, New Haven & Hartford Railroad for ninety-nine years from March 1, 1893, and the lessee assumes all liabilities. The Pittsburg, Fort Wayne & Chicago Rail-

way extends from Pittsburg, Pennsylvania, to Chicago, with a branch, a distance of 470 miles. The capital consists of $38,875,300 special improvement and $19,714,286 common stock. The special stock is subject to the common, and was issued to the Pennsylvania Railroad for improvements. The property is leased to the Pennsylvania Railroad in perpetuity from July 1, 1869, at a rental of interest and sinking-fund on bonds and 7 per cent per annum on both classes of stock. The lease was assigned to the Pennsylvania Company on the lessee's assuming all obligations of the lessor.

The rate of dividends guaranteed indicates the valuation placed on the leased property. Though ordinarily it runs from 4 per cent to 8 per cent, it may, however, be almost anything. For example the Maine Central Railroad guarantees 2 per cent on the $300,000 capital stock of the Rumford Falls & Rangeley Lakes Railroad. The Maine Central Railroad also guarantees 2 per cent on the $4,392,538 capital stock of the Portland & Ogdensburg Railway, running from Portland, Maine, to Lunenburg, Vermont. These represent low points. Of course the lessee always guarantees interest on any bonds of the lessor. The Philadelphia & Reading Railway pays 12 per cent on the capital stock of the

Philadelphia, Germantown & Norristown Railroad. The Delaware & Hudson Company pays a dividend of $6\frac{1}{4}$ per cent on the $345,360 Rome & Clinton Railroad stock. The old Metropolitan Street Railway Company of New York City guaranteed 16 per cent on the $1,000,000 capital stock of the Eighth Avenue Railroad.

To make the discussion complete, we need to consider a type of holding company somewhat different from the ordinary holding company formed for the purpose of combination. Usually the companies taken with an industrial consolidation are competitors. That is so from the very nature of the case. Any two or more concerns making the same kind of goods must to some extent be in competition. Companies taken into a railroad consolidation ordinarily are roads that lead into each other's lines in such a way as to form an extended system. In fact, so far as interstate lines are concerned the federal law prohibits a complete consolidation of any other kind. There is a class of companies, however, which unite concerns that are not physically connected in any way, and cannot from the nature of their business be competitors; at least, they cannot be in selling, though perhaps they might be in buying. One or two examples will explain the situa-

tion better than any amount of further general statement.

The American Light and Traction Company has outstanding $11,146,700 common and $14,236,200 6 per cent cumulative preferred stock. This company owns at least 97 per cent of the stock of the following concerns: Milwaukee Gas Light Company; Detroit City Gas Company; Grand Rapids Gas Light Company; Madison Wisconsin Gas and Electric Company; St. Joseph Gas Company; St. Paul Gas Light Company; Binghampton Gas Works; Consolidated Gas Company, Long Branch, New Jersey; Muskegon Traction and Lighting Company; St. Croix Power Company of Somerset, Wisconsin; Southern Light and Traction Company.

The North American Company, with $29,793,300 capital stock outstanding, controls the Milwaukee Electric Railway and Light Company; Milwaukee Light, Heat and Traction Company; Milwaukee Central Heating Company; Racine Gas Light Company; Kenosha Gas and Electric Company; Watertown, Wisconsin, Gas and Electric Company; Detroit Edison Company; Union Light and Power Company, St. Louis; St. Louis County Gas Company; Suburban Electric Light and Power Company, St. Louis; United Railways Company of St.

Louis; Mississippi River Power Distributing Company; West Kentucky Coal Company.

Such concerns as the Electric Bond and Share Company present a type still further away from the holding company for the ordinary form of consolidation. They are really financing concerns, and perhaps look to doing more thoroughly from the beginning, with subsidiary companies in the construction stage, what companies like the American Light and Traction and the North American have done with companies already established. The Electric Bond and Share Company and similar organizations put out general issues of collateral bonds secured on the first mortgage bonds of new traction, electric lighting, or other public utility concerns. The issuing companies reserve the right to substitute collateral, so that, whenever the affairs of a subsidiary company warrant, they can take out from under the trust deed the securities of that particular corporation and put them on the market. When they do that they have to return other collateral of a required standard.

Though this principle has been applied so far only to public service corporations, nothing in the idea prevents it from being applied to industrial undertakings. Only the financing, generally speaking, of industrials is

not as well organized as the financing of public utilities. As we have seen all along, the railroads present the most developed and most complex forms of financing. Likewise the organization for financing railroads has developed further than the organization for financing the public utilities, and that in turn further than the organization for financing industrials.

Though somewhat aside from corporation finance in any strict sense, the practice of financing real estate by means of collateral security-issues presents a matter of interest. Such issues follow two general forms. In one a real estate development company issues its own general obligation secured on the equity of redemption of specific real estate. That is, the company finances its developments, so far as it can, on regular real estate mortgages; then finances the equity by the issue of its obligations secured on the equities of a number of properties against each of which a specific first mortgage is outstanding. Such development companies may vary this general plan in many ways.

Mortgage guarantee companies and similar institutions issue the other type of real estate collateral securities. They simply place a number of real estate first mortgages as collateral under an issue of their bonds. Since

the collateral mortgages do not all fall due at the same time, the issuing company must reserve the right of substitution. This is not a matter of corporation finance at all, but simply a device for splitting-up real estate mortgage securities into uniform and relatively small amounts to fit the pocket-book of the small investor who likes that kind of security. The issuing company makes its profit out of the difference between the rate of interest the mortgages pay and the interest the collateral bonds bear. In return it adds its own obligation to the obligations of the mortgagors, and further lessens risk by the distribution of security.

Railway terminals often give rise to a form of financing a little different from any yet mentioned. Located in the hearts of big cities, they frequently do service for more than one railroad. Companies using them are likely to finance them through a separate corporation, and become in one form or other joint obligors on any securities issued to the public to raise the funds to pay for land and construction.

One example will illustrate the whole situation. The Kansas City Terminal Railway Company owns and operates the new joint terminal in the city from which the company takes its name. The property serves to give

ten railroads an entrance into this big Western commercial centre. They are the: Atchison, Topeka & Santa Fé Railway; Chicago & Alton Railroad; Chicago, Burlington & Quincy Railroad; Chicago, Milwaukee & St. Paul Railway; Missouri, Kansas & Texas Railway; Missouri Pacific Railway; St. Louis & San Francisco Railroad; Union Pacific Railroad; Wabash Railroad.

Each company agrees to pay one tenth of the principal and interest on the bonds issued by the terminal company, one tenth of the taxes, and its share of the operating expenses. Each is also jointly as well as severally liable; that is, if any one or more of the railroad companies entering into this undertaking should default on the agreement, the others would have to make good the amount defaulted.

The terminal company has authorized $50,000,000 first mortgage 4 per cent bonds, due January 1, 1960, subject to call as a whole on January 1, 1930, or on any interest date thereafter. Some $12,500,000 of these are already outstanding. It is estimated that the property will cost when completed about $30,000,000. The property comprises: —

1. A union passenger station and fifty-one acres for trackage.

2. A six-track line of 6.61 miles as an approach or throat to the station.

3. A four-track line 2.36 miles long connecting the throat with the main line of the Chicago, Burlington & Quincy Railroad.

4. A four-track line $6\frac{1}{4}$ miles in length along the north side of the city and connecting with the throat.

5. Two double-track lines 6.72 miles in length reaching the stockyards and the railroads from the west.

Plans for the whole include 188 miles of main and industrial railroad tracks, four local freight stations, passenger, freight, and switching yards, in addition to the big union passenger station.

Terminals like these are to-day one of the most important keys to the railroad situation. We have gone into this description at some length to show the nature of the property financed by these joint undertakings, and to bring out some of the reasons, besides the obvious one of convenience, for the joint financing. Aside from the matter of convenience, they would be too great a burden on the single line.

The Kansas City Terminal is one of many. To cite just another, the Boston Terminal Company owns the property known as the South Station in Boston, which gives an entry into that city to the New York, New Haven & Hartford Railroad and the Boston

& Albany Railroad, — now, by lease, part of the New York Central system. These two companies pay a rental in monthly installments of a sum sufficient to meet operating expenses, 4 per cent on $500,000 of stock which the railroads themselves own, and the interest on the $14,000,000 first mortgage 3½ per cent bonds, due 1947, which the terminal company has outstanding.

This situation of a separate terminal corporation leads to mentioning a tendency to what we may call a corporate division of labor. Organizers of corporate enterprise and their lawyers are multiplying subsidiary corporations. They often form a new one for each division of the business. A single enterprise may have a corporation to erect buildings, another corporation to own and operate them, a corporation for the purchase of raw materials, one for its transportation, another for the manufacturing operation, and still another for the selling organization. Only time can tell whether this tendency will spread more widely and extend to still further division, or whether the investing public will insist on a greater simplicity in securities and a massing of the credit of the whole enterprise.

V

AMORTIZATION

In the chapter about "Trading on the Equity" we discussed considerations affecting the desirability of corporate indebtedness. Stating the case briefly, the borrowers in a business by creating a debt take a greater risk on the capital they have committed, and the lenders accept a lower return and less influence in the management for their capital in consideration of a smaller risk.

Let us repeat an elementary matter just for the sake of having the facts directly before us. Take, for example, a business that will average a return of, say, 8 per cent on all the capital invested in it. Then an investment of $1,000,000 will give an average annual return of $80,000. If by placing a mortgage on the property the managers of the business can borrow $500,000 at 6 per cent, they will, to be sure, have to pay $30,000 annually for this capital, but will have $50,000 left for income on their own $500,000 invested in the business. Borrowing increased their return from the 8 per cent they would have received without the hired capital to 10 per cent. They are

running the risk that next year the business may earn only $50,000. In that event they will still have to part with $30,000 to the lenders and have only $20,000 for themselves. Out of a return on the total capital of 5 per cent they will receive only 4 per cent. If the business comes up to expectation, however, and earns an average of 8 per cent on all capital, the owners, who are the shareholders, gain largely. This expectation of greater gain furnishes the regular business reason for borrowing.

Such a reason, however, is not temporary but permanent. If the transaction is based on a good business principle to-day, it continues good business to-morrow and always. Nevertheless, in spite of the permanence of such a reason, an individual conducting a business might wisely contemplate paying off his debts, because he is liable to accident and death at any time, and might not wish to have his estate exposed to the greater hazard of trading on the equity. This consideration of prudence does not apply to a corporation, which is perpetual in its nature.

Since to have a debt is good business, why should a corporation which has once created one ever amortize it? There are two reasons. Amortization (1) permits a corporation to readjust its financial plan to changed or

changing conditions, and (2) meets a requirement of those advancing the borrowed money, or procures the money on sufficiently more favorable terms to make the provision for retiring the debt good policy.

In the ordinary situation, if the corporation were the only party to the debt bargain it might not amortize the debt at all, or provide only for reducing instead of retiring it. From the single standpoint of a debt, as such, being good business, one without any maturity would be ideal. Some English railroads do have perpetual debts, usually debentures of one form or another. American corporations have not commonly adopted such a form of indebtedness. There are a few instances of it. For example, the Public Service Corporation of New Jersey, operating the traction lines in that populous section adjacent to New York City, has outstanding about $20,000,000 perpetual interest-bearing certificates. Perpetual indebtedness does not, however, for the present at any rate, accord with the American custom. As a business expedient it is of doubtful propriety. There are other considerations besides the merit of being in debt. American corporate creditors do not want to rely solely on the "market" for converting their asset into cash. They want an obligation to return the principal at a

time certain, which they can wait for if they wish. Of course, this is notably true of that vast majority of smaller corporations whose securities never have an active market anyway.

From the standpoint of the debtor party a perpetual debt does not afford the corporation the desirable periodic opportunity for readjusting financial arrangements in accord with changed conditions in the particular enterprise or the general business situation.

We should remember, however, that paying the creditor and paying the debt are very different matters. American railroad corporations have regularly adopted the practice of paying the creditor, but not of paying the debt. In other words, they do not amortize a debt but refund it.

Since a continuance of the debt seems desirable from the argument so far, why do so many corporations other than railroads provide for amortization by sinking-funds or by serial repayment? Are they mistaken in their policy, or do they consider business reasons beyond those indicated? We have already twice mentioned one reason, the opportunity amortization gives for readjusting financial arrangements to accord with changed conditions, whether in the general business situation or in the particular enterprise. It may be

that in the course of time the corporation cannot advantageously use so much capital in the business as at present and will therefore desire to pay off part of the debt. Refunding would meet the contingency of conditions changing for the better, and enable the corporation to borrow on more favorable terms or in large amounts. The business may have grown so prosperous, its earning power so increased, or the general business situation may have grown better, so that, whereas at first it may have had to pay, say, 6 per cent for its borrowed money, it can at the maturity of this issue now borrow at, say, 4½ per cent. This is taken up at length in the section on the interest rate. Or the corporation may want to increase its borrowings in order either to trade on a thinner equity or to extend the business. By a refunding operation it can do either of these things advantageously. It can issue the new bonds at the lower rate, or it can put them out in a larger amount than the issue they refund. On the other hand, if conditions make it desirable to retire or reduce the debt, the corporation cannot do either unless it has provided funds.

Then, too, when a specific asset stands back of a specific liability, and that asset by its nature decreases during the lifetime of the debt, conservative corporate management

compels an amortization of the debt at least as rapid as the decrease in the value of the asset, or the building-up of a special fund to stand in place of the decreasing value. Equipment bonds stand in just this position, and form an exception to the general rule that railroads do not provide means for the retirement of their debts. The bonds are issued for the purchase of specific cars and locomotives and are secured by title to the equipment bought. A serial maturity retires them faster than the depreciation. Serial repayment is the rule, too, in the case of the Great Lakes steamship bonds issued on the security of single vessels. It is also the rule with bonds issued on the security of natural resources which diminish with use, as bonds on timberlands and coal or other mines.

With the railroad equipment and the steamboat the decrease in the value of the asset is regular, and the debtor corporation must, in prudence, provide with corresponding regularity for amortization. In the case of bonds issued on natural resources, prudence dictates that amortization need only be provided to keep pace proportionately with the quantitative decrease of the asset. Regularly the amortization agreement provides that a certain amount per thousand feet of timber cut or per ton of coal mined be set

aside for the sinking-fund. This sum should be large enough at least to maintain the ratio of assets to liabilities. Further to assure the bondholders the corporation usually agrees to cut or mine annually an amount sufficient to provide for the retirement of all the bonds by the time of their maturity. It is common, in fact, to have such bonds actually mature in series.

Assets of a timberland, unless conserved by forestation, or of a coal mine, necessarily diminish with use. With the ordinary public service or manufacturing corporation this does not follow. Reasonably careful management requires that the corporation at the very least spend enough in maintenance to keep up the value of its assets. If the corporation keeps its assets in the same proportion to its debt it satisfies the demands of prudence.

A debt results from an agreement however, and it is an old maxim that it takes two parties to make a bargain. So far we have discussed only the considerations affecting one party, the debtor corporation. What the corporation may consider adequate for the demands of prudence, the creditor party may not deem nearly equal to his desire for safety. For example, if the value of a special asset pledged as security decreases from its very

nature, as in the case of the railway equipment or the steamship, the creditor will not rest satisfied with any less assurance of the maintenance of the equity than that given by serial repayment. Amortization in this way requires that certain of the bonds definitely fall due each year. Since failure to pay the maturing bonds constitutes a default of principal, with the consequent loss of right to control the property, a corporation cannot fail merely as a matter of convenience to keep up the amortization.

Though amortization may not be so important to the creditor in cases other than those already mentioned, he may nevertheless require it as a condition of investing. Stating the actual situation more nearly, the banking-house arranging to finance an issue of bonds may insist on a sinking-fund as a measure of protection to their clients. That leads immediately to the main part of the discussion. Assuming that the debt is to be amortized, in what manner shall the corporation provide for its repayment?

For the sake of facilitating statement, the discussion will assume the common case of a corporate debt represented by bonds and secured by mortgage to a trust company for the benefit of the bondholders. Principles of amortization, however, would be the same

for other forms of debt as for that. Several questions will test the merit of the plans of amortization now in use.

1. What gives assurance that the stipulations for amortization will be carried out?

2. How will the amortization provisions affect the market for the security?

3. How evenly do they distribute the burden of the debt?

4. What work do they involve in carrying them out?

5. What assurance do they give that they equal the requirements?

6. How does the cost to the corporation compare with that of other forms of amortization?

To explain question 3, — the burden of a debt comprises the obligation to pay interest and the obligation to pay principal. Serial repayment and sinking-funds have for their very purpose the distribution of this burden of principal payment over a period of time. Since principal payment, however, makes only part of the burden, the manner of distributing this may disturb the equality of interest payment and result in an uneven distribution of the whole debt burden. Ideally the burden of principal and interest combined should weigh evenly through the period of the debt.

Methods of amortization fall under several heads: —

(*a*) The bonds may mature serially.

(*b*) The corporation may build up a redemption fund by depositing cash with the trustee.

(*c*) It may invest the redemption fund in securities other than those it has issued itself.

(*d*) It may use the fund to purchase securities of the issue being amortized.

Serial maturity meets with an objection in the answer to the second of the test questions — as to the effect of the amortization provisions on the market for the security. Such a maturity makes impossible a uniform quotation in terms of price, and, therefore, with one or two other considerations affecting the matter, makes difficult the creation of an active market such as exists on the stock exchange and through street trading in many securities capable of a uniform quotation in terms of price. Take, for example, the New York Central Railroad equipment 4½ per cent bonds, due serially from January 1, 1911, to January 1, 1925, inclusive. A price quotation for the entire issue except par (100) would be impossible. Anywhere below par the bonds having the shortest time to run are worth the most in terms of price. That is to say, a 4½ per

cent bond having only three years to run would sell at 99.17 in order to yield 4.80 per cent. If it had nine years to run it would have to sell at 97.83 in order to yield 4.80 per cent. Without making any allowance for the investment demand at the time running to short-term or long-term securities, if the nine years' bond were worth 97.83, then the three years' bond would be worth 99.17.

A uniform quotation can be given, to be sure, in terms of basis, as, say, "any maturity, price to yield $4\frac{3}{4}$ per cent," or "price to yield $4\frac{3}{4}$ per cent, less one eighth." Such a quotation is too technical for any but the initiated buyer. It involves too many considerations. Furthermore, fashions of investing, as already indicated, throw out of gear the possibility of quoting uniformly in even such a complex manner. As a matter of fact, depending on a good many considerations, investors at one period show a preference for short-term securities, at another for long-term. During a time of short-term investment preference, a bond due in two years might command a $4\frac{3}{4}$ per cent basis, but one of the same serial issue due in ten years might not command better than a $4\frac{3}{4}$ per cent basis, less one fourth; that is to say, a quarter of a point lower in real price than the shorter maturity.

Such an impossibility of a practical uniform quotation does actually detract from the marketability of a security, and in consequence lessens its value; for quickness of the market is an element of actual value. Doubtless the serial maturity, and therefore the lack of one quotation for an issue as a whole, explains some part of the fact that equipment bonds have sold at relatively low prices considering their intrinsic merit as a security. Of course, in the case of equipment bonds the importance of amortization, and the assurance of it that a serial maturity gives, outweigh the matter of the market difficulty.

Another disadvantage of serial maturity, though not necessarily inherent in the form itself, exists in the use of the form in practice. Since the annual or semiannual maturities in practice are generally of equal or nearly equal amounts, the serial repayment makes an uneven distribution of the burden of the debt. A few figures will express this more quickly and plainly than words.

Take a debt of $1,000,000 bearing 6 per cent interest and having a serial maturity of $100,000 annually. That is to say, the debt is repayable in ten equal annual installments of principal. Burden of the debt will then distribute itself in this manner: —

	Amortization charge	Interest charge	Total debt burden
1st year	$100,000	$60,000	$160,000
2d year	100,000	54,000	154,000
3d year	100,000	48,000	148,000

and so on. The amortization charge, or amount of principal retired each year, remains constant with the result of a steadily diminishing interest charge. Consequently the total burden of the debt bears heaviest the first year and steadily grows lighter. When the enterprise is new, the heaviest charge comes at a time when the corporation can least conveniently carry it.

If the serial repayment offsets the diminishing of an asset through depreciation, as in the case of equipment bonds, such an uneven distribution of the debt burden becomes inevitable. The rate of depreciation does not adjust itself to meet the financial convenience of a corporation. As already stated, however, an unequal debt burden is not inherent in the nature of serial maturities. Proper computation could so grade the serial repayment that it would be small in the beginning and advance each year the exact amount the interest charge declined. The discussion will illustrate this further on.

So much for serial repayment. On account of its interfering with the opportunity to

make a market that an issue uniform in maturity as well as in other respects affords, it seems undesirable except under special circumstances, as in the case of equipment bonds. There remains for us a discussion of sinking-funds.

We can dismiss with a word or two the possibility of cash deposits to build up a fund with the trustee available and sufficient to retire the debt at its maturity. A trust company cannot on the average afford to pay an interest rate sufficient to offset the interest the corporation pays on the bonds outstanding. If it can pay three, or even four, per cent, and the bonds bear interest at five per cent, obviously the corporation loses heavily on its sinking-fund, besides adding to the risk of its own business whatever risk there may be of the trust company failing. This form is objectionable mostly from the sixth consideration, the cost to the corporation.

As a second form of sinking-fund, the corporation could apply its annual amortization charge to the purchase of securities other than its own. If this charge were properly graduated, it would distribute the burden of the debt. A requirement in the trust deed that securities purchased for the sinking-fund be placed on deposit with the trustee would guard against the corporation impairing the

fund under special stress. Question arises immediately, however, of the safety of the securities purchased for the fund. A difficulty closely connected with the question is the proper adjustment of income return on the sinking-fund securities to offset the interest payment on the corporation securities being amortized. If the outstanding bonds yield six per cent, unless the securities in the sinking-fund average to yield six per cent, the corporation suffers loss. Again, if the securities being amortized carry a high rate of interest, any attempt to get an offsetting interest rate in the sinking-fund securities would simply mean the addition of another risk to the risks inherent in the enterprise.

Getting the sinking-fund securities into cash available to meet the maturity of the outstanding bonds offers another difficulty. Unless all the paper purchased for the fund matures before the outstanding bonds, the corporation assumes the risk of the market in disposing of them. To have all the sinking-fund securities mature in time to meet the payment of the outstanding bonds, yet not so long before as to cause substantial loss through a large cash deposit in the bank, would be impracticable.

All this calls for a great deal of work and the exercise of careful banking judgment.

Any attempt to make money on the sinking-fund obviously creates too great a temptation and leads directly to danger. The best skill and judgment in the world would not be able, with due regard to other considerations, exactly to adjust the income on the sinking-fund to meet the interest on the debt. Enough has been said to show that a sinking-fund of this class cannot be a matter of exact calculation.

There remains a third form of sinking-fund amortization. To take advantage of this, a corporation must issue its bonds subject to call. In order to offset what an investor inclines to regard as a disadvantage, the uncertainty as to when his loan may mature and involve the necessity for reinvestment, the corporation usually makes the price at which the bonds are subject to call some point above par — say, 105. The fact that the call price limits an advance in the market price also weighs in the minds of many investors. If the corporation must call some of the bonds every year, or may call any, or all, before the stipulated certain maturity, naturally a purchaser will not pay more than the call price and run the risk of loss from having his bonds called earlier than the full term. The surprising thing is that he will ever do so. Yet occasionally callable issues go to a market price higher than the call price. If the cor-

poration is under no obligation to call, but reserves the right to call simply as a privilege, this does not surprise so much. The purchaser may argue that the corporation will not exercise the privilege, particularly if it have outstanding second mortgage securities that would thereby become a first lien and present an obstacle to the corporation if it should wish to take advantage of an enhanced credit in a general refunding operation. If the corporation has only one issue, callable at, say, 102, bearing five per cent interest and having fifteen years to run, which would make the call price of 102 a 4.80 basis, and the bonds should advance to 106.50 or approximately a 4.40 basis, the corporation might be tempted to call the bonds at 102 and refund by selling bonds at its apparent credit for a security of that class, on a 4.40 basis. For example, it might refund with 4s at 95½, which would be close to the 4.40 basis. The longer the security had to run the more probable a situation that would make the refunding profitable.

For considerations quite aside from amortization, however, ordinarily a corporation should make its bonds subject to call. It should do this in order to enable it to take care of contingencies that might arise in the business that would make the right to call of

the utmost importance. The possibility of wanting to create a much larger first mortgage issue to extend the business when the corporation could not finance on a second mortgage at all, or could do so only at a much greater disadvantage, is only one of many conditions that might arise to make the right to call tremendously important. Since the corporation for such reasons as these should reserve the right to call the issue as a whole anyway, the further disadvantage of making the issue subject to retirement in part, and certain of retirement in part from time to time for amortization purposes, does not add much to the disadvantage under which the issue may suffer. We shall discuss the calling of bonds further under the general head of "Form."

If a corporation issues bonds subject to call, and amortizes them by calling the required amount each year, it keeps the advantage of a uniform issue with a corresponding uniform price quotation, and consequent better market position than an issue falling due serially would have. Ordinarily the trustee must, in this form of amortization, if it can, purchase the sinking-fund bonds on the open market at a price lower than the call price. If the market price is not below the call figure, the trustee must draw bond num-

bers by lot up to the required amount and call the bonds drawn. The mortgages contain full provisions for this, and for notification to the holders of coupon bonds by publication of the numbers of the bonds drawn for call, and by letter to the holders of registered bonds. Often, however, the corporation agrees to call all the sinking-fund bonds at the agreed price, no matter what the market price may be, and thereby adds an attractive little element of speculation to the security. If an investor should buy his bonds at an issue price of 97, and should have them called in several years at 103, he would profit handsomely.

In the best actual practice of amortizing by this method, corporations have adopted the form of keeping the bonds "alive" in the hands of the trustee for the sinking-fund and applying the interest on these bonds to the purchase of further bonds for the fund. The next page shows such a fund actually worked out.

A sinking-fund in the form just discussed gains the desired result of equalizing the burden of the debt. It does not call for the difficult task of judgment of investing in other securities for a sinking-fund. It accomplishes directly the end in view, the amortization of the debt, and gives an assurance almost, if

SINKING-FUND COMPUTATION

THE A. B. COMPANY

Issue, $1,000,000 6 per cent 15-year bonds. Denominations, $1000, $500, and $100. Due 1st April, 1924. Interest payable 1st April and October. Issue to be purchased or drawn each year at par and kept alive by trustee.

Annual interest, $60,000 **Sinking-fund, $46,200**

	Year	Amount of sinking-fund	Interest accrued on bonds held in sinking-fund	Total amount to invest each year	Bonds purchased for sinking-fund	Cash balance in sinking-fund	Total amount of bonds held in sinking-fund
1 October	1910	$46,200		$46,200	$46,200		$46,200
	1911	46,200	$2,772	48,972	48,900	$72	95,100
	1912	46,200	5,706	51,978	51,900	78	147,000
	1913	46,200	8,820	55,098	55,000	98	202,000
	1914	46,200	12,120	58,418	58,400	18	260,400
	1915	46,200	15,624	61,842	61,800	42	322,200
	1916	46,200	19,332	65,574	65,500	74	387,700
	1917	46,200	23,262	69,536	69,500	36	457,200
	1918	46,200	27,432	73,668	73,600	68	530,800
	1919	46,200	31,848	78,116	78,100	16	608,900
	1920	46,200	36,534	82,750	82,700	50	691,600
	1921	46,200	41,496	87,746	87,700	46	779,300
	1922	46,200	46,758	93,004	93,000	4	872,300
	1923	46,200	52,338	98,542	98,500	42	970,800
1 April	1924		29,124	29,166	29,100	66	999,900

not quite, as strong as serial repayment that this will be done. The plan leaves the issue uniform in all respects and, therefore, subject only to the considerations of the callable feature, leaves it in the best possible position market-wise. It is mathematically certain that the amortization provisions equal the requirements. The cost to the corporation is as small as possible in order to gain the desired advantages.

Though this form of sinking-fund is the best in use and contains the essential qualities of the best possible plan of amortization, it can nevertheless be simplified and strengthened in several respects. The nominal keeping the bonds alive in the hands of the trustee shows how slowly the mind advances in practice. The idea of a "fund" for amortization prevails over the essential idea of amortization itself. The plan of the bonds continuing to draw interest probably results from the thought of a constant sinking-fund payment plus a constant interest payment making the burden of the debt constant. Keeping the bonds "alive" merely renders this plausible. Though they are in the hands of the trustee, which at law may prevent the extinction of the debt, the trustee has a double trust, one to the holders of the outstanding bonds and one to the corporation, to keep the purchased bonds, so far as the principal of the debt is concerned, as though they were dead and canceled. Indeed, in most cases the trustee must stamp the bonds, "Purchased and held for the sinking-fund," which would effectively prevent their negotiation. To all intents and purposes the bonds are dead. Their continuing to draw interest is a mere device to equalize the burden of the debt. Actually to cancel the purchased bonds would accord with

the real situation and make a more artistic arrangement. The business would then take the form of the corporation, annually or semi-annually, appropriating a sum equal to the base sum obtained by computation plus the amount of interest on the bonds kept alive in the sinking-fund under the present form. The corporation would give this annually increasing sum to the trustee for the purchase of bonds on the market or by call. It should be the duty of the trustee to cancel them when bought. The reluctance of trust companies to assume any real responsibility in connection with bond issues of which they are trustees is well known. However, to give the bondholders as strong an assurance of amortization as serial maturity involves, failure on the part of the corporation to provide at the proper time the stipulated amount for the purchase of bonds should constitute a default involving the same consequences as failure to pay interest when due. It should be the duty of the trustee to notify the bondholder of any failure on the part of the corporation to provide for the amortization. Such a duty does not go beyond a mere administrative responsibility no greater than trust companies already accept in the execution of trusts.

VI

FORM

No. 1

No..... .....Shares

STATE OF GEORGIA

THE CHATTANOOGA, ROME AND COLUMBUS RAILROAD COMPANY

This certifies that ..... is the owner of ..... Shares of One Hundred Dollars each, of the full paid Capital Stock of the Chattanooga, Rome and Columbus Railroad Company, transferable only on the books of the Company, in person or by Attorney, on surrender of this Certificate.

Rome, Georgia, ... 19...

.....Secretary. .....President.

.....

(*On stub*)

No.....

.....Shares

.....19...

Issued to

.....

.....

Received above described Certificate,

.....19...

.....

(*On back*)

For Value Received.....

hereby sell, assign and transfer unto .....

.....

.....Shares of the Capital Stock represented by the within Certificate, and do hereby irrevocably constitute and appoint.....

Attorney to transfer the said Stock on the Books of the within named Company,

with full power of substitution in the premises.
Dated.....19...
.....
In the presence of.....

(*Right end*)
Registered this ..... day of ..... 19...
Central Trust Company of New York,
by .....Secretary.

(*Left end*)
Countersigned this ..... day of .....19....
by.....Transfer Agent.

No. 2

Common Stock

No..... .....Shares.

CHICAGO AND INDIANA COAL RAILWAY COMPANY

This certifies that ..... entitled to ..... Shares of One Hundred Dollars each of the Common Capital Stock of the Chicago and Indiana Coal Railway Company, transferable only on the books of the Company, in person or by Attorney, upon the surrender of this Certificate. This stock is subject to an issue of a six per cent. non-cumulative Preferred Stock of said Company. All dividends paid by said Company in any year, except said six per cent. upon the Preferred Stock, shall be paid upon this Stock. This Certificate is not valid unless countersigned and registered by the Registrar of Transfers of the Company.

In Witness Whereof, the said Company has caused this Certificate to be signed by its President and Treasurer, this ..... day of ..... 19...

..... Treasurer .....President.

.....

.....

(*On stub*)

No.....

Dated.....19...

.....Shares

Issued to

.....

For .....

.....

Received the above described Certificate of the Common Stock,

.....19...

.....

(*On back*)

For value received,.....

hereby sell, assign and transfer unto

.....

.....Shares of the Capital Stock represented by the within Certificate, and do hereby irrevocably constitute and appoint

.....

Attorney to transfer the said Stock on the Books of the within named Company, with full power of substitution in the premises.

Dated ..... 19.....

.....

In presence of .....

(*On end*)

Countersigned and Registered this ..... day of ..... 19...

Metropolitan Trust Company of the City of New York, Registrar of Transfers,

by ..... Secretary.

No. 12

Preferred stock

No..... .....Shares.

CHICAGO AND INDIANA COAL RAILWAY COMPANY

This certifies that ..... entitled to ..... Shares of One Hundred Dollars each of the Preferred Capital Stock of the Chicago and Indiana Coal Railway Company, transferable only on the books of the Company, in person or by Attorney, upon the surrender of this Certificate.

This Stock is entitled to a preference to the aggregate amount of six per cent. in dividends which may be declared in any fiscal year out of the net earnings of the Company, which dividend shall not be cumulative. All dividends paid by said Company in any one year, except said six per cent., shall be paid upon the Common Stock.

This Certificate is not valid unless countersigned and registered by the Registrar of Transfers of the Company.

In Witness Whereof, the said Company has caused this Certificate to be signed by its President and Treasurer this ..... day of .....19...

.....Treasurer. .....President.

(On stub)	*(On back)*
No.....	For Value Received,.....
Dated .....19...	hereby sell, assign and
..... Shares	transfer unto
Issued to	.....
.....	..... Shares of the Capi-
For.....	tal Stock represented by the
.....	within Certificate, and do
Received the above de-	hereby irrevocably consti-

scribed Certificate of the Preferred Stock,
..... 19...
.....

tute and appoint .....
Attorney to transfer the said Stock on the Books of the within named Company, with full power of substitution in the premises.
Dated..... 19....
.....
In presence of .....

(*On end*)

Countersigned and Registered this ..... day of ..... 19...
Metropolitan Trust Company of the City of New York, Registrar of Transfers,
by.....Secretary.

Some of the expressions on these stock certificate forms may require explanation to people unfamiliar with financial paper.

"*Shares of one hundred dollars each*": That is to say, $100 is the "par value"; so that if the authorized capital of the corporation were $1,000,000, it would have a total of 10,000 shares. If the certificate should read: "Shares of ten dollars each," then, of course, the total number of shares of a corporation capitalized at $1,000,000 would be 100,000. To get a further understanding of what this statement may mean, read the discussion of "Watered Stock."

"*Full paid*": A corporation may issue shares to subscribers who have paid up only

part of the amount agreed. In that event an assignee of the shares would get only what property the assignor had, and might be liable to the corporation for the amount due. The liability of the shareholder to the corporation is also an asset of the corporation to which creditors have a right. To indicate that no such liability to the corporation exists, its certificates bear the words "full" or "fully" paid.

"*Countersigned this..... day of .....* 19... *by .....Transfer Agent*": Legal title to a share of stock lies in the registered owner; that is, in the person whose name appears on the books of the corporation as the owner. An assignee of the shares in possession of the certificate has it in his power to have the legal title transferred to him on the books of the corporation. If a corporation is of some magnitude, and its shares are frequently dealt in, it may maintain a formal transfer agency. Depending on the frequency of transfers, this may be an entirely separate office, or a department in the corporation's own general offices, or a trust company which has undertaken to do the work. The president and the secretary may sign the certificates in blank, or may authorize the transfer agent to sign them with a stamp. The counter-signature of the transfer

agent becomes a means of validating the certificate. The corporation may close its transfer books for a definite period over dividend dates, or before shareholders meetings, in order to give itself time to make up the list of shareholders to whom it must mail dividends, or to determine who is entitled to vote at the meetings.

"*Registered this..... day of.....* 19... *Central Trust Company of New York by.....* .....*Secretary*": A trust company fulfilling the duties of registrar of stock simply acts as a check on the transfer agent in guarding against mistake or fraud in the number of shares issued. The signature of the registrar gives an assurance that the number does not exceed the amount authorized. Of course the situation demands that the registrar be absolutely separated from the transfer agent. The purpose of registering stock differs entirely from that of registering bonds, but answers to that of a trustee's "certification" of bonds. In respect to transfer of title, all stock by its very nature occupies the same position as registered bonds.

The wording of the power of attorney form appearing on the back of a stock certificate fully explains its purpose. In the ordinary course of sale through a broker, the owner of the stock would simply fill in the date line,

sign, and get his signature witnessed. The seller does not know the purchaser, and cannot fill in his name. If the seller should fill in the blank for the attorney, that particular person would either have to appear at the transfer agency or exercise the "power of substitution" to make out a new power of attorney.

(*Form of $1000 Coupon Bond*)

$1000 U.S. Gold. £205.15.2 Stg. M.4200 D.R.W. Francs 5160. Guilders 2480.

No.....

United States of America.

ST. LOUIS AND SAN FRANCISCO RAILROAD COMPANY

General Lien 15–20 Year .... Per Cent. Gold Bond.

St. Louis and San Francisco Railroad Company (hereinafter called the Railroad Company) for value received, hereby promises to pay to bearer, or, if registered, to the registered holder of this bond, one thousand dollars in gold coin of the United States of America of or equal to the present standard of weight and fineness, on the first day of May, 1927, at its office or agency in the City of New York; or, at the option of the holder, in London, England, 205 pounds 15 sh. 2d. Sterling; or in Frankfort o/M. or Berlin, Germany, 4200 marks, D.R.W.; or in Amsterdam, Holland, 2480 guilders; or, 5160 francs if paid in France, Belgium or Switzerland; and to pay interest on said principal amount from May 1, 1907, in said cities and countries respectively, in said respective currencies, at the rate

of .... per centum per annum, payable at such office or agency in like gold coin semi-annually on the first day of November and of May in each year, upon presentation and surrender of the annexed coupons.

Both the principal and interest of this bond are payable without deduction for any tax or taxes which the Railroad Company may be required to pay thereon or retain therefrom under any present or future law of the United States, or of any state, county or municipality therein.

This bond is one of a series of coupon bonds and registered bonds of the Railroad Company, known as its General Lien 15–20 Year Gold Bonds, limited to the principal amount of $109,850,400 at any one time outstanding, and all issued and to be issued under, and equally secured by, a mortgage and deed of trust, dated August 27, 1907, executed by the Railroad Company to Bankers Trust Company and N. A. McMillan, as Trustees, and under and by an Agreement dated December 31, 1908, made by and between the Railroad Company, said Trustees and the Holders of all of the then outstanding General Lien 15–20 Year Gold Bonds. For a description of the properties and franchises mortgaged, the nature and extent of the security, the rights of the holders of bonds, and the terms and conditions upon which the bonds are issued and secured, reference is made to said mortgage and deed of trust and to said Agreement.

The bonds of this issue are subject to redemption at the option of the Railroad Company at a premium of two and one half per cent. and accrued interest, on any interest day prior to May 1, 1922, and at par and accrued interest on May 1, 1922, or on any interest day subsequent thereto.

This bond shall pass by delivery unless registered in the name of the owner on the books of the Railroad Company, such registry being noted on the bond by the

Railroad Company. After such registry, no transfer shall be valid unless made on said books by the registered holder in person, or by his attorney duly authorized, and similarly noted on the bond, but the same may be discharged from registry by a transfer thereon to bearer, and thereupon transferability by delivery shall be restored; but this bond may again from time to time be registered or transferred to bearer as before. Such registration, however, shall not affect the negotiability of the coupons, which shall continue to be transferable by delivery.

The coupon bonds are for $1000 each and are numbered consecutively from 1 to 109,851 inclusive, but the Railroad Company may, in lieu of any one thereof, issue ten coupon bonds for $100 each, bearing the same serial number and lettered consecutively from A to J.

The holder of any coupon bond for $1000 may, at his option, surrender for cancellation his bond with all unmatured coupons thereto appertaining in exchange for a registered bond without coupons, as provided in said mortgage and deed of trust.

This bond shall not become valid or obligatory for any purpose unless and until it shall have been authenticated by the certificate hereon endorsed of the Trust Company at the time being one of the Trustees under said mortgage and deed of trust.

In Witness Whereof, St. Louis and San Francisco Railroad Company has caused this bond to be signed by its president or one of its vice presidents, and its corporate seal to be hereunto affixed and to be attested by its secretary or an assistant secretary, and coupons for said interest with the engraved signature of its treasurer or an assistant treasurer to be attached hereto, as of the twenty-seventh day of August, 1907.

ST. LOUIS AND SAN FRANCISCO RAILROAD COMPANY.

By.....
President.

Attest:

.....

Secretary.

(*Form of Coupon on $1000 Bond*)

No.....

On the first day of ....., 19..., unless the bond hereinafter mentioned shall have been called for previous redemption, St. Louis and San Francisco Railroad Company will pay to bearer at its office or agency in the City of New York, U. S. A., on surrender of this coupon ..... dollars U. S. Gold; or in London, England, £.....; or in Frankfort o. / M., or Berlin, Germany, M. .....; or in Amsterdam, Holland, ... Guilders; or, if paid in France, Belgium or Switzerland, ... Francs; being six months' interest then due on its General Lien 15–20 Year Gold Bonds No.....

.....

Treasurer.

(*Form of Registered Bond*)

No. .....

$.....

United States of America.

ST. LOUIS AND SAN FRANCISCO RAILROAD COMPANY

Registered General Lien 15–20 Year ..... Per Cent. Gold Bond.

St. Louis and San Francisco Railroad Company (hereinafter called the Railroad Company) for value received, hereby promises to pay to .....

.....or assigns, ... thousand dollars in gold coin of the United States of America, of or equal to the present standard of weight and fineness, on the first day of May, 1927, at its office or agency in

the City of New York; and to pay interest on said principal amount from the first day of May or of November, as the case may be, next preceding the date of this bond, at the rate of ..... per centum per annum, payable at such office or agency in like gold coin semi-annually on the first day of November and of May in each year.

Both the principal and interest of this bond are payable without deduction for any tax or taxes which the Railroad Company may be required to pay thereon or retain therefrom under any present or future law of the United States or of any state, county or municipality therein.

This bond is one of a series of coupon bonds and registered bonds of the Railroad Company, known as its General Lien 15–20 Year Gold Bonds, limited to the principal amount of $109,850,400 at any one time outstanding, and all issued and to be issued under and equally secured by a mortgage and deed of trust, dated August 27, 1907, executed by the Railroad Company to Bankers Trust Company and N. A. McMillan, as Trustees, and under and by an Agreement dated December 31, 1908, made by and between the Railroad Company, said Trustees and the Holders of all the then outstanding General Lien 15–20 Year Gold Bonds. For a description of the properties and franchises mortgaged, the nature and extent of the security, the rights of the holders of bonds, and the terms and conditions upon which the bonds are issued and secured, reference is made to said mortgage and deed of trust and to said Agreement.

The bonds of this issue are subject to redemption at the option of the Railroad Company at a premium of two and one half per cent. and accrued interest, on any interest day prior to May 1, 1922, and at par and accrued interest on May 1, 1922, or on any interest day subsequent thereto.

This bond is transferable by the registered holder thereof in person, or by attorney duly authorized, on the books of the Railroad Company, upon surrender and cancellation of this bond, and thereupon a new registered bond will be issued to the transferee in exchange therefor, as provided in said mortgage and deed of trust. This bond also, in the manner prescribed in said mortgage and deed of trust and upon payment of the charge therein provided for, is exchangeable for coupon bonds of the denomination of $1000 for the same aggregate principal sum, and bearing all unmatured coupons.

This bond shall not become valid or obligatory for any purpose unless and until it shall have been authenticated by the certificate hereon endorsed of the Trust Company at the time being one of the Trustees under said mortgage and deed of trust.

In Witness Whereof, St. Louis and San Francisco Railroad Company has caused these presents to be signed by its president or one of its vice presidents, and its corporate seal to be hereunto affixed and to be attested by its secretary or an assistant secretary, this ..... day of ..... 19...

ST. LOUIS AND SAN FRANCISCO RAILROAD COMPANY.

By.....,
President.

Attest:

.....
Secretary.

Denomination: The ordinary denomination of bonds is $1000. For coupon bonds that is the maximum. Registered bonds may come in denominations of $5000 and multiples of $5000. Frequently bonds come in smaller denominations than $1000. A denomination

of $500 is common. And there is some tendency to issue denominations as small as $100 to meet the purchasing ability of people of small means. So far the demand has not been great enough to make the issue of the smallest denominations common. When $500 and $100 denominations are issued at all, they form only part of the entire issue.

In the form presented the denomination is translated into its equivalent in sterling, marks, and francs. This, of course, makes the bonds more available for the English, German, and French markets. Sometimes part of the issue is put out with an even amount in the foreign currency — as £200. So long as the bond stays abroad, that is advantageous. If the investor should want to resell in the American market, that would be a greater disadvantage than it is an advantage in the foreign market. Since this is the natural primary market for an American security, such a resale is not an unlikely event. It is difficult to make the bonds of different currencies interchangeable for the very reason that would make it desirable to have them interchangeable, namely, because the denominations in the various currencies do not come out even.

Interest rate: Though the rate of interest has been left blank in the form, as a matter of

fact, these particular bonds have been issued as 5 per cents. The reason for leaving blank the place for naming the rate of interest the bonds are to bear is because the mortgage is still "open"; that is, more bonds can be issued under it, and the directors desire to have authority to make the bonds to be issued in the future bear a different interest rate. Owing either to a change in market conditions or to a change in the position of the corporation, either of which is very likely to happen, especially over a series of years, the bonds may sell on a different basis from the one they sell on now. Since bonds sell at a disadvantage at almost any premium, and also if at too great a discount, it is thought desirable to leave the interest rate blank in order that it may be changed to one at which the bonds will sell most advantageously. Presumably this will be a rate at which the bonds will sell at some discount from par. The rate will be changed only in case that will have a favorable effect greater than the somewhat unfavorable effect of breaking up the uniformity of the issue as a whole. The interest rate on some issues has been changed in this way. For example, of the Chicago Burlington & Quincy, Illinois division, bonds dated 1899 and due 1949, $49,650,000 are $3\frac{1}{2}$s and $34,165,000 are 4s. Chicago, Milwaukee

& St. Paul Railway general mortgage bonds, due 1989, are part in 4s and part in 3½s. Chicago & Northwestern general mortgage bonds, due 1987, are also part 3½s and part 4s.

Term: Considerations of purpose of issue, the credit of the corporation, the condition of the market, all affect the decision of the term for which a corporation shall issue its bonds. The term itself may be absolute or uncertain. That is, the bonds may run for a length of time that neither the debtor corporation nor the creditor bondholder can change. Or they may run for a term which the corporation, on the one hand, can shorten but cannot increase, and the bondholder, on the other hand, cannot affect. In that case it may be either that the corporation can redeem the bonds at any time, or at some special time, or within some special times. If the corporation may redeem the bonds only at or after a date which is nearer to the time of maturity than it is to the time of issue, we call them "optional," otherwise simply "redeemable." The bond used for illustration presents both situations. It is optional in that the corporation has the option to redeem it at par only on or after May 1, 1922. Since the corporation may repurchase it by paying a premium of two and a half per cent at any interest date before May 1, 1922, it is also called redeem-

able. We will discuss this further under the head of "right to redeem."

Returning to considerations affecting the term of bonds, the purpose of issue requires first attention. When speaking of amortization we discussed the idea of continuing the indebtedness in order to continue the advantage of trading on the equity. If the corporation issues the bonds for general corporate purposes, as, say, for constructing or extending its plant, the purpose of issue does not affect the term of the bonds. As a matter of safe conduct of the business, in order to assure a continuance of earning power the corporation should spend on its general property sufficient funds to take care of depreciation and maintenance and so keep good the equity protecting the bondholder. When the corporation issues the bonds for a special purpose, however, the nature of the assets it acquires with the proceeds may have an important bearing on the life of the bonds. The term should be well within the probable earning life of the assets. The corporation should not have to continue paying interest on property no longer productive of income. A bondholder must see to it that his security remains sufficiently unimpaired to protect him. For these reasons equipment bonds, for example, should not run much, if any,

longer than ten years. To take an illustration outside of private corporations, a municipality should not issue bonds for paving purposes to run for a longer term than the paving will last. Bonds issued to provide funds for the construction of an office building should mature well within what is likely to be valuable life of the building. This would take into account possible changes in the style of office buildings, a kind of depreciation due to obsolescence.

Another consideration, the credit of the corporation, may affect the term of the bonds. If those in control anticipate that some time in the future it will enjoy better credit, they will not want the bonds to run so long that the corporation will have to pay a rate of interest based on its period of poor credit for a good many years beyond the time when it should enjoy better credit. A new corporation presents this particular case. It has no established earning power, or lacks the prestige of long continued good income. A corporation that has recently gone through a reorganization offers the same considerations. Those who have authority to fix the term of the bond will not want to make it exceptionally long. It will be advantageous, as soon as may be after the corporation has reached as good a credit as can be anticipated, to refund on a

lower basis. On the other hand, they must make the term long enough not to embarrass the corporation by the necessity for refunding before its credit has reached a point where it can refund advantageously.

Converse considerations guide the decision on the length of term in issuing bonds of an old corporation at the height of its credit. Presumably the corporation wants to continue trading on the equity. Since that is the case, it can make a good bargain now that will save it from the trouble of refunding for some time, and may save it the necessity of making a poorer bargain in refunding at the end of a shorter term.

General market considerations, aside from the credit of the particular corporation, also affect the decision on the term of the bonds. When long-term interest rates are high, or to say the same thing in other words, when the price of bonds is low, obviously a corporation would be inflicting a handicap on itself to issue securities of very long term. So, as we should expect, during seemingly acute periods of high interest rates the corporations issue securities of an exceptionally short term. At the time of high long-term interest rates before and after the panic of 1907, concerns like the New York, New Haven & Hartford Railroad and the New York Central

Railroad issued many millions of notes running for three or five years. When they fell due, the corporation managers felt that interest rates continued higher than they would be later, and refunded the first short-term securities with new issues running for similar periods. As a permanent method of financing, a constant succession of short-term notes would be expensive. In addition to the interest the investor demands, the corporation has to bear the cost of selling each issue.

Without intending to indicate any special reason for the term, we shall name several important issues of exceptionally long life. Lake Shore & Michigan Southern first mortgage 3½s (dated 1897), due 1997. Missouri, Kansas & Texas first and refunding 4s (dated 1904), due 2004. Also of the same road the first mortgage 4s (dated 1890), due 1990, and second mortgage 4s (dated 1890), due 1990. Morris & Essex Railroad first and refunding 3½s, guaranteed by the Delaware, Lackawanna & Western (dated 1900), due 2000. Texas & Pacific Railway first 5s and second consolidated 5s (both dated 1888), and both due 2000. Norfolk & Western Railway first consolidated 4s (dated 1896), due 1996. St. Louis Southwestern Railway first mortgage 4s (dated 1891), due 1989. Union Pacific

Railroad first and refunding 4s (dated 1908), due 2008. Manhattan Elevated Railway 4s (dated 1890), due 1990.

Fashions in the term of securities change. At one time for no very well-defined reason investors like those of long life, at others those of short life. Consideration of what the fashion is will also influence the decision on the term of the security. The fashion probably has little or no relation to any conscious thought about probable advance or depreciation in the future value of gold. An investor might well reckon with that question; though with doctors disagreeing, we can hardly wonder at the investor's refusing to take much account of the matter.

If the managers of the corporation plan to make a general mortgage issue under an open mortgage with a large amount held in reserve for refunding existing issues, the bonds must bear a date long enough to cover all the underlying issues and cover a period beyond sufficient to make them worth while as the means of the refunding operation.

Bonds of corporations operating under franchises limited to a fixed period should mature well within the life of the privilege.

Right to redeem: The right to redeem bonds some time before the obligation to pay them matures may perhaps properly form part of

the discussion of the term they are issued for. We have several times mentioned the desirability from the corporation's standpoint of retaining this right. When the first provision for financing shows itself insufficient, power to redeem the issue as a whole may become important in order to provide a basis for new financing. If the corporation's credit improves more rapidly than the organizers anticipated, the right to redeem may become important in order to enable them to take advantage of the improved credit. It may be that they anticipated the improvement in the credit, but could not at the time place sufficiently short-term securities to advantage.

The right of redemption of any part of the issue, in addition to the right to call the issue in its entirety, may appear desirable for sinking-fund purposes. We discuss this under "amortization." Instead of the right to redeem in part, with the option of purchasing in the open market for sinking-fund purposes, the trust deed may obligate the company to call at the stated price the bonds for the sinking-fund.

Commonly the right of redemption in itself counts as a disadvantage in the market, and the corporation offsets this disadvantage by placing the call price of the bonds some-

where above par, as 102, 103, 105, sometimes even as high as 110. Assuming that the corporation sells the bonds at a discount, their redemption before maturity would from the standpoint of mathematics be an advantage rather than a disadvantage, for then the investor would be getting the benefit of his discount within a shorter time. From the standpoint of the corporation this means paying a higher basis interest. The right of redemption presumably limits the possibility of an advance in the market price of the bonds to the call price. No one will pay a price for a bond and run the risk of having the corporation call it at a lower price within a very short time. When there is no obligation to call, and the likelihood is improbable, the price of the bonds does sometimes rise above par. A right of call also presents the disadvantage to the investor of uncertainty as to the term of investment and the possibility of imposing on him sooner than he anticipates the care and labor of making a new commitment of his capital. This would be a stronger objection at a time when long-term bonds are in favor. Generally it ought not to weigh very heavily against the bonds in the market. Barring this last objection, and assuming the investor content with the possibility of his bonds going as high as the call price, he ought to regard the

possibility of redemption prior to maturity as an advantage. Indeed, French investors regularly do.

Making the call price above par is rather cumbersome and something of a matter of self-deceit on one side or the other, seller or buyer, or possibly both. If it is improbable that the corporation will call them, whatever disadvantage the right of call might be supposed to make ought not to weigh much against the market price. A probable exercise of the right of call ought to adjust itself as readily and no more to the disadvantage of either party when the call price is par than when it is at a premium.

Interest dates: Corporations regularly pay bond interest twice a year. Compilers of "basis" tables showing the computed actual return bonds make on the capital invested in them assume a semiannual payment of interest. Months run in couples in the minds of those dealing in bonds as a business. Those complementary months in order are January and July, February and August, March and September, April and October, May and November, June and December. A corporation issuing bonds will ordinarily choose to pay interest in those months in which the nature of the business is most likely to provide the funds, or to make one of the dates come near

coinciding with the close of the corporation's fiscal year. The big dates, on which much larger amounts of interest are paid than at other times, are January and July, and the requirements for funds to pay interest and dividends at these times make a special demand on the money market. Generally people like to get their incomes at these times. The interest dates of a security may make a difference with individual investors, who may like to have their incomes paid at special times, or may wish to place their investments so as to have their incomes distributed through the year. Sometimes the less frequent interest dates, like March and September, are chosen to meet this demand.

Registered and coupon: Though investors fully understand the difference in form between registered and coupon bonds, they do not understand so well all the consequences of the two forms. The distinction in form is simple enough. A coupon bond has attached to it a sheet of what in effect are small promissory notes representing the interest. One falls due each interest date. To collect his interest the owner must "clip" his coupon and forward it, presumably through his regular banker, to the place of payment named in the bond and coupon for collection. Transfer of title requires no formality. Property in

the bond passes by transfer of the document. A registered bond, on the other hand, has the name of the owner entered upon it, and also on the books of the corporation, kept either at the office of the corporation or by some bank or trust company acting as fiscal agent of this corporation. The company thus has the address of the bondholder and at the proper dates mails the checks for interest to him. Ownership of a registered bond can be transferred only by changing the name registered on the company's books. That is, with respect to the transfer of title, registered bonds stand in the same position as stock.

Relative advantages of the two forms from the standpoint of the investor are the ready transferability of coupon bonds, and the safeguarding from theft of the registered form. Many considerations, however, argue strongly in favor of the coupon form. Owners of registered bonds may find in the comparative difficulty of transfer a greater disadvantage than they anticipate. It may cause delay in selling, and especially such delay in getting the proceeds of a sale as to be embarrassing. A broker cannot safely sell until he is certain there will be no difficulty about effecting a transfer. The corporation's agent for registry, if competent, is bound to be extremely careful about his authority to transfer, and may

cause long delay in effecting a delivery by insisting on better evidence than that first supplied him. Procuring a transfer in the case of settling an estate always causes considerable trouble. A dealer cannot safely register a bond in the name of the purchaser and send it forward with draft for collection. The registry fixes title, and legal situations unknown, perhaps, to the purchaser as well as to the dealer, may intervene to deprive the dealer of his lien. Very possibly before payment and delivery the purchaser may die. In that event a great deal of trouble and long delay may take place before the dealer can get paid.

From the standpoint of the purchaser registration may affect the situation of his estate with regard to the inheritance tax. In one case a man in New York State left his property by will to a younger man, whom the testator had always treated as his son, but never formally adopted. Some bonds of a corporation of another jurisdiction formed part of the estate. The jurisdictions took different views of the situs of the property represented by the bonds. Under the law of the jurisdiction of the corporation property in a debt has its situs where it is owed, and the bonds therefore formed an estate of the testator in that jurisdiction. According to the

law of New York State the situs of a debt lies at the domicile of the creditor, and the bonds therefore formed part of the testator's estate in New York. As a consequence the estate had to pay an inheritance tax on those bonds in both jurisdictions. To aggravate the situation the tax was heavier in both jurisdictions because of the collateral inheritance. The point of the story is that the testator, against the advice given on general principles by the dealer selling the bonds, had insisted on having them registered. Though the law would have been the same for coupon bonds, the situs of the corporation would have had no means of acquiring jurisdiction to enforce its tax. As it was, the agent for the transfer had no right to make it without evidence that the estate had paid the inheritance tax. In such a case as this it would hardly be accounted moral turpitude to dodge one tax if possible. Jurisdictions are much in conflict over this very point, and for that reason alone, if for no other, it would be well to keep on the side of safety by not registering. Some investors, however, insist on having registered bonds.

Interchangeable: Because some investors want registered bonds and others will take only those in the coupon form, a corporation confers a privilege of some value to the pur-

chaser in making its bonds interchangeable. If that is the case the corporation will, on request from the holder of a bond in one form, deliver in its place a bond in the other form. Usually only the big corporations with large bond-issues outstanding extend this privilege. To carry it out requires considerable trouble on the part of the corporation or its agent for making the transfers.

Registerable as to principal: Many corporations, perhaps most with bond-issues under a number of million dollars, do not issue bonds registered both as to principal and interest, but issue coupon bonds which are registerable as to principal. When issued, the bonds are all alike coupon in form, but have blanks on the back in which the name of an owner may be indorsed. The corporation provides for entering this name on the company's books, and the bonds become registered as to principal. Coupons remain attached to the bond, and interest is collected by their means as in the case of any coupon bond. The coupon bond form presented for illustration provides for such registration as to principal.

In a few instances corporations have issued bonds only in the coupon form, but provided for detaching the coupons and leaving them in the possession of the corporation or its agent, and indorsing the name of the owner

on the body of the bond and entering his name on the books of the company as the registered owner. The bond then becomes registered both as to principal and interest. By indorsing it as payable to bearer, so entering it on the books of the company, and reattaching the sheet of coupons, the company can transform it back into a coupon bond. This requires practically no more trouble than simply registering as to principal, and is perfectly feasible for a corporation with a relatively small amount of bonds outstanding. Bonds registerable as to principal only may regularly be retransformed into full coupon bonds by indorsing to bearer and entering them on the books of the company as bearer bonds.

Domicile, or place of payment: The bond form presented as a specimen makes both principal and interest payable at the office or agency of the company in the city of New York, or, at the option of the holder, in London, Frankfort, Berlin, Amsterdam, France, Belgium, and Switzerland. Since the particular issue of bonds represented by the form was intended especially for the European market, it was made payable in rather more places than usual. If a bond is intended to be sold in England or in Europe, it is regularly made payable in London and, say, Berlin, as

well as in New York. On account of the possibility of avoiding taxation, French investors rather like to have their income payable in London. Therefore it is not so important, in order to effect sales among the French investing class, to have the bonds payable in Paris.

Likewise, if it is intended that a bond be sold entirely in this country, it may have more than one place of payment. It may be that the bankers handling it expect to sell it mainly in the Middle West. In that case Chicago will be one of the places of payment named. Part of the issue, however, may be sold in the East, and in that case the bonds will also be made payable in New York.

Usually the place of payment is made more specific than simply stating the city. Ordinarily the bond states that it is payable at, say, the Columbia-Knickerbocker Trust Company, in the city of New York. It is then sometimes said to be "domiciled" at the Columbia-Knickerbocker Trust Company. In the case of most of the smaller issues, at any rate, the trustee is made fiscal agent for the purpose of paying interest, and the bonds therefore domiciled with the trustee. Larger issues may be domiciled with some institution other than the trust company acting as trustee. Those corporations having such

large amounts of securities outstanding as alone to require the services of a whole staff, maintain their own fiscal office at their general head office, and make the American domicile of their bonds at that place.

Taxes: To discuss the taxation of securities would require a whole treatise to itself. Such a provision as the sample form of bond contains commonly appears in bonds. It has little or no actual present practical effect, and is valuable to the holder and contains something of a menace to the corporation in event of a change in the system of collecting taxes. No matter what the taxation provisions of a particular jurisdiction may be, bonds commonly sell at prices based on the assumption that the purchaser does not pay taxes on them. In event of any attempt being made by the Federal Government or any of the State Governments to collect an income tax after the English fashion "at the source," presumably such a promise to pay interest without deduction for any tax which the railroad company may be required to retain therefrom would work to impose the burden of that taxation, which might amount to 2 per cent, on the corporation and to relieve the bondholder. That would probably be so, at any rate so long as the railroad is its own fiscal agent for the payment of interest as in this bond.

Whether on the appointment of some financial institution as agent to pay interest, the collection of taxes at the source, that is, the requiring of the paying agency to deduct from the interest the amount of the tax and pay that amount over to the Government, would be a tax which the railroad company was required to retain therefrom, might be a matter of uncertainty, to be known only after adjudication. Our multiplicity of taxing jurisdictions, however, combined with the wide scattering of the securities of any particular corporation, makes improbable any wide attempt to collect any heavy taxation at the source. The State of Pennsylvania does collect a small state tax from Pennsylvania corporations on securities of the corporation known by the corporation to be in the hands of Pennsylvania investors. As matters stand, and as they seem likely to continue, such a tax provision as this in a bond seems not likely to have much effect.

Trust deed: Such a reference to the trust deed as this, "For ..... the rights of the holders of the bonds, and the terms and conditions in which the bonds are issued, reference is made to the said mortgage and deed of trust," definitely makes the provisions of that document part of the terms of the bond. American investors might well be more in-

sistent on looking up the stipulations of the trust deed. They might sometimes find there provisions giving a majority or even a minority of the bondholders a right to do things materially affecting the lien and encroaching on the regular rights of a security holder. The chapter on the "Instruments of Corporation Finance" emphasized the limitations on the shareholders' control which the trust deed might make in favor of the bondholders. Though that is the usual situation, a trust deed may, and sometimes does, place limitations on the rights of the bondholder in favor of the shareholder.

VII

THE MARKET AND THE PRICE

EVERYTHING a corporation can do to make its securities more marketable will help it command a higher price for them. Though that sounds rather a truism, marketability has something of a special meaning with reference to securities, and a corporation can do many things of detail, besides offering its essential assurance of payment, to give its securities a broader appeal and therefore help them pass more readily from hand to hand.

The discussion at this point is not dealing with the fundamental things in connection with corporation security-issues. The more a corporation offers of income and control and the less of risk, obviously the readier acceptance its securities will find. We have already dealt with these fundamental considerations in the chapters on "The Instruments of Corporation Finance" and "Trading on the Equity." By price, too, we mean here the essential thing which is measured, not by the market quotation in dollars, but by the return the man who furnishes the capital demands for his funds. What sounds com-

plex in words is simple enough in figures. This is only to say that a 4 per cent 20-year bond at 91, yielding approximately 4.70, is selling essentially higher than a 5 per cent 20-year bond at 102½, yielding approximately 4.80.

If a security has a quick close market it possesses a quality of value which will add to the price people will pay for it something beyond what they would pay for the amount of control and freedom from risk the security offers. A "quick" market is one in which a security may be sold without delay. The "closeness" of a market depends on how great a difference there is between the buying price and the selling price of a security at any given moment. A market for a particular security may be so close that the buying and selling price are only an eighth apart; in that case a man would be able to buy at, say, 99⅜ and to sell at 99½. Such a transaction is often possible in bonds of the big, active, railway issues, and results from the competition for business among dealers and brokers off the stock exchange. Since members of the stock exchange cannot do business for less than one eighth commission, such a transaction would be closer than any that could be put through the exchange, where there would have to be a real difference of a quarter of a point in price

just to cover commissions. However active and steady quotations might be on the exchange, so that a whole series of transactions went through at $99\frac{1}{4}$, and apparently a man could either buy or sell at that price, really the seller would be getting $99\frac{1}{8}$, after paying his one-eighth commission, and the buyer for the same reason be paying $99\frac{3}{8}$. Off the exchange dealers and brokers who are not members can "split" the commission, and in order to put through a transaction frequently do. Indeed, they sometimes do business on so small a profit as one thirty-second of one per cent. Such a close market as this represents the extreme and carries with it the corollary of being a quick market. Since it is the degree of stress in the working of demand and supply on each other that makes both, the speed of a market bears a direct relation to the distance apart of a market. A quick market is at the same time a close market, and a slow market is a wide one. These are expressions of a general state of affairs. In the market for any particular security, it may be necessary to sacrifice something of speed in order to get the closest possible quotations, and conversely to abandon something of closeness in order to get the greatest speed.

Transactions such as those just mentioned indicate the highest degree of closeness.

With regard to quickness of a market it may be possible in a given security to put through a transaction either way, buying or selling, in a matter of seconds. A security with a wider, slower market might have its buying and selling prices half a point apart, and require several hours to find either a seller or a purchaser. So on, all the way to a difference of from five to ten points between the buying and selling prices and a time of several days or weeks required to find perhaps either seller or purchaser. Beyond these points of market width and slowness, a security can hardly be said to have any market at all. It may nevertheless involve little risk of loss of income, and, if a bond or other evidence of debt, of principal, and may be yielding the holder an excellent return.

A quick, close market presents an element of distinct value, and the quicker and closer the more valuable. Even if a buyer of securities intends to hold them permanently as an investment, it is, nevertheless, worth something to him, though maybe not the price he would have to pay, to be able, in event of an unforeseen contingency, to sell his security without too great delay, and at a price not too remote from what he would have to pay for it if he were a buyer. Marketability becomes more and more important as the security is

held by a man actively engaged in business with an uncertain demand for funds, or such a financial institution as a bank, which may need to realize on its assets at any time. Every investor must decide for himself in how great a degree he requires marketability, and how much it is worth to him.

It is not our purpose to go into a general discussion of the elements of a securities market, but simply to point out the effect of marketability on price in order to lead to a discussion of things, apart from considerations of income, control, and risk, which may affect the position market-wise of a particular issue.

Magnitude of an issue exercises a large influence in the creating of a market. As between an issue of $1,000,000 and one of $20,000,000, each having the same ratios of equity, earning power, and all the other matters that go to make up the amounts of risk, income, and control in each, the larger issue will probably in the long run command the higher price. Its very size means that more people must become familiar with it and interested in it. The volume of dealings after it has once been placed will be greater, and dealings make the market. So the sheer size of an issue influences marketability.

This depends on the size of the enterprise,

however, and its demand for capital, and is not one of the matters the corporation, as such, really exercises control over, except, as mentioned in the chapter on "Expansion," through looking forward to future needs, and authorizing more securities of a given class than it immediately issues.

A corporation planning an issue of securities has, however, an opportunity to arrange it in various ways, aside from the fundamentals of income, control, and risk, that will help the securities find a broader and more active market. Obviously we do not use the term "broader" here as synonymous with "wider" as already used, but to indicate the security as appealing to more people.

As one means to this end the corporation can prepare the issue in a way to meet the requirements of the stock exchanges, say the New York Exchange, or more than one, and through its bankers get the issue listed. Though such a course opens to the issue the possibility of being traded in on the exchange, it does not by any manner of means insure such dealings. Unless the issue is of some magnitude, and has already excited considerable interest among investors, news of the listing is likely to be almost the last thing heard of it from the New York Exchange. The name will continue to appear on the

official sheet with a nominal bid and asked quotation, but with no reported transactions whatever. Quoted bid and asked prices are likely to prove wholly illusory on any attempt to put through a transaction. An offer to purchase at the quoted asked price may fail to bring out any of the paper. At the same time an offer to sell at the quoted bid price may fail to uncover any takers. Listing an issue of from one to several millions in the New York Stock Exchange simply courts a general neglect. Brokers on that exchange stand ready and expect to deal in the entire list, and do not much form into groups especially interested in particular issues, and that fact accounts in part for the neglect of the smaller amounts listed. The organization of the stock exchange market as it stands at present in New York works against them.

Dealers in securities on the London Stock Exchange tend to split into groups, each interested mainly in a particular part of the list. Doubtless the custom of doing business through "jobbers," who, when approached by a "broker," do not know whether the transaction the broker has on hand is a buying or a selling one, and therefore name both the price at which they are prepared to sell and that at which they stand ready to buy, works in favor of the smaller issues. A jobber must

at the same time be interested in both sides of the market. Brokers there do more in the way of acting as actual investment advisors to their clients than here. They feel the need of being well acquainted with the securities they deal in, and in order to get the more intimate acquaintance tend to restrict their dealings to a smaller number of issues. Those particularly interested in Canada, for example, make a point of dealing in "Canadians," and so on. When even a small issue is listed on the London Exchange it has from the start a little group of brokers interested in it. As a result, issues amounting to no more than from one to several million dollars may have a fairly close and active market. It would be possible there either to buy or sell a bond or share of such issues within, say, a day or two, at not more than a point apart for the buying and selling price.

In New York, on the other hand, bankers are reluctant to list small issues on the exchange, because the listing, instead of helping to build up a broader market, simply increases their difficulties in "protecting" the market. The investment business is not yet with us as well developed and as well understood as in England. On account of the lack of a coterie of brokers interested in a particular issue both on the buying and on the

selling side, some holder in haste to realize might sell a security at a sacrifice price, and the low quotation made and published would unsettle all the other holders and make them inquire anxiously of the issuing banker about the value of their security. The situation all comes down to the fact that the issuing banking-house itself offers the only real market for most relatively small issues. Eagerness of such houses for business has developed a system of trading whereby an investor is induced to swap securities he already holds for some of the specialties of the particular banking-house seeking to do business with him. Listing the small issue on the exchange simply offers a rival house a place where, concealing its own hand in the matter, it can offer the other banker's "specialty" for sale, and so practically compel the issuing house, in order to protect the market, to buy back its own securities. In the language of the street it has to "hold the basket." The time does not now seem close at hand when the New York Stock Exchange will afford a market for the relatively small issues.

A corporation putting out an issue of $15,000,000 or more almost must prepare the issue for listing on the New York Exchange. Investors will think it rather queer if it is not listed. It does not follow, however, that the

stock exchange will offer the only, or even the principal market, or, for that matter, even an important market for the security. The discussion at this point does not refer to stock. When shares are listed, especially large issues, the exchange becomes practically the only market for them; but even for those bonds most actively dealt in on the exchange, the transactions there are probably only a very small part of the total transactions in the issue. Dealings over the telephone from securities house to securities house, and by the street trader going from office to office, learning of a buyer here and a seller there, on the average enormously exceed the transactions on the exchange. Such exchange transactions as there are give each day a published quotation which affords an index of the course of the market in the security. An investor who considers marketability an important matter wants that daily published quotation to keep him informed of what he can do in case he should want to realize. Exchange dealings like this in the larger issues do not present the disadvantages to the issuing house that the listing of smaller issues does, for several reasons. In the first place, the large issues probably are widely underwritten by bankers who are themselves dealers in securities, and extensively subscribed for by smaller dealers, who

besides getting the regular dealers' quarter-point concession off the price at which the issuing bankers publicly place them on the market, count on the demand being so large as to send the market price somewhat above the issue price. From the very start a large number of dealers are interested in the security, and their efforts immediately establish a trading market.

When an issue is small, however, a single banking-house can, and frequently does, handle it without the help of other houses or dealers. At the most, two houses join in marketing the issue. Such underwriting as may be done is not by bankers and dealers who would be interested on their own account in creating a market, but by capitalists who are ready to assume the kind of a risk involved in that special security. Except in the case of an enterprise in the construction stage, that is, without an established earning power, there is probably no underwriting at all. The issuing banker has to bear alone all the burden of creating a market.

Again, investors purchasing securities of large issues expect to take the risk of some fluctuation in the market, of a possible decline in price. When the market falls off somewhat from the issuing price, they do not hold the issuing house blamable. They recognize

that when they bought they then accepted the risk of the market. They understood that they were called upon to exercise some judgment both of the merit of the security and of general market conditions.

Since in the case of small issues the house putting them out *is* the market, purchasers hold that house responsible both for the intrinsic merit of the security and for its market position. Because the purchaser usually is not as well situated to judge of either the soundness of the enterprise or the general state of the market for a security of the class offered, it is not unfair that he should place greater responsibility on the issuing house. From the very magnitude of the corporation putting out large issues the investor knows, or can know, something about it. Reports of its earnings are published in the daily papers, or, if not in them, at least in the financial papers. There, also, are published quotations of securities of a similar kind for him to judge the general market condition from.

Such considerations as these govern the matter of listing in order to extend the market for an issue. It is desirable to list the larger issues, and therefore they must meet the listing requirements in form.

Whether prepared to meet the requirements of the New York Stock Exchange for

steel engraving, etc., or not, a security should at any rate be prepared in such a way as to present a good appearance and to offer some reasonable obstacles to counterfeiting. Aside from questions of wear and tear, since most securities have rather a long life to run, to avoid decay they should be printed on a very high-grade paper. If this paper can be of some special make, as an additional precaution against counterfeiting, so much the better. Though for a small unlisted issue it may not be thought necessary to have the entire design especially prepared, it should at least be printed from a carefully guarded plate. A high-grade piece of steel engraving probably makes the best precaution possible against counterfeiting. Considering how poorly many securities are prepared, how ready a market many of them have, and how little they are scrutinized to discover possible counterfeiting, it is a wonder that "green goods" men do not direct more of their energies in this direction rather than confining themselves to the carefully prepared and closely scrutinized government and national bank notes. However, there have been notable cases of counterfeiting securities, and the danger is well worth guarding against. Knowledge of the existence of this danger on the part of some investors, and an appreciation of a good appearance on

the part of all, does, however, add to the marketability of a security, and it commands therefore a price much more than enough higher to make up for the cost of a good appearance.

Whether bonds shall be issued under an open or a closed mortgage presents another consideration of marketability. Doubtless the investing public generally prefers a closed mortgage. It does not want to take the chance of having the protecting equity made thinner through the issue of further securities of the same rank as theirs. Besides, it fears that the bringing-out of additional amounts of the same security will have the natural effect of increasing the supply on the market, to depress the price. Even provisions in the trust deed assuring the maintenance of the equity do not overcome the handicap on that account. They require too much explaining. A "closed mortgage" tells its whole story in two words. The chapter on "The Instruments of Corporation Finance" mentioned a number of provisions looking to the maintenance of the equity in the event of further issue of securities under an open mortgage. We shall not go more fully into the matter here.

Though the fact that a mortgage is "open" may tend to depress the price of the security,

its value in future financing is likely to do far more than offset its immediate adverse influence. Securities with a junior lien would sell at a serious disadvantage. The fact that securities of an issue are already outstanding and have a current market quotation makes a good foundation for more of the same issue. It is hard to assign a relative weight to each of these influences. All this discussion is, of course, apart from the matter of the mortgage being open, technically, because of bonds reserved to retire underlying issues, and refers only to the possibility of issuing more bonds for actual new expenditures on the property. The replacement of the bonds of underlying issues with bonds of the junior issue can work only to the advantage of the outstanding bonds of the deferred security. It is true that if there were not reserved bonds of the new issue, the bonds of the old issue would have to be replaced with some security more remote than the new issue, which in turn would become the prior security with the larger equity protecting it. Since, however, the reserved bonds will not when issued work to the positive disadvantage of the bonds of the issue then outstanding, they are not looked on with such disfavor as authorized bonds to be issued for expenditures on the property.

Since the chapter on "Amortization" went

rather at length into the desirability of a uniform issue, that is, all of the same maturity, instead of maturing serially, we shall not go into that matter further here, but mention it now merely because of its bearing on the general subject of this section. The discussion of amortization also mentioned the probable effect on price of making the bonds callable, and of providing a sinking-fund.

Also the chapter on "Form" considers the market effect of such matters as rate, term, denomination, place of payment, and making the bonds registerable and interchangeable. A corporation can arrange all these things in such a way as will give its securities the widest appeal. For example, some people prefer a registered and some a coupon bond. If the corporation provides both, it does not exclude from the number of purchasers of its securities those who strongly prefer one or the other. And the experienced buyer, himself preferring one or the other form, but quite aware that some other investors do not feel the same way, appreciates an interchangeable bond, so that his particular part of the issue may, in case he should wish to put it on the market, appeal to as wide a range of purchasers as possible.

Most of the matters mentioned here as discussed elsewhere will not be mentioned fur-

ther now than just the reference. The matter of denomination may be worth a few words more. Though a good many issues provide bonds of $500 denomination, $1000 is the standard. It seems improbable, under the present method of selling securities in America, that bonds will be issued much in smaller denominations. The smaller amount will not stand the expense of selling. The only reason for issuing bonds in denominations of, say, $100 is to fit the pocket-books of people who cannot invest $1000 at a time. It costs as much to sell a $100 bond as to sell one of a $1000. A small investor would not, however, pay a higher proportionate price for the $100 bond than the larger investor pays for one of a $1000. If the banker is making a two-point profit, gross, on the issue, he makes a gross profit of $20 on each $1000 bond, but only $2 on the $100 security. Cost of selling and of putting through the transaction on the $1000 bond might be, say, $10. It requires just as much work to sell the $100 man his bond, and the clerical and other work of putting the transaction through are just as great. So it would cost the banker $10 to put through the $100 transaction on which he has made, gross, only $2. He would be doing business in the smaller denominations at a loss.

Because the distributing agents of securi-

ties in France are the branches of the big banks, where the small investor keeps his deposit, the seller is closely in touch with the buyer at all times, and therefore it cannot cost nearly as much for the selling expenses of these small transactions in France as in America. There the small investor is legion and well trained. He comes in and buys over the counter. In America he would have to be sold to just as the larger investor is now sold to. The investment banker would have to cultivate his confidence instead of already having it, as in France, because of being his depositary banker to start out with. Until the small investors become more numerous in America, and some changes take place in the methods of distributing securities, probably it will not be worth while to issue bonds in smaller denominations than at present.

Sometimes a corporation can make its securities comply with requirements to meet a special demand. If it has the possibility within its power to comply, for example, with the requirements for savings banks or trustee investments within a particular jurisdiction, it gains immediately the chance of tapping large amounts of loanable capital. For the most part a corporation can do little in the matter of mere arrangement to aid in this direction, but sometimes it can put itself in

the proper position. Only a study of the situation in each case can determine what the corporation can do toward this end.

In some jurisdictions a corporation may make its securities tax exempt, and if it can look for a large market for them in that particular jurisdiction, it may considerably help their sale by complying with the provisions for tax exemption. A corporation can make its bonds tax exempt in New York, for instance, by recording them on the payment of one half per cent recording tax. A Pennsylvania corporation can make its bonds tax exempt in that state by paying a small annual tax. By having a Pennsylvania corporation the issuing body, large amounts of railroad equipment securities have been made tax exempt in the state, and thereby appealed especially to the wealthy Philadelphia market. Stock of a Massachusetts corporation is tax exempt in the state, but not stock of a foreign corporation. In order to get that advantage in the important Boston market for investments, some foreign corporations have already taken out new charters in Massachusetts and transferred their assets to the corporation under the new charter. And, by way of a wink at the possibilities, some enterprises, especially holding companies, have organized as unincorporated associations under

the Massachusetts law, in order to avoid the federal corporation tax. This, however, is aside from our subject and a general matter of corporate organization rather than especially of corporation finance.

VIII

CAPITALIZATION AND THE STATE

ANY state regulation of corporation finance may rest on one or more of three general purposes: —

1. To protect creditors.
2. To protect prospective shareholders.
3. To protect the general public from having to pay an excessive return on capital invested in the business.

Since the protection of creditors is purely a legal matter, it does not enter into the scope of our discussion here. In the chapter on "Watered Stock" we went into the question of protecting prospective purchasers of corporation securities, and shall not take it up further. Our subject at this point is the protection of the general public from the exaction, in the form of rates or other payment for service, of an excessive return on capital.

So far the demand for state regulation of the financial arrangements of corporations in order to prevent a possible excessive charge has not been much made with reference

to any but public utility corporations. Although already a few people begin to advocate a more general state supervision of charges, most of those who consider the question so far are content to rely on competition to control the charges of manufacturing and commercial corporations. People rather commonly feel, however, that the state must carefully scrutinize the charges of corporations that are wholly or partly monopolistic, or of an inherently monopolistic nature.

Immediately the question arises, What is a fair or an unfair charge? The usual reply says that a charge which gives more than an adequate return on a fair capitalization is not a fair charge. It goes on to explain that the state must not allow corporations to fix rates to earn a return that on its face appears no more than adequate, but is really exorbitant because based on an excessive capitalization.

Ordinarily the argument does not go much farther than this. It does not bring out any statement of what is either an adequate return or a fair capitalization. Yet it would seem necessary to determine each precisely before it were possible to discuss the fairness of a rate dependent on both.

What is an adequate return? If you want to buy into the railroad business to-day you can purchase Denver & Rio Grande Railroad

preferred stock at a price to yield you, say, 7.09 per cent on your capital.[1] Or, if that investment does not please your fancy, you can buy Central Railroad of New Jersey common stock at a price to return you an income of say, 2.85 per cent. Denver & Rio Grande preferred pays 5 per cent dividends, non-cumulative, and the total earnings of the road available for dividends amount to 8.12 per cent on the stock. Central Railroad of New Jersey common pays 8 per cent dividends and the road earns 18.6 per cent on the stock. In the case of the Denver & Rio Grande the fact that you cannot get more than the present 5 per cent dividend, on account of the rate limited in the preference, and the apprehension that you may get less because the earnings are not so greatly in excess of the amount required for the preferred dividends, determine the price you pay for the stock, and consequently the return on your capital. Central of New Jersey, on the other hand, offers you an 8 per cent dividend that you feel absolutely confident of, and the hope that you will get some of the 10 per cent it is earning on the stock beyond that. So you would have to

[1] The fact that since this was written the Denver and Rio Grande has stopped paying dividends on preferred stock and the Wabash, mentioned a little later, has gone into the hands of a receiver, illustrates the element of risk.

pay, say, 280 for the Central of New Jersey stock, but could buy the Rio Grande preferred for, say, 70.

Suppose you try to escape the life of hopes and fears of stocks into the seeming comparative Nirvana of bonds, and get the calming assurance that the railroad must pay the stipulated income. You can take your choice between Pennsylvania Railroad consolidated 4s of 1943 at, say, 103.25, giving you a return of 3.80 per cent on your investment, or of Wabash first refunding and extension 4s of 1956 at, say, 63, giving you a return of about 6.50 per cent.

Obviously we cannot come to a decision about the fairness of a charge by considering simply one class of capitalization, or what the company may choose to pay immediately in dividends, but must consider total capitalization and what the company earns available to pay returns on that capitalization. For the classification of the capital, its priorities, and so on, hardly concern the public in this matter. Let the corporation arrange its capitalization as it sees fit, and trade on any equity it may care to.

Denver and Rio Grande earns, say, 4.50 per cent on its entire capitalization; Central of New Jersey on its entire capitalization earns 16 per cent. Which earns the "ade-

quate return" and which has the fair capitalization? Or is it perchance the fact that neither has either?

The futility of general statements and surface comparisons becomes plain. We cannot determine the adequacy of a return without knowing whether or not the capitalization is fair. Even before that we must settle on something which we can accept on general principles as an adequate return on capital invested in an enterprise.

It is a truism of economics that any given income from capital represents two things: one, what is called true interest, or the return due to capital as such; the other, the premium for the assumption of the risk in employing the capital in any particular direction. In economic theory true interest is the reward for saving, the compensation due to the sacrifice of immediate enjoyment. That part of actual interest which we call premium for the assumption of risk is paid as compensation for hazarding the savings in any special investment.

True interest represents that part of income which the law of supply and demand in relation to capital governs, quite apart from the assumption of risk. If no risk entered into the employment of capital, or if the risks in all uses were exactly uniform, the return at

any given moment on all employments of capital would be exactly the same. Such true interest would change from day to day, fluctuating with the demand and supply. This phenomenon clearly appears in the daily prices paid for money borrowed in transactions involving approximately similar risks, as call loans, sixty day prime paper, and so on. Quotations, that is, interest rates, vary from day to day, depending on the amount of money seeking employment of the particular kind, the demand for funds in the particular employment, and the changing nature of the risk due to general business conditions which constantly vary.

Besides the risk of the particular employment, a time speculation risk enters into any commitment of funds. This is only another form of stating that true interest varies from day to day. At the end of the term for which the funds are committed, will capital be more in demand or less than now? Will general business conditions be better or worse? This time speculative risk accounts for the fact that the call money rates and the ninety-day rates on risks essentially similar, except for the time element, vary so widely. Though the longer the time the greater the commercial risk, the speculative time risk in the demand and supply of funds is so much more im-

portant that the influence of the commercial time risk can hardly be traced.

All this elaboration of statement simply attempts to get at the elements we must consider in finding the basis of true interest, plus the time speculative risk, to which we must add the premium for risk in the particular employment in order to arrive at our desired adequate return.

We cannot eliminate the time speculative risk. Because the element of time necessarily enters into every transaction, that speculative risk necessarily inheres in every transaction. Since a corporation employs its capital as a whole for all intents and purposes in perpetuity, it seems that the particular time risk to consider should be that inherent in perpetual securities like stocks. Risks of the special employment, however, enter into all such securities to so high a degree that it is impossible to see from them anywhere near true interest plus the time speculative risk.

Though really true interest would have to be on a loan without the time risk, that is, on a call loan, we will hereafter speak of true interest as if it included the time speculative risk.

We might consider English consols. They offer a perpetual security with a minimum of special risk. They yield an income of, say,

3.20 per cent. Probably this is too low to take as a fair return on a perpetual commitment of capital without special risk, because particular privileges such as exemption from taxation, being a legal trustee investment, and so on, much more than offset whatever special risk may be considered as inherent in the security.

Giving up the idea of finding a perpetual commitment of capital with a relatively small special risk, let us consider some long-term securities. United States Government 3s of 1961, which lack the circulation privilege, yield a little less than 3 per cent. Again, however, privileges creating special demands for these bonds probably reduce the income from them below normal true interest. Loans like those of the cities of New York, Boston, Philadelphia, and Chicago yield, say, from 3.80 to 4.20 per cent. Such loans involve relatively little special risk. Considering the special demands created by the fact of tax exemption, and being a legal savings-bank investment in those states which most closely restrict the investing of such institutions and at the same time have the most savings-bank funds to invest, it seems highly probable that the effect of such demands more than offsets the slight special risks in securities of this kind, and that they yield a return really less than the estimated true interest on such a

long-time commitment. At best that must be only a guess. If a hazard were to be made as to what, at the present time, would be a fair true interest rate on a long-time commitment of capital, the surmise might place it as somewhere between $4\frac{1}{8}$ and $4\frac{5}{8}$ per cent. This offers a leeway of one half per cent. Such a possible variation, however, would make a considerable difference to an investor. It amounts to $500 a year on $100,000.

If it is impossible to arrive at a fair estimate of true interest, even on a commitment of any particular length, to say nothing of a perpetual commitment, what can we do with the much more difficult problem of estimating a fair compensation for assuming the special risk of the business? We cannot arrive at it as insurance risks are determined. We should find it of no use to appoint an actuarial board to make estimates. There are not a sufficient number of enterprises operating under approximately the same conditions to work out a law of averages. The only possible estimate of this risk is the appraisal at large. In the particular circumstances, so far as he can ascertain them, what does each investor compute it? These opinions working on each other, and forming a market, establish the common estimate of the risk. Events frequently prove this conclusion wrong. If any

government agency should attempt estimating the risk of enterprises, how much more frequently would they be right than the consensus of opinion expressed in the market?

An estimate by a governmental agency in the case of a projected enterprise could be effective only in one situation. If the government estimate were higher than a market estimate, it would not affect the market estimate, and the project would go ahead just as if the Government had made no estimate at all. When the government estimate chanced to coincide with that of the market, we should have exactly the same result. If the Government, however, should estimate the risk lower than the market, and fix the adequate return on capital correspondingly, investors would not put their funds into an enterprise in which they estimated the risk as greater than the possible return would justify, and the project would never get under way. So much for the effect of any attempt by a government agency to measure the risk of a projected enterprise. How about an established business? Should the Government be permitted to take advantage of "hindsight," and after the event has proved of a business that its promoters were justified in undertaking it, step in and say that the measure of return shall be the measure of risk now appar-

ent? Or should the Government make what we may call a retroactive estimate of the risk, and, from the standpoint of the present, attempt to measure the risk originally assumed? Human judgment cannot be counted on to be fair under such circumstances. It is so easy now to look back and feel sure that the telegraph, the telephone, the Union Pacific Railway, in fact, practically any established business, was bound from the start to be successful in a large way. Yet at the beginning of all these things there were more thousands who believed that the anticipated profits did not justify the risk to be taken than tens who believed that they did. It is impossible from the standpoint of the present to get the same view backward that the standpoint of twenty-five or fifty years ago presented forward. It is unfair to get the measure of reward for a risk assumed in the past by a present estimate of the risk now existing.

We have then several very distinct difficulties in any attempt, assuming that the capitalization is fair, at deciding on what constitutes an adequate return. We must first determine what the "true interest" should be on a permanent committing of capital. Our judgment of that must necessarily vary from day to day as circumstances shift, and the outlook changes. No statutory fiat could

in any fairness determine that true interest should be regarded for a period of years as so and so. Assuming, however, that true interest could be established, we have seen the difficulties in attempting any estimate of the risk. Fixing the conditions, including the return on capital committed, would not, with regard to new enterprises, be unfair to the capitalist contemplating putting his funds into them, because he has the option of committing his capital or not. If such conditions with regard to new enterprises were made so stringent as to prevent the embarking of capital in them, they would tend to give too great an advantage to established businesses by relieving them of potential competition. We have pointed out the difficulties of being fair in any attempt to make artificially, as by legislative enactment, the conditions under which an established business shall operate, including the return on capital, different from those under which the capital was committed to the enterprise. It is not easy to see a solution of the difficulties, unless, indeed, something might be done along the line of the long-term franchise, guaranteeing against a change of conditions for a sufficiently long time for the investor, or the enterprise in the investor's behalf, to set up an insurance fund against the risk of change. Whatever change

may be made, it should not throw the entire burden on the people who committed their capital to an enterprise relying on the conditions as to freedom of action in charging for services permitted at the time the project was taken up. Though it may not be good public policy to permit the enjoyment in perpetuity of conditions that have proved more advantageous than could have been anticipated, it is likewise not good public policy to make those conditions immediately more onerous than anticipated.

It must be kept in mind, too, that the conditions under which one enterprise does business are never just like those under which any other enterprise operates. Therefore, the estimation of risk, and consequently of an adequate return, must vary with every property. Obviously no statutory enactment could cover the situation. Only some agency that could consider the merits of each case could handle the matter. Up to the present, so far as the Government has dealt with the matter, it has done so, for the most part, in just this way through such agencies as the Interstate Commerce Commission and the various state commissions on railroads, and other public service corporations.

To go on with the discussion, let us assume, however, that it is possible in some way to de-

termine what is an adequate return on capital committed to a particular enterprise. That does not get us halfway. We have next to consider what is the fair capitalization on which such an adequate return shall be paid. It may seem, in changing from the word "capital" to "capitalization," that we are shifting our premises. The further discussion, it is believed, will show that we are not indulging in this logical fallacy. Though it may prove more convenient to speak in terms of capitalization, the actual question is always as to what the capital, the assets value, in the enterprise really is on which a return is to be allowed.

Much confusion has come in at this point over the question of securities sold at a discount. One set of people contend that every such transaction represents a capitalization watering operation, another that the discount is a necessary part of the cost of construction. Neither is right, as a great many people, including both the managers of some corporations, and also some public service commissions, are well aware. The discount has nothing to do with capital cost, but is simply and entirely deferred interest and represents part of the investor's estimate of the risk involved. The discount has to do entirely with the question of adequate return and not

at all with the question of fair capitalization. Though it may conceivably be a matter of public concern as to how far it is desirable to go in deferring interest in this way, such deferred interest should be confined to its proper place in a discussion of return on capitalization, and not be allowed to confuse by coming in at the wrong point. It may be remarked, however, that the various statutory provisions against selling securities at a discount have an element of stupidity in them.

Discussion of the proper basis for a fair capitalization, or return for capital committed to an enterprise, runs along two broad lines. One is that it might be on *original cost;* the other that it might be on the *cost of reproduction.* Both have their objections as a basis of determining the capital investment, or capitalization, on which the adequate return is to be allowed.

Let us consider first the fairness of original cost as a basis. The special objection to it is that it deprives the corporation of the benefit of the unearned increment, or increased valuation due to the growth of the community. The corporation, especially if a railroad corporation, may itself have been the most important influence in bringing about such an increased valuation. The number of people who believe that a return to the railroad, or

other public service corporation, based on the original cost would be a fair return, is much greater than the number of people who believe that no unearned increment is fair.

We have just this situation. John Smith owns an acre of property on the prairie worth $10. A railroad builds near this location and establishes a station and switching-yards close at hand. Smith's acre becomes desirable as a site for a grain elevator, and shortly is worth $1000. The community grows up, and land equivalent to that which the railroad bought for yards cannot now be bought for less than $1,000,000. When the corporation was buying prairie land it did not have to pay, perhaps, more than $1000 for its entire location. By this time, Smith's property, which jumped immediately to $1000 in value, has now advanced to the point of being worth $10,000. Those who advocate an adequate return on a fair capitalization, and would base their fair capitalization on the original cost of the property, would say that Smith is entitled to earn an adequate return on $10,000, but the railroad should be permitted to earn only an adequate return on $1000. Smith may earn ten times as much as the railroad, in face of the fact that his original investment was only one hundredth as much. Yet Smith, we will assume, has not done anything himself to in-

crease the valuation, but the railroad has been the most important contributor to the welfare of the community, and the community would not even have come into being at all except for the railroad.

Not to permit owners of the railroads or other public service corporations, that is to say, their security-holders, to get any benefit from the unearned increment, is to place this class in the community at a disadvantage as compared with other classes. Though that would work no harm if it were made to apply only to projects undertaken hereafter, it would work a distinct unfairness if made retroactive and applied to those enterprises which were entered upon in the definite expectation of getting the benefit of such increases in value. Such a probability was one of the conditions surrounding the enterprise at its initiation, which its projectors certainly had a reasonable right to expect to continue. If that condition had not existed it is conceivable that they would not have engaged in the undertaking.

Cost of *reproduction* would perhaps give a more equitable basis for that fair capitalization sought after as a foundation for state regulation of rates. Such a basis would treat the investors in the securities of public service corporations on a level with other owners

of property in the community, and give them the benefit with every one else owning property, of the unearned increment of value which the community activity has created.

Perhaps we should have defined earlier the basis of capital cost to be taken, whether original cost, or cost of reproduction, or any other cost is assumed as the proper cost principal. It should mean actual moneys paid out, in the case of original cost, or that would be required to be paid out in the case of the cost of reproduction, plus a proper charge on moneys expended for interest up to at least the time of going into operation. As already pointed out, such interest does not include the entire discount on bonds sold. On bond money only the basis rate should be allowed during construction. A rate at least as large as the basis on which the bonds were sold should be allowed on funds represented by stock. Inasmuch as such funds carry a larger risk, the interest rate allowed to be charged up to the cost of construction on account of them might well be larger.

A valuation estimated on the cost of reproduction alone might well be unfair, in that a decrease in the cost of materials, or a fall in wages, might make the reproduction cost lower than the original. As against this, however, it may be argued that a monopolistic

public utility would be little or no worse off on such a valuation, for the purpose of basing an allowable return on capital, than a manufacturing enterprise without state regulation of charges, which, nevertheless, would be liable to competition from a plant built at a lower capital cost under similar conditions of construction. Danger of unfairness lies, too, in mistaken estimates of the cost of reproduction. Those having to do with the financing of new enterprises know how difficult engineers find it to estimate construction costs, and how commonly they underestimate. If this is the case with the most expert engineers whose reputation is at stake, and whose figures will be tested by the actual performance of the work, it is easy to see what injustice might be done by engineers estimating on behalf of the state, whose figures will not be checked up by the actual carrying-out of the work.

Cost of *replacement* affords another possible basis of valuation. Cost of reproduction, which we have just been considering, contemplates the present cost of building an exactly similar property in the same location. Cost of replacement contemplates the present cost of building a property that will perform the same service as the property now in existence. We see at once that cost of repro-

duction and cost of replacement may come to very different sums. Engineering mistakes, now easy to see and to avoid, may have made the present property cost more than would one built new at the present time that would do as much work. Even more likely, new inventions or devices for doing the work may make it possible to construct a property at a much cheaper cost that will perform that same service. Again, this basis of valuation applied to public service corporations would not, perhaps, in its general tenor, be unfair, because capital invested in a manufacturing corporation is subject to the same possibility of loss through similar improvement in methods, giving a new competitor an advantage. If valuations are to be based, however, on analogies to manufacturing corporations, these additional elements of risk need be kept in mind in determining that compensation which is to be counted fair.

With these very general considerations in mind, indicating the difficulty of the problem, we may now go on to see what some of the states have done through commissions in dealing with it. What has been stated will afford any one a basis for a critical examination of their work. On the other hand, the statement of their work will show many other things needful to consider. We shall make

little attempt to comment, but will simply examine what they are doing.

For our purpose we will take the Gas and Electric Light Commission of Massachusetts, the Public Service Commission of New York, and the Public Utilities Commission of Wisconsin. These are the only commissions with a jurisdiction over public service corporations other than steam railways that have a long enough history to show much accomplished. The statements for New York represent a study of only the first district. The general jurisdiction of these commissions include: —

A. Establishment of uniform accounts.
B. Publication of statistics.
C. Quasi-trade journal functions.
D. Service.
    1. Improvement of service.
        a. Upon commission's own initiative.
        b. Upon complaint.
    2. Extension or abandonment of service.
        a. Upon commission's own initiative.
        b. Upon complaint.
E. Safety.
F. Valuation of property.
    1. Physical property.
    2. Other property.

G. Capitalization.
H. Regulation of rates.
I. Policy of the commission as to the admission of new companies into the field, the consolidation of companies, and as to the transfer and sale of rights of companies.

From the standpoint of a discussion of corporation finance we are interested only in that part of the jurisdiction including

(1) Valuation.
(2) Capitalization.
(3) Regulation of rates.
(4) The limitation of competition as an offset to the limitation of earnings through rate regulation. The discussion will take up the work of all three commissions under each head.

Valuation (Massachusetts)

Valuation of Physical Property

In the case arising from a petition of the mayor of Salem and customers *vs.* the Salem Gas Light Company, the commission states with some definiteness what it will consider in its valuation of any company's property. It quotes the court in the case of Smith *vs.* Ames as the authority to be followed: —

And in order to ascertain the value, the original cost of construction, the amount and market value of its bonds, the present as compared with the original cost of construction, the probable capacity of the company under the rates prescribed by the statute, and the sum required to meet operating expenses are all matters for consideration, and are to be given such weight as may be just and fair in each case.

Valuation of Property Other than Physical

The commission has no occasion to place a value on the non-physical property, because it never allows a company to increase its capital to exceed the value of the physical property. Whenever possible, through its rate-regulating powers, it compels a company, capitalized in excess of this, to reduce its capitalization to this limit. In case of the consolidation of two companies, it never allows the capital of the new company to exceed in amount the sum of the separate capitals of the former companies.

Valuation (New York)

Valuation of Physical Property

Information about the method of valuing a corporation's physical property as a basis for rate-making, comes from two cases. Experts of the commission made an appraisal of

all the property of the Bronx Gas and Electric Company. This included cost to reproduce and depreciation. The commission undertook similar appraisal work on the Kings County Electric Light and Power Company. It makes such appraisals either in connection with bond or rate cases, or in anticipation of reorganization applications. The significance of a consideration of cost to reproduce and depreciation will be clear after a study of the methods of valuation the Wisconsin commission employs.

Valuation of Property Other than Physical

In prescribing uniform accounts, the commission orders that franchise accounts shall be charged only with the amount actually paid to the state for the right, exclusive of taxes. Furthermore, the corporation must amortize this amount during the life of the grant. It must similarly charge all other intangible assets at their actual money cost alone; and must amortize this amount during the life of the asset.

Valuation of Physical and Other Property (Wisconsin)

The commission must value all the property of every public utility. It holds a public hearing, after notice to the corporation,

before the final determination of the value. The commission may at any time, upon its own initiative, make a revaluation. It must publish separately in its annual reports the value of all property used, and the value of the physical property used, by all public utilities.

In compliance with the law, every bit of physical property of every utility in the state is to be valued, and constant revaluations are to be made to keep these values up to date. In the case of Hill *et al. vs.* The Antiago Water Company, the commission makes a comprehensive explanation of the methods of obtaining a valuation as the basis of rate-making.

There are three such valuations: —

(1) Original cost.
(2) Cost of reconstruction.
(3) The present value.

Which of these valuations the commission may use depends on the special circumstances of each case.

When it includes only proper charges, and when there have been no unnecessary wastes or mistakes, of such nature that no one but the owners should be held responsible for them, then the original cost of construction would seem to represent the investment that has been made in the physical property of the plant.

Thus the commission states the circumstances under which the original cost properly represents the investment value of the plant. It ascertains this cost from the construction accounts. They should show: the cost of the various parts of the plant; the cost of engineering, superintendence, and management; the amount allowed as interest during the period of construction; the amount, if any, at which bonds were discounted; the basis on which contracts for construction were let; the basis upon which stock was issued; promotion expense, cost of franchises, and other items. In short, each of the various items entering into the cost of the plant should be shown in detail.

The commission has this further to say concerning the original cost valuation: —

The original cost, even when shown in detail, may not be the same as the value upon which the investors are entitled to reasonable returns. The question here is one of equity between the investors and the customers. The former are entitled to reasonable returns on a reasonable valuation; the latter are under obligations to pay rates which will yield such returns. The problem is to find the valuation equal to both sides. This value may not always be represented by the amount of money actually invested. The plant may have been built when prices were unreasonably high or low; there may have been excessive promotion

fees, private understandings with the promoters, and so on. All of these things must be taken into consideration. Subject to such considerations, if satisfactory records have been kept, the original cost as estimated from the construction accounts is accepted as correctly showing the value of the investment.

If the records of original construction cost are wholly or partly lost, so that the original cost cannot be correctly ascertained, the value has to be determined by what it would cost to reconstruct the plant. The commission describes the method of obtaining this cost: —

To begin with, it is necessary to obtain a complete inventory of the physical property. This inventory must be secured by actual inspection, aided by the records and such other information as may be had from the company. This inventory should include not only the different parts of the property of the plant, but the amount or quantity of labor and material required to place it in position as a part of the complete plant. The next step consists of finding a suitable price per unit for the labor and material required. The prices are usually those which constitute the average market price for the last few years, modified by local conditions. From these facts the total cost of labor and material that enters into a plant can be computed. In addition it is necessary to ascertain the time required for construction, in order that the interest on the cost during the construction period

may be estimated. The probable cost of engineering, superintendence, insurance, and various other factors are also to be computed. The sum of the costs of all these elements is considered to constitute the cost of construction new.

As a third possibility the commission may use the present value. The total amount of depreciation is deducted from the cost of reconstruction new, giving the present value of the plant. In many cases companies have charged rates ample to cover operating expenses, including depreciation, together with a fair amount for interest and profits, but have distributed to the stockholders the amount which should have been reserved for depreciation. This practice, the commission argues, is one way of paying dividends out of capital. Since part of the stockholders' capital has been returned to them, and their investment decreased proportionately, it is only fair that the sum upon which returns are to be estimated should be reduced accordingly. An alternative to reducing the investment valuation is to keep the plant value up to the cost of reproduction new, and make the managers pay back from earnings the amount diverted from depreciation. In all cases the franchise is to be valued at its actual cost alone, and no other intangible assets are to be considered.

A further element contributing to the value

of the investment is the cost of business. This consists of the deficit from operation during the development period. The commission considers it as necessary a cost as the cost of plant construction, and believes it should be treated as part of the capital invested. An alternative to charging this cost to capital would be to amortize the amount by charging it directly to the consumers as an addition to the price or rate. In that case it becomes a temporary charge, borne only by those consumers who exist during the amortization period. The commission considers this inequitable to the unlucky consumers who are burdened by it.

Capitalization (Massachusetts)

Though originally the board had no control over capitalization, it was not slow in making clear that a power of regulation was desirable. As a result it has to-day a most effective control. From the first the board made it evident that it would consider as capital, upon which dividends were to be earned, only an amount equal to the actual cash paid in. This is shown in the following statement: —

Over-capitalization (watered stock) is a perpetual and unjust burden on the consumers. The stockholders are entitled only to a fair and reasonable dividend on the actual amount of cash

paid in. The money used in the extension of plant, if paid out of surplus, should not be capitalized, but should be for the benefit of the consumers by reducing the price of gas.

What annoyed the board was the companies' practice of capitalizing surplus earnings by issuing stock and scrip dividends upon them. This practice, with the board's views concerning it, is illustrated in the case of the Springfield petition of 1893. The Springfield Gas Company had been incorporated with a capital of $50,000, subsequently increased to $500,000, mainly through the issue of stock dividends, which in nearly every case had been equaled in value by additions to the company's plant. In discussing this situation, the board said in part: —

The consumer is in duty bound to pay three charges: —

(1) the fair cost of gas;
(2) fair dividends on a reasonable amount of capital;
(3) such excess as will give the company sufficient surplus to meet extraordinary accidents and to conduct its business with the highest economy.

If he pays more, and the company converts the excess into new capital, increasing it to a figure beyond the fair amount demanded for the business, he is burdened with too high a price for the gas and a dividend charge upon his contributions.

As a result of continual agitation on the part of the board, the following law, prohibiting the issue of stock and scrip dividends, was passed: —

No company shall declare any stock or scrip dividends or divide the proceeds of any sale of stock or scrip among its stockholders, nor shall any company create any additional new stock or issue certificates thereof to any person, unless the par value of the shares so issued is first paid in cash to its treasury.

After the passage of this law, the board still lacked the complete control over capitalization it desired. So it secured the passage of stock and bond laws in 1894 and 1896 to the effect that: —

A gas or electric company shall issue only such amounts of stocks and bonds as the board may from time to time vote. The board shall render a decision upon application for such issue within thirty days after final hearing. The board shall make out a certificate of its decision, including a statement of the purposes to which the proceeds of the issue are to be put, a copy of the certificate going to the company, which shall use the proceeds for no other purposes than those described.

If when the board approves an issue of stocks and bonds, it determines that the fair structural value of the company's plant is less than the outstanding stock, it may prescribe conditions and requirements it considers best adapted to make

good these impairments of capital stock, or before allowing an increase it may require the capital stock to be reduced to an amount not exceeding the amount of such impairment. *In case of an authorized increase of capital stock, the shares shall be offered proportionally to the shareholders, at not less than the market value thereof at the time of increase. This value is to be determined by the board.*

If the increase does not exceed 4 per cent of the existing stock, without offering the same to the stockholders, and in other cases, if after the time allowed to the shareholders any shares remain unsubscribed for, the directors may sell them at auction to the highest bidder at not less than par to be paid in cash.

The purposes for which companies wish to issue new securities are three: —

(1) The purchase of existing plants and properties;
(2) The construction of new plants and construction of additions to present plant and facilities;
(3) Refunding of bonds and floating indebtedness.

In the case of a petition for permission to issue securities for any of these three purposes, the board follows the ironclad rule that the amount authorized shall in no instance be more than actually necessary to secure the exact amount of funds required.

This is well shown in the case of an applica-

tion of the Fall River Gas Works for the approval of an issue of new capital stock to the amount of $50,000. It wanted the funds to purchase the plant of the Manufacturer's Gas Light Company, and to enlarge its own plant. It was found that the purchase price was equivalent to 780 of the shares of the buyer. Upon investigation the board was satisfied that this price represented the fair structural value of the plant, not including the franchise and intangible assets. The board ruled that 1620 shares of stock were ample, the proceeds of 780 shares to be devoted to the purchase and 840 to improvements.

An illustration of an application of this principle in a petition on account of new construction is found in the board's action upon a petition of the Brookline Electric Light Company (1897), for an issue of $200,000 of bonds in order to make additions and extensions to the company's plant. The board thoroughly investigated the company's plans, and examined its plant. Finding that the fair structural value of the plant equaled the outstanding stocks and bonds, and that the proposed extensions and additions were needed and would require the amount petitioned for, the board approved the issue.

The board applies at every opportunity the clause of the act demanding that if at the time

of approval by the board of an issue of stocks or bonds the fair structural value of the company's plant is less than the outstanding stocks and bonds, the board may prescribe the requirements it considers best adapted to make good these impairments, and may demand that the stock be reduced. Thus, in 1889, in the case of the application of the Dedham and Hyde Park Gas Company for approval of an issue of mortgage bonds to enlarge and reconstruct its plant, when it found that the stock exceeded the plant's value by about $20,000, it allowed the petition only upon condition that the company reduce its capital stock from $100,000 to $80,000.

In the treatment of petitions for the issue of stocks and bonds for refunding operations, the board exercises the greatest caution. Difficulty arises in the determination as to whether the debts have arisen from expenditures for extensions or for repairs and renewals. The board constantly guards against capitalizing depreciation.

The petition of the Boston Electric Light Company for $50,000 of an issue of $250,000 to fund a part of the floating debt illustrates this situation. Though the company had annually appropriated large sums out of income to depreciation, because of the rapid progress in electric lighting methods the sums applied

had not been sufficient to make up for this loss. Recent legislation had compelled it to remove its overhead line in a part of the city and to place new conduits under ground. So the company found itself facing an extraordinary rate of depreciation. Probably public convenience would demand still further improvements in the near future. The board ruled: "Clearly, this situation imposes on the corporation, in its own as well as the public's interest, the duty to apply from its income a sum much larger even than heretofore to the payment of its floating debt and toward the cost of new improvements." Denying the petition, the commission said: "The cost of renewals and reconstruction necessarily incident to the proper conduct of the business, and of replacing property no longer required, is fairly chargeable upon earnings, but only actual additions to the plant upon capital."

Capitalization (New York)

A public service corporation in the State of New York may issue stock, bonds, notes, or other evidences of indebtedness, payable at more than twelve months from the date of issue, when necessary: (1) for the acquisition of property; (2) for construction, completion, extension, or improvement of its facilities; (3) for the improvement or maintenance of its

service; (4) for the discharge or lawful refunding of its obligations; provided the corporation has secured from the commission an order authorizing the expense accounts, such as expenditures for replacements, and insure that in the future capital will not be impaired. To guard against improper uses of the money obtained from the sale of securities, the commission includes in its certificates of approval the requirement of monthly reports of receipts and disbursements on such accounts, with the further requirement that the books of account shall be open to audit by the commission.

As a result of the investigations of finances and appraisals of property conducted by the commission, many of the original applications have been modified, or even withdrawn, while the examinations were in progress. The commission has in several instances been forced to deny applications, or parts of applications, because the funds to be obtained were to be devoted to making replacements. It allowed the capitalization only of those expenditures which added increased value to the plant.

Capitalization (Wisconsin)

In its report for 1909–10, the commission pointed out weaknesses in the provisions of the law giving it jurisdiction over stock and

bond issues. When a corporation desired to issue stocks, bonds, or other evidences of indebtedness for money only, the scope of the commission's inquiry was limited to ascertaining merely whether such an issue would be legal or not. The commission makes this criticism: —

> The law as it now stands is of little value as a means of ascertaining many important facts relating to the past issues of the securities of public service corporations, which should be matters of record in connection with any new issues of securities. The financial history of such corporations is vital to investors, and if made a matter of record, will accomplish much in the way of preventing over-capitalization of such corporations. . . . It might be well to strengthen the law in other respects. At present the corporation determines the amount and character of the securities it wishes to issue, also the purposes for, and the terms upon which, the same are to be issued. The legislature could prescribe the purposes for which such securities could be issued, determine the character and limit the amount of the same to that which would be reasonably required for such purposes, and leave to the commission to ascertain whether the proposed purposes are within the terms of the statute and whether the character and amount of the issue are reasonably required for such purposes.

The law as amended in 1911 would seem to be proof against any of the defects of the

former law complained of by the commission. It reads: —

No public service corporation shall issue any stock or certificate of stock except in consideration of money, or of labor or property, at its true money value as found and determined by the commission, actually received by it equal to the face value thereof; or any bonds, notes, or other evidences of indebtedness, except for money or for labor or property at its true money value as determined by the commission, actually received by it equal to 75 per cent thereof. No bonds, notes, or other evidences of indebtedness shall be issued at less than 75 per cent of the face value thereof, plus the amount of any discount paid or incurred upon the issuance of such bonds, notes, etc.

No stocks, bonds, or other evidences of indebtedness, except such as are issued for money only and payable one year or less from the date thereof, shall be issued without the consent of the commission.

In case of an application for the right to issue stocks, bonds, etc., for money only, the corporation shall file with the commission a statement setting forth: —

(*a*) purposes for which they are to be issued;
(*b*) the amount and character of the proposed issue;
(*c*) the terms on which they are to be issued;
(*d*) the total assets and liabilities, *and the previous financial operations and business of the*

corporation, in such detail as the commission may require.

For the purpose of enabling it to determine whether the proposed issue complies with the provisions of the act, the commission may make any such inquiry or investigation, hold such hearings and examine such witnesses, books, papers, documents, or contracts as it may deem important in enabling it to reach a determination. It may also make a valuation of all the property of the corporation.

If the commission decides that the proposed issue complies with the law, it gives the corporation a certificate of authority stating (1) the amount of such stocks, and bonds, reasonably necessary; (2) the purposes for which they are to be issued; (3) the terms upon which they are to be issued. The corporation must not apply the proceeds to any purposes not specified in the certificate.

In case of an application for an issue in return, as a whole or in part, for anything other than money, the corporation shall file a certificate showing also (4) the description in detail and estimated value of the property or services for which they are to be issued; (5) the amount of money, if any, to be received in addition to such property, services, or other consideration.

The commission shall obtain the true valuation in detail of such property, service, or other consideration, and shall make examinations and investigations as before.

The commission's certificate of authority in these cases shall contain, in addition to (1), (2), (3), the true value of the property or service or consideration other than money as found and determined by the commission.

A corporation may issue stock, bonds, or other evidences of indebtedness, when necessary for organization expenses and all other expenses reasonably required in connection with all the financing and construction of the property; for the acquisition of property, and for the construction, completion, extension, or improvement of its plant; or other facilities for the improvement of its service; or for the discharge or refunding of its legal obligations. No corporation shall make such issues for any purpose not chargeable to its capital account. If it should make such an issue for purposes not chargeable to capital account, it must set aside annually such a sum as to amortize the amount by the time the obligations become due.

Regulation of Rates (Massachusetts)

It is difficult to determine just what the board has accomplished in the way of price re-

ductions. Though each year between twelve and twenty gas companies have reduced their rates, in most cases they have not made the reduction as a result of complaints. Average prices paid by coal-gas consumers have fallen from $1.72 in 1886 to $.91 in 1909. Changes in methods of production and distribution, however, have resulted in such reductions in costs, from time to time, that it is impossible to draw definite conclusions as to how far this appreciable downward trend in prices has been due to the efforts of the board. Moreover the board has been unable to make any general action to the end of bringing about a general price reduction, but it has been forced to confine itself to those irregular cases which chance, in the form of complaints, has brought under its jurisdiction. However, it is fair to say that because of the board's existence prices have probably responded more quickly to the diminutions in costs due to inventions and improved methods of production.

Cost-reducing improvements in apparatus and methods are sure sooner or later to bring about a general price reduction. However, in such a business as electric and gas lighting, where nearly every company enjoys a monopoly in its own territory, under ordinary conditions improved methods are likely to be

much slower of general adoption than in the case of competitive industries. A company making satisfactory profits without fear of competition will hesitate a long while before installing new apparatus or adopting new methods, which, although likely to diminish costs and so increase profits, will necessitate a large initial expense. Presumably the existence of the board has gone far toward overcoming the tardiness of prosperous companies in installing new and cost-saving apparatus. The commission keeps informed about the latest and most improved methods of manufacture. Whenever a company is brought before it by a petition for a reduced price, it bases its decision upon the costs by the most improved methods of manufacture. An order for one company to reduce prices leads to others. No community, learning that another obtains gas or electricity cheaper than itself, is content until it has brought its grievance before the board. Thus, thanks to this natural determination of every consumer to pay no more than the next fellow, the board is in a position sooner or later to scale down prices throughout the state to the cost level of the most efficient means of production. As a result the companies tend to adopt improved devices and methods more quickly than they would altogether of their own accord.

On the petition of the customers of the Springfield Gas Company for a reduction in the company's price, the board stated the charges contributory to a proper price: —

The consumer is in duty bound to pay three charges: —

(1) fair cost of gas;
(2) a fair dividend on a reasonable amount of capital;
(3) such excess as will give the company sufficient surplus to meet extraordinary accidents and conduct its business with the highest economy.

"Fair cost" obviously means the fair manufacturing cost. In satisfying itself as to whether or not the company is employing the proper methods to supply the public with gas or electricity at a fair manufacturing cost, the board subjects the companies to thorough tests.

The second charge upon consumers is a fair dividend on a reasonable amount of capital. What the board considers a reasonable amount of capital has already been stated under the head of "Capitalization." In an investigation arising out of a petition of consumers of the Chelsea Gas Light Company, the board found that the prices were not higher than those of other companies, that the company was economically managed,

that for several years it had been making only about 6 per cent on the capital; but it also found that the amount of capital was unusually large. It appeared that the present management had received a company heavily capitalized, due largely to a distribution of stock dividends. The board considered that under such circumstances low dividends would not be considered a reason for keeping prices at their present level, and ordered a reduction.

According to the board no single uniform rate of income return to be allowed on investment can be set. It says (1909): —

To assume that some single rate of dividend can be applied to such investments would not infrequently put a premium on managerial inefficiency, invite a failure to regard properly the company's obligations to the public, and thus imperil the public's interests. In fixing a fair rate of return for individual companies, certain features of local history and condition should not be overlooked. It would be short-sighted policy which would overlook the relation of the actual investments of the shareholders to the total investment in the business, of which the value of the company's plant may afford the best indication. When the plant value is high compared to the capital stock, along with a high grade of service and a relatively low price, it affords a convincing indication of high efficiency in the management

and a commendable regard of the public's interest. Under such a management, the public interests will not be prejudiced, but may rather be conserved by a moderate increase in dividends over what might be claimed under other conditions.

The board defines pretty distinctly what shall constitute a proper surplus to contribute to the charge upon consumers. It shall be sufficient to enable the company to meet extraordinary accidents and to conduct its business with the highest economy.

Again quoting the commission: —

The board believes that the policy of creating a surplus should be commended rather than condemned. The history of the business shows the lowest prices where this policy has been pursued, as it allows an increase of facilities without a corresponding increase of dividend-demanding capital. The surplus in this case cannot be considered the exclusive property of either the shareholders or the consumers. It would seem that the company is under obligation to use this in order that substantial advantages will accrue to the public. From an examination of the works it is apparent that there is an immediate demand for investment in the plant of a portion of this surplus. This policy should be continued. Thus the surplus will act as an insurance against loss if prices are reduced and consumption is not increased.

In justification of the idea of the joint ownership of surplus by the company and the pub-

lic, the board's argument in the case of the Worcester petition of 1902 is to the point: —

> But it must not be forgotten that however skillful and wise may have been the management, the company has been able to acquire its present accumulations only by the exercise of a monopoly, which it has enjoyed by the favor of the state, and which is in a measure assured to it by law. This is certainly a most important contribution by the public to the company's prosperity, for which the public is entitled to a special consideration. When both parties have so clearly contributed to these results, neither ought to claim the exclusive rights to the benefits they confer.

In the case of J. A. Gale and other consumers of the Haverhill Gas Company, the board calls attention to the debt owed by the present consumers to those of the future, and at the same time to the fact that when the surplus exceeds certain limits, it should revert to the present consumers in the form of reduced prices.

Regulation of Rates (New York)

The commission can act on the rates of common carriers only on complaint. It has not established any definite principles of rate-making. Speaking of a failure to provide for depreciation, in favor of high dividends, the commission says: —

The stockholders, having obtained in the form of dividends the earnings that should have gone for maintenance charges, should not now object because renewals and increased maintenance and interest charges make dividends temporarily impossible, nor should this presumably temporary situation stand in the way of reduction of fares, if other considerations justify such a reduction.

Regulation of Rates (Wisconsin)

The Wisconsin commission states of the charges which make a proper rate: —

Under normal or ordinary conditions, public utilities are entitled to earnings that will cover the operating expenses, including depreciation, and a fair return on the investment. These items may be said to constitute the cost to the users of the services that are furnished. (Manitowoc Gas and Electric Company, December, 1908.)

With the installation of the accounting systems prescribed by the commission, a company's expenses of operation and everything connected with its finances may be accurately determined. The commission makes no attempt to give a normal rate of depreciation, but states that the rate is a variable dependent upon the circumstances peculiar to each case. The method of ascertaining the investment value or amount upon which the rate of profit is to be estimated has been given under that heading. In the case of Hill *et al*

vs. The Antiago Water Company, the commission discusses the proper return on the investment. The interest rate it states to be a variable, governed by the conditions of each case. Profits above interest, it says, shall be high enough to encourage new capital to enter the field. Since risks are greater in new enterprises, higher profits shall be allowed them. As the utility becomes older and the risk decreases, profits shall decrease accordingly. It is the duty of the commission to protect the consumer from monopoly prices and discriminations. The only instance in which the commission attempts to name at all definitely what is a proper rate of return is in the case of the Chippewa Railway Light and Power Company, in which it says: —

> Many authorities held that it [the rate of return] should range from eight to ten per cent on a fair valuation of the plant; many place it as low as six per cent. It is not unlikely that the figures thus mentioned represent the maximum and minimum rate under approximately normal conditions, and that, as in the case of depreciation, the actual rate allowed should depend on the conditions in each case.

Policy as to the Admission of New Companies into the Field (Massachusetts)

The board, upon application in writing by any company, chartered under the laws of

the commonwealth, after notice and hearing, may authorize the company to go into the gas or electric business. It may engage in such business in the territory or any part thereof that the board may designate, but shall not do so unless authorized by a two-thirds vote of the shareholders.

In granting this authority the board shall prescribe the time, not less than six months, within which the company shall erect and equip a plant for carrying on its business, and shall designate the minimum capacity of the plant. If the company fails to erect the plant within the time required, the authority becomes void, and shall not be granted again for two years. No other company or person in the community where a company already exists may lay pipes or erect wires without the consent of the mayor or aldermen or board of selectmen. Any company aggrieved by the decision of the municipal authorities on the coming of a new company, may, within thirty days after notice of such decision, appeal to the board of gas commissioners, which shall thereupon give notice and hear all parties concerned. The decision of the board shall be final.

Practically all the cases of such new companies have come before the board through appeals by the old company from the action

of the municipal authorities. One of the first was the Boston Electric Light Company *vs.* A. W. Perry (1889). Perry had purchased a small, private, electric lighting plant. He moved the apparatus to a block he owned, and from there he ran wires across Summer Street to blocks that he leased. He had obtained no permit to do this, as he did not know that it was necessary. Later he had asked for one, and, as no remonstrants appeared, the aldermen had granted it. The company, stating that it had seen no notice of the hearing, showed that the grant from the aldermen allowed Perry to light a valuable and substantial part of the city. Since he did not possess a general franchise, he did not have to furnish gas upon a reasonable demand as the corporation had to; the corporation argued that though Perry could, perhaps, furnish light to certain sections more cheaply than it could, nevertheless to let the decision turn on this alone was an injustice to the company, which could furnish light to the whole city at a less rate than Perry. The board agreed with this argument.

The board gave a very full statement of its reasons for protecting the large company in such a case in the hearing on an appeal by the Edison Electric Illuminating Company (1895) from an order of the aldermen permitting

O. H. Durrell to run pipes across the streets. As between corporations and individuals it seems to be a wise policy to entrust the lighting of towns and cities, so far as it requires a public franchise, to perpetual bodies, subject to state supervision and regulation, and capable of continuous ownership. Such bodies serve the community as a whole more safely and economically.

The commission says: —

> The large lighting companies, holding valuable franchises, are compelled to submit to the orders of this board in regard to the quality and prices of light. The large company is required to satisfy all reasonable demands for extension, and in fact to furnish the whole community with light. It is clear that if isolated plants are permitted to exercise public franchises over limited areas in the city, the burden of each company will be enhanced, for such a removal of its customers, as would result from the multiplication of business, would of necessity add to the cost of light to the whole community.
>
> If it were shown that a company rendered inefficient service or charged unreasonable rates, or defied legal restraint, these circumstances might be conclusive in favor of introducing competition. The multiplication of plants, exercising public franchises, and each lighting a limited area of the public territory, would, in the first place, lead to great confusion, and, in the second place, would be detrimental to the general consumer, who must

always be dependent upon the large general companies, and for whom the companies must maintain a sufficient plant and lines.

It is equally true that the board is willing to protect an existing company which is giving satisfactory service, from the invasion of its territory by a large company. The board's action, in the case of an appeal by the Haverhill Electric Company from a decision of the aldermen in favor of the Haverhill Illuminating Company, shows this. The contract of the electric company to light the city had just expired. Some time before its expiration, the city advertised for street-lighting bids. The bid of a certain group was successful, and they incorporated into the Haverhill Illuminating Company, and received from the aldermen power to carry on the business of supplying electric light and power to the city. At the hearing there was no attempt to show that the service of the present company was poor or its prices high. The evidence showed that its equipment was as efficient and economical for the work required as that which the new company proposed to install.

The permit rested solely on the fact that the illuminating company offered to do the street-lighting at a price which would amount to about $6000 less than the price of the old company. The old company had $250,000

invested in the business. The new proposed to invest $150,000. It was more than probable that this latter investment would be too small to carry on a business of a volume equal to that then being done, and it was very doubtful if the company planned an extension of its business. There was no attempt to show that there would be a profit in the undertaking; in fact, the testimony amounted to an admission that it would be unprofitable.

It seemed to the board that though the admission of the new company might, for a while, result in lower prices, the competition would in the end prove expensive for the community. The ultimate result would be a union or consolidation which would bring an undue burden of capitalization upon the public, and an excessive investment in plant and apparatus. The existing investment of $250,000, which was adequate, would be increased to $400,000, at least, and that amount would rapidly grow larger. In view of these facts the board did not hesitate to uphold the protest of the old corporation.

It is clear that the board has developed a fixed policy, by reason of which the existing company is vastly more secure in its position than it ever had been before the creation of the board. In the first place, the board practically denies the right of individuals to enjoy

franchises, in competition with the perpetual, state supervised corporations. It considers that the corporation has proved itself the best equipped unit to give the whole community the most economical service, and in view of this fact, it considers that the enjoyment of a right to furnish a part of the community by an individual results simply in a burden upon the corporation which it should not be forced to bear. With regard to the admission of a new corporation into the field, the board's policy is just as decisively in favor of the existing company. As long as the corporation obeys the law, serves the community efficiently, and charges reasonable rates, the board considers it deserving of retaining its position against all comers. The burden of the proof in every case rests upon the company seeking to enter the field. If it cannot prove that the existing company is not living up to the three requirements named, it has not shown the necessity of its establishment. Capital invested in supplying any community should be kept to the lowest limit which insures efficient service. The board adheres to these principles so strictly that in one case it sustained an existing company, which was giving only a mediocre service, against a company seeking authority to serve the same territory, on the condition that the existing com-

pany should bring its service up to standard within a certain, stipulated time. (Appeal of Easthampton Gas Company, 1908.)

Policy as to Consolidation of Companies (Massachusetts)

The statutes allow the purchase and sale of the rights of one company by another, or the consolidation of two or more companies, only on the board's approval. Thus the board has full control of a company's actions in this direction.

The board bases its decision, in cases of this kind, upon its estimate of whether or not the community will benefit from the proposed changes. A study of two cases shows this.

In 1889 the New Bedford Gas Company and the New Bedford Electric Company petitioned for authority for the sale of the plant and franchise of the electric company to the gas company. At the hearing the Edison Electric Illuminating Company appeared in opposition. Since the consolidation seemed to promise no public benefit the board refused to allow it. At the request of the petitioners the board later reopened the case. The new evidence showed that the incandescent electric lighting company confined itself to one section of the city, that it was making no effort to increase this area, and that it could

make no considerable extension except at an expense practically prohibitive. It also appeared that considerable economies might result from the operation of the business by the gas company. These would be effected by the use of fuel of little or no market value in the place of coal, by a reduction in labor costs, and by the removal of the electric plant to unoccupied land which the gas company owned. The gas company was ready to erect a plant with facilities for lighting the whole city. The board believed these facts pointed to improvement in both quality and price and permitted the consolidation.

The Worcester Gas Light Company and the Worcester Electric Light Company applied for authority (in 1891) for the gas company to engage in electric lighting. Plans had been made for the purchase of the rights and property of the electric light company by the gas company. The electric light company had just completed an addition costing $125,000, making a building of ample size to meet the wants of the community for years. It had managed its affairs with strict economy, and pursued a conservative policy. The board was unable to find that any appreciable saving in the conduct of its affairs or the manufacture of its product could be secured by the change. The businesses used no article

in common. Coke for fuel would be available from the gas works only a few weeks a year, and even then transportation charges would be prohibitive of its use. The wide separation of the plants and the difference in the training of the employees would make necessary separate superintendents and employees. The present dividends of the gas company were eight per cent, of the electric light company, five per cent. The contract between the two would probably require $300,000 extra capital. With no facilities for reducing the cost of electric light, the stockholders of the gas company would doubtless suffer a reduction in dividends. This could be prevented only by advancing the prices, lessening the service, or using the surplus profits of the gas company. Any of these courses would be contrary to the public interest. It would be for the interest of the consolidation to increase the sales of gas rather than of electricity, and the public would object to such a policy. The board refused to permit the combination.

Policy as to the Admission of New Companies into the Field (New York)

Without having first obtained the permission of the commission, no corporation shall begin the construction of a street railroad, or exercise any franchise or right under any pro-

vision of the railroad law. The commission shall grant its approval, whenever it shall, after due hearing, determine that such construction or such exercise of the franchise or privilege is necessary for the public service. The provision concerning gas and electrical companies is substantially the same.

Decisions of the commission have done little toward formulating a definite policy, to be followed in acting on applications for the exercise of franchise rights and other powers mentioned in clauses of the act relating to the admission of companies into a new field. It has, however, come out flatly in defining its position as to the admission of new companies into a field already satisfactorily supplied: "If additional companies are allowed to enter a field already adequately supplied, the public in the end must pay higher rates or accept poorer service." In the case of the application of the Longacre Electric Light and Power Company, in 1908, the commission stated its views at length. This company petitioned for the approval of a proposed bond-issue. Since the proceeds from the sale of the bonds were to be used to build a plant, the request amounted to an application to begin business. The board denied it.

The applicant did not prove that the exist-

ing companies were not properly serving the public interest and convenience, and that it would be to the public advantage to have a new company authorized to enter the field. If a competing company were to enter the field, it was unlikely that it would continue independent operation for any length of time.

Competition was not desirable, the board said. The existence of competing companies leads to much more frequent opening of the streets, resulting in injury to pavements and more expense to the taxpayers. Competition involves duplication of plant and equipment. It is an established fact that one company can generate current for the whole of Manhattan more cheaply than several companies, each trying to serve the entire borough. As a result of duplication of capital and the less economical methods of production and distribution which accompany competition, the cost of furnishing current is higher than under efficient monopoly. Furthermore the existence of duplicate plants and wires is almost always urged as a reason for higher charges when the state attempts to lower rates. Practically all the advantages claimed as the probable result of competition can be secured through the powers of the commission. Until it has been demonstrated that these are inef-

fective, it would be unwise to adopt a method which has proven ineffective in the past.

Policy as to the Consolidation of Companies (New York)

No public service corporation, foreign or domestic, can hold any part of the capital stock of another public service corporation unless authorized to do so by the commission. Except as stock shall be transferred or held as collateral with the consent of the commission, no corporation of any description, domestic or foreign, other than a public service corporation of the same sort, can hold more than ten per cent of the capital stock issued by any public service corporation. No franchise or right under any franchise, to own or operate a public service enterprise, can be transferred, or leased, without the commission's approval.

It is apparent that the commission has a check over the control of companies by holding companies. There are, however, no cases of application for the right to acquire the stock of other corporations which bring out facts worthy of notice.

The commission is in a position to accomplish much toward conserving the public interest through its control over leases. The widespread bankruptcy of the New York surface lines was due to no one thing more than

the extravagant terms on which many lines had leased the property of others. In some cases the Metropolitan Street Railway Company had made leases under which it had agreed to pay twenty-one per cent upon the inflated capital of the companies whose lines it leased. The commission makes it evident that it will allow no more leases upon such terms. "Leases made under which extravagant rentals are paid lessen the available net income." "Only five applications were presented to the commission for the approval of contracts and agreements. Only one was similar to the numerous leases of the Metropolitan system in the past, and that was disapproved."

Policy as to the Admission of New Companies into the Field (Wisconsin)

No license, permit, or franchise can be granted to any person, partnership, or corporation to engage in any public service enterprise, where there is in operation under an indeterminate permit, as provided in the act, a public utility engaged in a similar service, without first securing from the commission a declaration, after a public hearing, that public convenience and necessity require such second utility.

An indeterminate permit may be granted, where the existing public utility is operating without an indeterminate permit (1907). By an act of the legislature in 1911, all existing franchises and permits possessed by public utility corporations were made indeterminate permits.

The commission stating its views on competition between public service corporations, says: —

There are many important differences between public service and commercial enterprises. The former usually require a much larger investment in plant, equipment, and other fixed property, which in turn means heavy annual charges for interest, repairs, and maintenance. The conditions which surround the former, are also of such a character that the service which they render can usually be furnished at a much lower cost by one plant than by two or more in the same locality. The differences between them extend to the principles of competition. In most of the ordinary commercial undertakings, the expense can usually be stopped, whenever competition has reduced prices below a profitable level. This cannot be done in the case of public service corporations. The investment in these corporations cannot be withdrawn and converted to other purposes. The interest and maintenance charges go on at about the same rate, whether the plant is in operation or not. Hence it often happens that it is better for the owners that such plants should be

kept in operation, even if they fail to earn more than the actual operating expenses.

Duplication of such plants is a waste of capital, whenever the service can be adequately furnished by one plant. It necessarily means that interest and maintenance must be earned on a much greater, if not twice as great, an investment, and that the actual cost of operation is likely to be relatively higher. Competition in this service, therefore, usually means a bitter struggle and low rates, until one of the contestants is forced out of the field, when rates are raised to the old level, if not above it. In this way it often happens that the means which were thought to be preventive of onerous conditions become the very agents through which conditions are imposed. In fact active and continuous competition between public service corporations, furnishing the same locality, seems to be out of the question. This has been shown by experience. Such competition is also contrary to the very nature of things. Two distinct and separate corporations are not likely to remain separate very long after it becomes clear that the service rendered by both can be more cheaply and effectively furnished by only one of them. (Application of Lacrosse Gas and Electric Company, August, 1907.)

That conditions may arise, under which competition to a certain extent is permissible, the commission states in these words: —

The legislature doubtless intended that through the administration of this law destructive compe-

tition and rate wars and competition in all forms injurious to the public should be eliminated. The legislature could not have desired to eliminate all competition absolutely. If such a construction were to be placed on the law, it would in most, if not in all, cases be impossible for any railway to be constructed in the future to enter any city, in which there is an existing railway, because it is axiomatic that in the railway world, within proper limitations, every railway competes with every other railway, largely independent of the exact geographical location of the competitors. (Petition of the Milwaukee and Ox River Railway.)

Enterprises of a speculative nature will not receive the commission's sanction.

It was one of the purposes of the statute, under which this application was made, to insure the public against the undertaking of hazardous enterprises. It was doubtless contemplated to prevent the projection of lines for speculative purposes and through which the innocent purchasers would be made to suffer losses. (Petition of the Milwaukee and Ox River Railway.)

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CORPORATION FINANCE

CHAPTER I

RAISING FUNDS FOR THE CAPITAL ACCOUNT THROUGH AN APPEAL TO THE STOCKHOLDER

PEOPLE who are starting a new corporate enterprise must in some way provide the capital for it. Finding the capital forms part of the work of the promoter. When performing this labor he often resembles Gilbert's policeman in that "his lot is not a happy one." He is too likely to have to cool his heels in many an anteroom before he accomplishes the desired result. In the discussion of "Watered Stock" in the preceding book on *Capitalization*, we have already indicated something of the nature of the promoter's services and the method of rewarding them. For the present let us assume a corporation in existence and conducting a going enterprise. When the managers of such a corporation decide that the business requires new capital, or that new capital could be used to advantage in the business, they can attempt to procure it directly through the corporation or they can seek the aid of other

people who make a business of procuring capital for corporations.

If those in control of the affairs of a corporation seek the aid of those who make an occupation of providing capital, — investment bankers or brokers, or, to use a term which includes both, dealers in securities, — they must pay these people for their services. Naturally the question arises whether or not the corporation can cut out the middlemen and, by appealing directly to those who have capital to invest, get the entire amount of funds which the investor is parting with. Of course this question is simply the special part the distribution of securities plays in the whole general question of the middleman and his rewards. It is no part of our purpose, however, to enter at length into the general question, but simply to discuss the issue with special reference to securities.

Corporations have not been successful in making an appeal directly to the capitalist. By capitalist we mean only some one with money to invest, whether large or small in amount, some one who controls capital to a value of from one hundred dollars up to many thousands. Locating the capitalist and persuading him to invest his capital in a particular enterprise requires special skill and influence. When a dozen opportunities

to invest are being offered skillfully and influentially, as is always the case, an offering made without skill and influence is not likely to meet with acceptance.

Middlemen, or dealers in securities, perform a real service. Some description of the manner of performing this service will appear as our discussion develops. A corporation engaged in the special business which it was organized to carry on does not have the facilities, to say nothing of the special knowledge and ability, to engage in the business ordinarily carried on by the dealer in securities. A given corporation ordinarily demands new capital only at considerable intervals. It cannot maintain a permanent organization to satisfy these occasional demands.

Dealers in securities make a business of doing for many corporations what, for any one of them, though probably their most important affair, is one that ordinarily demands attention only at infrequent and irregular intervals. They perform services of two kinds. They do the actual work of inducing the capitalist to make his commitment in the particular enterprise, and they assume the risk of success in performing this service. Generally speaking, corporations do not meet with success in new financing unless they can and do command both serv-

ices. People who are willing to act as brokers for a corporation in selling its securities on commission, and without assuming the risk of the market, naturally will not sell if they find selling so difficult as to be unprofitable. Ordinarily corporations resort to dealers of that character only when they fail to find some dealer who will assume the risk. Generally only small corporations attempt to raise funds in that way, and then the attempt usually results in disappointment.

Risk in these transactions is a very real thing. The most skillful and best informed in these matters may fail to estimate correctly the appeal a particular issue of securities will make to the public at a given price. Even if they are not mistaken in their estimate of the popularity of the issue, general, financial, and business conditions may shift rapidly, before the securities can possibly be disposed of, and cause the bankers who have purchased or underwritten them a heavy loss. The corporation can well afford to pay for the insurance. Generally it is almost a vital matter that the corporation secure the money and usually a relatively small difference in the cost of securing it is not at all vital. If the corporation is carrying through a refunding operation, creating

a new issue of bonds to sell and to enable it to pay off bonds which are falling due, it must have the money or suffer a default. If the corporation requires new capital for extensions, it may be of the utmost importance to it, under the conditions existing, that the new capital expenditure be made. Though the difference between a $5\frac{1}{2}$ per cent and a $5\frac{3}{4}$ per cent basis — which would be a difference between 93.25 and 90.12 in the price of a 25-year 5 per cent bond — is important, it is not vital.

Though it may not be expedient generally for a corporation to turn itself into a banking house in the endeavor to raise capital without the expense of the services of a middleman, it may under some circumstances procure for itself new funds required. The corporation may be a "family" affair: that is to say, a very few people may own practically all of the stock and may not want any "outsider" to have a substantial interest in the business. Many such corporate businesses conduct their affairs much in the manner of a partnership. People who are essentially partners organize in the corporate form for the sake of the limited liability, for the precision of the corporate form in providing for the contribution of capital and division of profits, or for any other of

the advantages which the corporate form possesses. The stockholders are so few and so closely associated that they are like a family. Often more literally family corporations conduct business enterprises. Such corporations frequently result from the death of the man who established the business and during his lifetime carried it on as his personal enterprise. On his death, in order to keep the business in the family and provide for its management and the distribution of profits, it is incorporated. Under such circumstances the existing stockholders may be able and may prefer to supply any new capital needs of the corporation.

Many corporations cannot appeal to the banker for help. No financial organization may have been developed to procure capital under the special conditions. At the time of writing banking organizations are adequate to supply the financial needs of any railroad, electric railway, gas, electric light, or hydraulic electrical enterprise which economic conditions justify. These are, of course, the kinds of business which, as shown by the principles developed in the discussion, in the previous book on *Capitalization*, of "Trading on the Equity," are, when once established, least subject to business risk. Our financial organization is also adequate

to procure capital for the larger industrial enterprises. Even for these, however, it is not as well developed as for the public service corporations. Many smaller industrial enterprises, thoroughly justified by economic conditions, cannot obtain capital through well-organized established channels. It may be objected that the amounts involved in these smaller enterprises do not justify the effort bankers must make to raise the capital. Many of the costs would be nearly as large as for the big capital demands of the great corporations. Costs of investigation and of advertising in various ways, to make the enterprise sufficiently well known to command capital, would be disproportionate to the amount of capital required. The banker would have to charge enough for his services in such a case as actually to impose too heavy a burden on the business. Bankers, however, have overcome such difficulties for the smaller public service enterprises, and in the course of time will probably devise means for providing capital, in spite of the greater business risk, for the smaller industrials. Meanwhile those in charge of the affairs of these smaller industrial enterprises must get their capital as best they can. Such as they cannot provide themselves they must appeal to acquaint-

ances for. On a personal appeal men familiar with the industry of which the particular enterprise is a part may see an attractive opportunity for a commitment of capital. So from various sources the managers of the enterprise find the necessary capital.

Family corporations and the small industrials do not, however, compose the large body of corporate enterprises which present the problem of raising capital we are discussing. Generally a corporation which can procure capital through the regular channels of the banking houses had better take advantage of the opportunity and not attempt financing itself.

Under some circumstances, however, a corporation that is not a family affair may successfully finance itself. Especially if it had a surplus and its stock has a market value substantially above par, it may, on condition of cutting down the surplus, successfully appeal for funds. It may do this by taking advantage of the fact of the surplus, in connection with the right of its shareholders to purchase any additional capital stock the corporation may be issuing for cash.

We will have to delay at this point to explain, for the benefit of those who may not

be familiar with them, the various procedures possible in the issuance of corporate stock. The chapter on "Watered Stock" in the first volume on *Capitalization* gave some indication of the process of "getting stock out" as fully paid on the transfer of property to the corporation. Ordinarily the incorporators transfer the property at the time of incorporation in order "to get the stock out," as the phrase is, and put the corporation in a position legally to begin business.

The organizers of the corporation may, as described in the earlier chapter, distribute none or only a part of this stock, to satisfy the interests of the various parties to the launching of the corporate enterprise. The organizers may have had the stock issued as fully paid stock on the transfer of the property only to get the corporation into a better strategic position for future financing. If that is the case, they will hand back to the corporation such part as they do not require for the purpose of carrying out the bargain under which it was formed. Stock so turned back to the corporation, or "donated" as the process is termed, carries the name of "treasury stock." Of course the lawyer in charge of the incorporation proceedings must be careful to comply with all legal require-

ments, and must incorporate in some jurisdiction which enables him to carry the transaction through without jeopardizing the position of directors and shareholders.

To explain the matter more clearly, let us consider a supposed situation of a corporation which has provided for future financial requirements. We will assume that the charter of the corporation authorizes $2,000,000 of preferred and $6,000,000 of common stock. The organizers had the corporation issue and distribute all the preferred stock. They had property transferred to the corporation for which it issued $4,000,000 of common stock. Of this common stock, so issued, they had $2,000,000 donated back to the corporation. We will assume, too, that the corporation has given a mortgage under which it may issue $5,000,000 bonds, of which it has actually issued and sold $1,000,000. The capitalization, then, will stand in this way: —

Capitalization

	Authorized	*Issued*	*Outstanding*
Common stock	$6,000,000	$4,000,000	$2,000,000
Preferred stock	2,000,000	2,000,000	2,000,000
Bonds	5,000,000	1,000,000	1,000,000

Let us now also assume a balance-sheet for our corporation. We do not recommend this balance-sheet as a model for accounting practice, but present it simply to illustrate certain financial facts: —

Assets		*Liabilities*	
Real estate plant and equipment...	$5,000,000	Common stock issued and outstanding.....	$2,000,000
Material and goods, inventory.....	350,000	Preferred stock issued and outstanding.....	2,000,000
Bills and accounts receivable.....	150,000	Bonds issued and outstanding.....	1,000,000
2000 shares of common stock held in treasury.....	0	Bills and accounts payable.....	200,000
		Surplus.....	300,000
	$5,500,000		$5,500,000

The 2000 shares of common stock which have been issued and given back to the corporation are not, of course, an asset. When outstanding they will become a liability represented on the assets side by whatever are the proceeds of their sale. Rather than being placed in the assets column, a notation might be made to indicate the situation. They do represent a greater freedom of action on the part of the corporation in its financing. If the corporation has only authorized and unissued stock to dispose of, in order to raise cash it must get par for that stock. It may generally, to be sure, pay a reasonable commission for selling it. Even

with this limitation the corporation obviously must realize a certain minimum on a cash sale of any of its authorized but not theretofore issued stock. If the corporation, however, has some so-called treasury stock, it may generally deal with that stock substantially as it pleases. Of course the directors must obtain a price fair to the corporation and otherwise see that the sale does not injure existing stockholders.

Many jurisdictions, both by statute and by judicial interpretation, have been making it increasingly difficult for the managers of a corporation to arrange any way for the corporation to sell any stock for less than par. On the other hand, some jurisdictions have come to a recognition of the true business situation as outlined in the earlier chapter on "Watered Stock." Though at the time of this writing the idea of "stock without par value" has not received much legislative recognition, the fact of an increasing number of people who appreciate the truth back of it gives rise to the expectation that it will receive more general legal adoption. The difficulty and often impossibility of steering a legal course for a corporation to sell stock for less than par causes much of the unsound capitalization plans. If the stock of a corporation is not worth par, and yet the di-

rectors may not legally arrange for its sale at less than par, they must resort to borrowing, — that is, to the issuance of bonds. So the fixed charges become disproportionate, as explained in the discussion of "Trading on the Equity," and endanger the control of the shareholders.

If the corporation has no treasury stock at its disposal, it may, nevertheless, not have exhausted its authority to issue stock: that is, it may not have issued all the stock authorized by the charter. If it has not, the stock not yet issued is called, as we have indicated, "authorized and unissued stock." If the corporation has exhausted its authority to issue stock, it must procure additional authority from the State before it can finance itself on stock. Unless the charter permitted by the law of the State gives to the corporation authority to sell unissued stock without first offering it to stockholders, the directors must offer the existing stockholders a right to purchase, in proportion to their present holdings, the stock about to be issued and sold. Directors who have treasury stock of the corporation available are generally not obliged to give existing stockholders a chance to purchase ahead of any one else. They can come to a fair bargain with bankers and sell them the treasury stock. As

already stated, the price need not be equal to par or it may be any price above par.

Since stock which is merely "authorized and unissued" is often called "treasury" stock, we need to emphasize the distinction. Treasury stock has been issued or "gotten out," to use a common phrase, and in some way, usually by gift, returned to the corporation. That is, the corporation has a right to sell the stock for the benefit of the corporation. The incorporators can generally get the stock issued at the time of incorporation more easily than later. Property is being turned over to the corporation for which stock can be issued in payment. It is agreed that some of the stock be given back just in order to afford the corporation the greater freedom of action in disposing of it. A corporation cannot as a general principle buy back its own stock. That would diminish the fund to which creditors have a right to look for security. As already stated stock received back by the corporation cannot be an asset, any more than a promissory note bought back by the maker before its due date is an asset of the maker. Special statutory provisions in some jurisdictions to some extent modify the general principle that a corporation cannot buy back its own stock, but even these are likely to amount to provisions for a reduction of capital stock

and require essentially an amendment of the charter.

When arranging for the issuance and sale of unissued stock, the directors must first offer the stock to the existing shareholders. That requirement would not in itself irksomely restrict the management. But some jurisdictions clearly hold that existing stockholders have a right to subscribe, in proportion to their holdings, to the new stock at par. If the stock is worth more than par, obviously a sale of new stock at par amounts to a partial distribution of surplus. Though the management may not consider such a course good policy, they cannot help themselves in such jurisdictions on a sale of authorized and unissued stock. Since the right of the existing stockholder to subscribe at par for new stock seems in accord with the principles of the common law, the management would make the offering at par unless in a jurisdiction where statute or judicial decision had established another principle. Massachusetts, for example, by statute requires that quasi-public corporations must offer any increase in capital stock to their shareholders at a price to be determined by the Public Service Commissioners of the State.

This necessity for offering unissued stock first to existing shareholders requires that

the bankers, if they are called in, handle the situation in a special way. It may be that the management of the corporation feels it to be important that the funds for which the stock is being sold should be assured. They may not be willing to take the chance that stockholders will supply all of it. Or, if the situation is such that they might feel reasonably confident that the appeal to the stockholders would procure all the funds, they may wish to have the whole transaction handled by those who are expert in the business, and be willing to pay bankers for their services. In any event, bankers cannot make an absolute purchase of the stock on their own account unless they are ready to turn round and offer the stock to shareholders at the same price the bankers have just paid to the corporation for it. If the stockholders should take it all at this price, the bankers have had their labor for nothing. If the stockholders should not take it all, the bankers, in order to get any return for their work, would have to offer the rest to their clients at a higher price. Since such a matter as the price to the stockholders cannot be kept secret, obviously the bankers would not meet with success in offering the stock to their clients at a higher price.

Under such circumstances the corpora-

tion, instead of arranging for an immediate sale of the stock to the bankers, gets the bankers to underwrite the issue. The terms "underwrite" and "underwriting," as we shall consider in a later discussion, mean various things as loosely used in current financial talk of the street. Just at this point we are using the word in its more nearly original sense in the business of insuring. The bankers, on the payment of a stipulated sum called an "underwriting commission," the equivalent in this case of a premium for insuring the success of the transaction, agree to "take up" or purchase any of the stock which the existing stockholders do not buy. Or, it may be that the corporation, after offering the new stock to its stockholders, may make a public offering of the stock. It could make a public offering, and prefer the applications of its own stockholders. In any event, the bankers agree to buy at the issue price any of the stock or other security which the corporation does not succeed in selling. Since the bankers are receiving an underwriter's commission for their service as insurers, they can continue to offer the stock to their clients at the same price that the corporation was asking, and, if they are successful in selling, they will have received something for the transaction.

To illustrate the situation, suppose the corporation wishes to sell $3,000,000 of stock. Assume that the stock is of the "authorized and unissued" class which the corporation must offer to its stockholders at par. Let us assume that the essential facts for the purpose of our discussion are these: The corporation has assets which on an appraisal would be given a reproduction value of $12,000,000. It has net earnings of 10 per cent on this value. Since a bond issue would only confuse the discussion, we will assume that the corporation has no bonds, but has a stock issue of only $9,000,000 of common stock outstanding of a total of $12,000,000 authorized. We will assume further that the directors estimate that the corporation can earn 10 per cent on a further investment of $3,000,000, and that they consider the investment desirable for the better protection of the capital already committed to the enterprise. Stating these facts in tabular form in order to have them more clearly before us: —

Assets	*Liabilities*
Reproduction value of plant and other assets $12,000,000	Stock outstanding..... $9,000,000 ($12,000,000 authorized)

Net earnings $1,200,000; or, the corporation is earning 13⅓ per cent on the outstanding stock.

Let us assume that the stock is selling at 133, or approximately a value of $10 for each one per cent of earnings.

Now let us assume that the corporation arranges to sell $3,000,000 of stock at par, that the proceeds will be advantageously expended on the capital account of the corporation, and that the corporation will be able to increase its net earnings by the amount of 10 per cent on the new assets. The statement will then change to this form:

Assets		*Liabilities*	
Reproduction value of plant and other assets	$15,000,000	Stock outstanding	$12,000,000

Net earnings $1,500,000, or, the corporation will be earning 12½ per cent on its capital stock.

Obviously, under these circumstances the stock of the corporation, after the issuance of the new stock, will not be worth quite so much as before. Though in the case we have assumed, the issuance of the new stock will not make a great difference, it will, nevertheless, make a measurable change. If the estimates prove correct, net earnings on outstanding stock will decline five sixths of one per cent. We have placed a theoretical value on the stock for purposes of our discussion of $10 for each one per cent of net earnings on the stock. On that basis the stock, after the new stock is issued, should

be worth approximately $8.33 less a share than it is worth now.

Clearly this result must follow any issuance of new stock sold at par whenever the corporation has a real surplus, unless the corporation can increase its rate of earnings by reason of the new capital. It may be that the new capital will enable the making of improvements that will increase the per cent of net income the corporation can earn on capital invested in the enterprise. If it is anticipated that such a result will follow, of course the value of the stock will not decline with the new issuance. Unless the rate of earnings will increase, any issuance at par of new stock of a corporation with an actual surplus must mean a reduction of the amount of surplus to each share of stock outstanding, or of the total assets for each share with which the corporation can earn an income return for that share. In the case we have just assumed, the capital and surplus for each share, as measured by the appraisal of the assets on a reproduction basis, amounted to $133\frac{1}{3}$ per share, and, after the issuance of the new stock, capital and surplus for each share amount to $125. It happens that in the problem we have taken, the ratio of assets and the ratio of earnings remains the same. This would not always

be the case. Regularly the market price of the stock would be based on net earnings rather than on assets, and assets taken into consideration primarily as indicating something of the probable continuance of earnings. Though all our discussion about the effect of the new issue, so far as determining exact prices of the stock is concerned, is highly theoretical, probably actual results under similar conditions would approximate our entirely theoretical results.

Under such circumstances as we have discussed the corporation can readily obtain new capital on an appeal to its own stockholders. The corporation can finance itself. Acting in accordance with the principles we developed in our discussion of "Trading on the Equity," it may prefer to borrow the new capital it desires. In that event it will arrange for an issue of bonds instead of planning to issue more stock. Such circumstances as we have described, however, of a substantial surplus, and an income which tends to show that the surplus is not just a matter of bookkeeping, but causes the stock to sell at a considerable premium, do not compel the corporation to resort to borrowing because it cannot legally obtain capital increases in any other way. Let us consider how an appeal to the stockholders for new

capital could be made, and the way it would work out.

Assume that our corporation has announced its intention of raising new capital by offering to its stockholders at par $3,000,000 of its authorized and unissued stock. Note that the present issued capital stock amounts to $9,000,000. An increase of $3,000,000, under the legal principles we have stated, whereby a stockholder has a right to subscribe to new stock in proportion to his present holdings, would give the holder of three shares of the old stock a right to subscribe to one share of the new. Or, a holder of one share of the old has a right to one third of a share of the new. Though the holder of a single share of the old stock cannot get an actual fraction of a share of stock, the right to a third of a share cannot be taken away from him. This reads like a paradox. We mean that the holder of a single share has the right either to sell his right to subscribe for the new stock, or to purchase the rights of the holders of two other shares, and in this way complete his power to demand a share of the new stock. This is what is meant by a "right" when the term is used in speaking of the offering of new stock to the existing body of stockholders.

Directors of the corporation announce that

stockholders of record of a stated day will have the right to subscribe for the new stock in the proportion of one share of the new for three shares of the old. This announcement — at least, that part of it which says "stockholders of record of —— day of ——" — bears some resemblance to a declaration of a dividend. As we shall see, the transaction resembles a declaration of dividends in more respects than just its language. Through these "rights" the stockholders are about to get an immediate distribution of surplus in a way that amounts to an extra dividend.

We have assumed that the old stock is selling at about 133 and that after the increase the stock of the corporation will be worth about 125. On this basis a man owning three of the old shares has the right, on paying $100, to buy a share of stock which will have a market value of $125. Since a single "right" — that is, the interest of one share of the old stock in the issuance of the new — may be bought and sold, obviously the value of this right equals one third of the $25 which the holder of three shares may realize on exercising his right to subscribe. Or, to state the situation briefly, each right has a value of $8.33. For the sake of clearness let us show the transaction in tabular form: —

Total stock outstanding	$9,000,000
Amount to be issued	3,000,000

Right: — three of old to subscribe for one of new

Market value of new stock	$125.00
Subscription price for new stock	100.00
Value of subscription rights of three shares of old stock	25.00
Value of right	8.33

It is not to be assumed that these values all settle themselves in the precisely accurate mathematical manner indicated. Probably the price of the old stock fluctuates a good deal in anticipation of the announcement of the forthcoming rights. Though we have taken too small a corporation for our discussion to represent a reasonably typical issue of stock listed on the New York Stock Exchange, the results come to the same thing as if we had multiplied the amounts of old and new stock by three or four to present an issue of Stock Exchange size. Dealings in rights will begin immediately on the announcement that they will be given. The corporation will issue, to stockholders of record of the day stated, certificates representing the rights, and these certificates will be handled in just the same way as the certificates of shares of stock themselves.

So by making this appeal to and through its own stockholders, a corporation with a

real surplus, part of which its managers are willing to distribute and have represented as capital stock rather than as surplus, can raise new capital without resorting to the bankers. Instead of increasing its capital stock the corporation may even borrow in this way by offering bonds to its own shareholders at something less than their actual market value. Presumably the corporation has a perfect right to do this so long as it gives to each stockholder the right to subscribe in the manner just outlined, and provided it is not by so doing impairing the capital of the corporation.

If the stock of the corporation is selling only a little above par the situation offers less assurance that the corporation will be able to raise new capital by an appeal to its own stockholders. Issuance of new stock may reduce the market value of the stock to a point where a general decline in the market may carry the price to par or below. To illustrate this situation, assume a corporation with —

Stock outstanding	$25,000,000
To be issued	5,000,000
Market price for old stock	105

To cut our computation short by using the market estimate of values, the capital and surplus of the corporation has a value, on

the market price of the stock at 105, of $26,250,000. On realizing par for the $5,000,000 new stock, the capital and surplus of the corporation will have a value of $31,250,000. But the corporation now has 300,000 shares of stock, so each share should be worth approximately 104. At this price the rights would be worth only 80 cents. On a decline of two points in the market for the stock, they would have a value of only 40 cents. Unless one owned a considerable number of shares this is hardly a sufficient inducement to put through the transaction in order to realize on it. With a price only four points above par a very small general decline in prices would wipe the premium out entirely and carry the quotation below par. Of course no one would pay the corporation par for stock which can be bought on the market at less than par. A situation like this, with so narrow a range of safety in the market, perhaps hardly affords a sound enough basis for a banker to underwrite the new issue of stock. Certainly, if the raising of the new funds were of great importance to the corporation, it could not safely rely on procuring them from stockholders without getting the banker's insurance.

We have dwelt at some length on the principles underlying an estimate of the value

of the stock of a corporation after a declaration of rights. Of course in practice the matter is taken care of by the market estimate. We are assuming now a stock with an active market. When the corporation announces its new issue and the right of shareholders to subscribe at the terms offered, dealing in the rights will begin immediately. Assume our former case, in which we estimated the value of the rights at $8.33. The market will probably place an estimate on the value of the rights at about that point, and the market value so estimated will indicate at what price the stock will sell when it goes ex-rights. When the stock goes ex-rights the corporation will issue certificates to the stockholders of record at the designated time. Up to that time trading in the rights will be for delivery when issued, and the price of the rights will approximately indicate the quotation on the stock when it goes ex-rights.

The price of the rights may not be exactly their value computed in terms of the price of the stock. It is likely to run a little less. Otherwise a stockholder desiring to sell his rights would not afford a purchaser a good bargain. The purchaser might just as well buy the stock without taking the trouble to buy the rights first. Rights are likely to sell at a point that will give an opportunity for

a possible arbitraging between the quotation on rights and the quotation on stock. If, for example, the rights we have been discussing, which entitle the holder of record of three shares of the old stock to subscribe for one share of the new at 100, were quoted at 7.75, and the stock were selling ex-rights at 125, they would afford an opportunity for a successful arbitrage transaction.

Under the stated circumstances let us suppose a speculator has been able to pick up 300 rights at an average price of $7.75, and the quotation on the stock remains at 125. He can assure his profit on the transaction by selling 100 shares short at 125. At the designated time he can present his certificates for rights to the corporation and get a certificate for 100 shares on the payment of $10,000. Let us see how he has come out on his transaction: —

Cost of 300 rights at 7.75	$2,225.00
Cost of 100 shares at 100	10,000.00
Cost of Commission on short sale	12.50
Costs	$12,237.50
Realized on short sale of 100 shares at 125	$12,500.00
Less costs of transaction	12,237.50
Profit on transaction	$262.50

These figures are given simply for clear-

ness of illustration. Probably the rights would not sell low enough to make such a profit possible. The costs include something more than those stated — as the transfer tax and interest on the $2225 capital tied up in the rights during the interval before the certificate could be obtained on the subscription from the corporation. Some speculative risk would be involved, during the time required to pick up the rights, of the quotation of the stock declining or the price of the rights going up before enough were acquired to complete the transaction.

It should be mentioned that though in the New York market a right is that interest in the new stock which belongs to one share of the old, in some markets the term is used as meaning that interest in the new stock which entitles one to subscribe to one share.

Stockholders usually greet with pleasure an announcement of forthcoming rights. So far as the offering of the rights may indicate the opinion of the directors that the corporation may now distribute its earnings a little more freely, it affords a proper basis for self-congratulation on the part of the stockholder. But of course the corporation cannot lift itself financially by its own boot-straps. If the directors have been declaring dividends at the rate of 8 per cent per annum

and are likely to continue an 8 per cent rate on the new stock, the stockholders are getting greater immediate benefits from their holdings. Before the issuance of the new stock the corporation was earning, we assumed, $13\frac{1}{3}$ per cent on the outstanding stock. On an 8 per cent dividend rate, they were carrying $5\frac{1}{3}$ per cent to surplus. After the issuance of the new stock to stockholders at par, we assumed that the corporation earns $12\frac{1}{2}$ per cent on the stock outstanding. Now on an 8 per cent dividend the directors will be carrying $4\frac{1}{2}$ per cent to surplus. What constitutes proper surplus provision depends, of course, on the nature of the business. Assuming that $4\frac{1}{2}$ per cent on the amount of stock outstanding in this case makes ample provision for surplus, then the giving of rights has resulted in benefit to the stockholder. A present payment is of greater worth than one deferred. The offering of the rights raises a presumption in the mind of the stockholder that the dividend rate will not be cut, and that he will get the benefit of this immediate greater distribution.

If the management should be in a legal position to sell the stock at a premium so that they could obtain the full market value for it, they could treat the stockholder just

as well as under the plan of offering rights. To give the same results in an increased distribution they would have to increase the dividend rate, and an offering of new stock at the premium would raise no such presumption of increased distribution as an offering of rights. Market considerations, however, may favor the offering of rights rather than the sale at a premium. Distribution of the new stock by means of rights probably absorbs much of the shock of throwing a large block of new stock on the market. If the old stock were selling at 133, it is improbable that the new stock could be sold at that price. Even though the stock of the corporation would be worth just as much if the corporation should realize 133 for the new stock and could continue, as we assume, to make as large returns from new capital in the enterprise as on the old, still the sudden large increase in the market supply would depress the market price. In the case of the rights the expectation of the increased distribution of earnings acts as an offset to the depressing influence of the increase in the supply of stock in the market. Probably, too, more stockholders, rather than selling the rights, actually purchase the new stock on a granting of rights than would purchase at a premium that would represent the full

market value. So the offering of the rights probably in this way widens the demand.

Aside from these market and psychological considerations, theoretically the results should be the same in the long run whether the corporation gives its stockholders rights or sells at the full obtainable price. Assume in the case of our corporation that the directors were able to sell the stock at 133, the same price as that of the old stock. The sale of $3,000,000 of par value would then realize $3,990,000. If the corporation, as before, earns 10 per cent on the capital committed to the enterprise, net earnings will now increase by $399,000, from $1,200,000 to $1,599,000, or $13\frac{1}{3}$ per cent on the $12,000,000 of stock now outstanding. Theoretically the stockholder would be a little better off in this case than in the distribution of rights. According to our earlier calculation, if the corporation received par for its new stock, net earnings on the total stock would be $12\frac{1}{2}$ per cent. The corporation could carry $4\frac{1}{2}$ per cent to surplus and distribute 8 per cent. If the corporation could sell all the new stock at 133, it would, as just stated, be making $13\frac{1}{3}$ per cent on its total stock. It could carry $4\frac{1}{2}$ per cent to surplus and distribute $8.83\frac{1}{3}$ per cent to stockholders. A stockholder owning four shares of stock and

purchasing a fifth at 100 would have five shares on which he would be receiving an annual income of $40. If he should purchase one of the new shares at 133, he would, under the conditions assumed, have five shares from which he would have an annual income of $44.16\frac{2}{3}$. This would be a difference amounting to $12\frac{1}{2}$ per cent on his extra investment of $33. This is really, however, at the expense of the surplus of the corporation, because the $4\frac{1}{2}$ per cent on the stock carried to the surplus account is $540,000, but in the latter case it is on greater assets and therefore really a smaller surplus reserve.

Highly theoretical considerations of this kind, however, have little value, and we have not attempted, in the discussion at this point, to do much more than bring out that fact. The legal situations discussed are usually controlling, and if they should not be controlling market considerations would govern the decision of the directors as to the method of placing the new stock on the market.

Question may arise in the mind of some one about the rights of preferred stockholders to participate in a distribution of new stock. The New York courts, at least, have held that when preferred stock is entitled to cumulative dividends at a fixed rate and to preference in the distribution of assets,

and to no further dividend or distribution, and the preferred dividends are paid and the capital of the corporation unimpaired, the corporation is not obliged to allow preferred stockholders to subscribe to the new stock. It hardly needs saying that the holders of convertible bonds do not have a right to subscribe to new stock. The stockholder's legal right to subscribe is limited to new stock sold for cash. The presumptive right of the stockholder does not apply to an issue of stock in payment for property.

The discussion set out in this chapter has sought to bring out the possibility of a corporation financing new capital requirements by an appeal to its own stockholders and to show the considerations surrounding that possibility. Incidentally have been mentioned as briefly as possible some legal considerations governing the issuance of new stock, which indicate that the directors of a corporation, when they contemplate financing on new stock, may not have a free hand to do whatever they might consider most desirable as a financial expedient. Questions arise which are matters of grave consideration for the lawyers in charge of the legal side of the new issuance, and involve careful scrutiny of the statutes and decisions of the particular jurisdictions involved.

CHAPTER II

RAISING FUNDS THROUGH THE BANKING HOUSES

In the preceding chapter, "Raising Funds for the Capital Account through an Appeal to the Stockholder," were mentioned two reasons why corporations, if they can, generally resort to the banking houses to raise new funds for the capital account. It pointed out that corporations are not equipped to do this work, which is never more than occasional in character, and that they ought not to take the risk of failure to raise the required amount of funds, if they can avoid it. We should add as a further and important reason the professional character of the banker and his ability to give expert advice in financial matters. It is the business of the banker to know the market, to know what kind of securities will be most acceptable to it at a given time. Are capitalists at the moment speculatively inclined? If so the time may be opportune for an issue of stock rather than for an underlying security. Or do capitalists show a conservative tendency and a preference for the promise of interest rather than for a hope or expectation of dividends? Are

interest rates high or low? If the corporation is to finance on an underlying security, should it run for a short or for a long term? On all these matters, discussed in the first volume in the chapter on "The Market and the Price," the banker is an expert, and if the corporation were to undertake the work of raising funds directly it would find it highly advantageous to seek the banker for professional advice. On all such matters as those discussed in the chapter on "Form of Securities," the corporation needs the advice of the banker.

Just how does the corporation establish its relations with the banker? It is difficult to generalize. Sometimes the banking house was interested in the enterprise at the time of its promotion. The chapter in the first volume which discusses "Watered Stock" indicates something of the nature of this relationship. Some banking houses refuse, under any circumstances, to be interested in enterprises in the promotion stage. Others will, very rarely, concern themselves with a promotion. Some organizations, partly banking and partly engineering in character, are rather frequently interested either in the promotion of a new enterprise or in such a reconstruction as amounts essentially to a promotion.

A banking house which takes the position of a promoter does not appear publicly in its banking house capacity as a promoter, or as in any way interested in an enterprise in its promotion stage. When the enterprise has demonstrated an earning power through actual operation, the banker may appear publicly as identified with the undertaking. We are interested at this point, however, in the banker as promoter only as showing one of the ways in which the relationship of banker to a corporation may originate.

If the corporation went through its promotion period without any banker, and its organizers raised the necessary capital as best they could among themselves and their friends and such capitalists as they might reach, later, when it needed to make an addition to the capital account from funds raised from sources outside itself, presumably the officers sought a banking house that would undertake to provide the funds. Usually bankers have a number of such opportunities pressing on their attention all the time, and the officers of the corporation may have to visit a number of bankers before they find one ready to undertake the financing required. A rejection of the proposal may not in the least indicate an unfavorable criti-

cism of the financing. Commitments of the banking house already made may sufficiently tie up the capital of the house and require the entire attention of the bankers.

Though people are familiar with the term "banker," as applied to these organizations for arranging long-time or relatively long-time commitments of capital, people are not generally familiar with the working of these banking houses. Bankers of the kind we are speaking of are termed "investment bankers" to distinguish them from commercial banks and bankers. Such investment bankers are engaged in financing relatively fixed capital; commercial bankers properly finance only circulating capital or capital in the course of consumption. People sometimes designate "investment bankers" as "private bankers," partly because they are not dealing with the public as generally as are the commercial banks, and partly because they more frequently do not incorporate, but do business as individuals and firms. Since in many of our States individuals and firms engaging in a commercial banking business, without taking out charters as national or state banks, are termed "private bankers," the term "private bankers," as applied to those people who finance relatively permanent capital, is not exclusive, besides not being as descriptive as

the term "investment banker." We use the term "banking house" in speaking of investment bankers rather than the term "bank," which we limit in our use to an organization acting under a charter, or at least to an organization which takes deposits.

Generally these banking houses are not incorporated. Though some have been incorporated in recent years, there is no noticeable tendency in the direction of incorporation. Usually partnerships of varying size, ranging from two to fifteen or sixteen partners, carry on the business. Some banks, more especially trust companies, have investment or bond departments which do the work of investment banking houses in every respect.

These banking houses vary a great deal in the range of work they undertake. Some occupy themselves exclusively, or almost exclusively, with municipal finance. Though they may get into other fields, they are likely to do so as brokers, or as a result of trading, or to carry some other kinds of securities to satisfy the needs of their clients. Such houses do not especially concern us. Other houses make the financing of public-service corporations, other than steam railroads, their principal interest. Even in the field of public utilities houses may specialize, as in the

securities of gas, or of electric light and power corporations, or in the securities of street railway corporations.

While speaking of houses chiefly interested in the financing of public service corporations, we should especially mention certain organizations which carry on together the work of engineering and operating concerns and financing houses. They both operate and supply the funds for the corporations they are interested in. Sometimes they originally did the engineering work for the construction of the corporations. Though such organizations are not numerous they are important. By reason of special skill and ability in their chosen fields they effect economies in operation and construction. They purchase plants which have not proved profitable under the existing management and through their special skill turn them into profitable enterprises. Through the magnitude of their operations they can also effect economies in the purchase of supplies. Such engineering-banking organizations specialize in the field of public utilities more than do bankers who are not also engineers. A house of engineering bankers confines itself to gas plants or to electric light properties or to street railways.

Other banking houses concern themselves

especially with financing the steam railroads. Only two or three have the necessary capital and financial connections to handle the largest issues of railroad securities. Railroads, however, often have smaller issues, as for the construction of branch lines or for the purchase of equipment, within the financial ability of ten or a dozen other houses, and commonly these other houses get the financing of such issues. Many houses which do not act directly as bankers for railroads, or seldom do so, still make railroad financing their principal interest by participating in underwriting transactions and acting as distributors of the securities. A good many banking houses have refused to go outside of these fields. They take the general ground that only a municipal bond, secured by the taxing power of some governmental agency, or a bond of a railway or other public service corporation, with its relative stability of earning power as pointed out in the chapter on "Trading on the Equity" in the first volume, afford the proper basis for safety. Further, under modern conditions these enterprises are relatively non-competitive. In spite of franchise difficulties they do not lie as open to attacks tending to a rapid destruction of values. Hence, that especially indeterminate element, the quality of the

management, though very important, does not assume the relative importance in a railroad or other public service enterprise as in an industrial undertaking. The general class of public service business makes it more subject to analysis and to the deduction of general principles than is the case with an industrial enterprise. Therefore the banker can formulate and apply tests from experience with a greater assurance that his judgment is sound. For these reasons many banking houses interested in the financing of corporations have refused to go outside of the public utility field. There is no reason why a banking house, recognizing the liability of industrial corporations to greater fluctuations in earnings, and in other ways the greater business risks involved, should not undertake the financing of industrial enterprises, and many do.

Besides differing in the kinds of corporation financing they undertake, these houses differ in other respects. Some take deposits from clients who purchase securities from them and from corporations for which they supply the funds for the capital account. Ordinarily these deposits, from the nature of the business, are individually of considerable size, and the banking house is otherwise not taking the place of a commercial

bank or a savings bank. A few of the banking houses have foreign exchange departments and, with respect to foreign trade transactions, conduct a banking business concerned only with the financing of commodities in the course of consumption.

Banking houses differ in the way they conduct their business as well as in the kinds of corporations they finance. Some do essentially a wholesale business. They assume the responsibility to the corporation, but, to a considerable extent, reach the ultimate consumer through some intermediary banking house. We will discuss the general manner in which they do this in a subsequent chapter on the syndicate operations of joint accounts and underwritings. Some houses take a larger part in the active trading on the street than other houses, to some extent speculate in bonds, and generally pay special attention to the needs of capitalists and financial institutions. To whatever extent these houses may act as distributors to the final consumer, the capitalists who ultimately supply the funds to the corporations, they usually initiate some of the business they do: that is, they are the only intermediary between the borrower and the lender. Though sometimes the only business they initiate is municipal, usually, if they really

enter the field of corporation finance at all, they finance directly the issues of the relatively smaller corporations and come in with the wholesalers on syndicate operations in the issues of the larger corporations.

From time to time some one expresses an unfavorable criticism of the profits made by investment bankers. Before proceeding to discuss this directly, let us consider the general nature of the business. Banking houses should be differentiated from brokerage houses. To use the language of the street, an investment banker deals on his own account, a broker deals only as agent. That is to say, an investment banker assumes the position of a merchant and buys and owns the securities he sells. In this respect he conducts his business like any merchant who keeps a stock of goods and counts on making a profit on the turnover. London officially classifies investment bankers as merchants and not as bankers. Though it is easy to make the analogy of the investment banker with a merchant carrying a stock of goods of securities, the analogy is not closely accurate. Though securities in their marketing possess many of the characteristics of goods in the process of consumption, they are not, of course, commodities in the same sense as are wheat and cotton. As a mer-

chant, the investment banker is more strictly like a buyer who goes round among many sheep-growers and buys wool in relatively small quantities, which in turn he sells to a few manufacturing concerns. So the investment banker buys capital from the grower, the capitalist who has accumulated savings, and sells the capital to the corporation. But the investment banker sells "short." He has already sold capital to the corporation in return for the corporation's credit, and has borrowed most of the capital to put with a little of his own to make delivery. He then proceeds to cover on his short sale of capital by buying from the capitalist with the credit with which the corporation paid for the capital from the banker. In using the word "credit" here, we do not confine it to its strict meaning of promise or obligation of the corporation, but include an interest in the corporation which may be represented by stock. From whatever angle we choose to view the business, the essential and important fact is that the investment banker assumes the risk of the transaction. Since the business is one of credit, which probably is more sensitive and fluctuates more widely and more quickly than any commodity prices, the assumption of risk in selling and buying capital, or buying and selling credit,

whichever way one chooses to look at the matter, means the assumption of a greater burden than that of the merchandising of ordinary commodities. A little later, when we are considering the amount of bankers' profits, we must keep in mind this fact of the assumption of risk. A broker, on the other hand, simply acts as intermediary between the buyer and seller for a commission and does not assume any risk of the market.

The total number of banking houses of this kind in the United States is not great. Of about 4000 offices, at the time of writing, in some way dealing in securities, practically all are brokerage offices of one kind or another. The membership of the Investment Bankers' Association of America includes most of the banking houses eligible for membership. Financial qualifications for membership are that the applicant shall be engaged in buying and selling securities on its own account and shall have a capital of at least $50,000 engaged in this business. With a capital of less than $50,000 a banking house could hardly enter the field of corporation finance in any way to deal directly with the corporation. At the time of writing the membership of the Association comprises 340 main offices and 176 branch offices of these houses. Practically the entire organ-

ized business of financing the capital account of our corporations centers in these houses. The total number of branch offices is undoubtedly much greater. The branch offices listed as members have, most of them, considerable autonomy in managing their affairs.

Probably most readers will be surprised that the amount of capital necessary to qualify for membership in the Investment Bankers' Association is so small rather than that it is so large. People are likely to assume from the magnitude of the transactions undertaken that the business must require the banking house to have a large capital. But the business does not require a large capital tied up in plant like a manufacturing organization. The investment banker is engaged in dealing in credit and requires capital only as an assistance in commanding credit. When the banker supplies the corporation with capital, he receives the corporation's securities at the same time. How much of the capital the banking house must advance itself and how much it can borrow on the transaction depend on the nature of the securities, the position, senior or junior, that they occupy in the corporation's plan of capitalization, and, especially, whether they are of a kind to command a relatively

quick and close market. Depending on these conditions the banker can borrow from 50 to 90 per cent of the money necessary to complete the transaction of purchasing the securities from the corporation. Though the loan will rarely be so small, in actual practice, as 50 per cent, the lender produces the same effect by insisting on mixed collateral and by accepting only a percentage of slow and wide market securities as collateral for a loan.

A reader entirely unfamiliar with financial transactions may wonder where the investment banker borrows the money. He borrows at any national bank, state bank, or trust company ready to undertake the business. Since the banks located in the financial districts naturally get the business of the dealers in securities, they come to be known as "financial banks." Instead of financing commodities in the course of consumption, they are, so to speak, financing securities in the course of consumption; that is, in the process of sale to the capitalists who commit their funds to the enterprise of the corporation issuing the securities. The bank in making the loan primarily considers the marketability of the securities put up as collateral. It is of the first importance to the bank that its loans should be liquid.

That is why, from the standpoint of a bank, it engages in the business of financing commodities in the course of consumption. As the commodities pass from one stage to another of the process of consumption, of marketing and use, the loans fall due and are repaid. If the bank can get an equally liquid loan in any other way it is just as good banking for it to do so. One danger lies in loaning on securities. Prices for the securities are very sensitive to credit and other market conditions and vary widely with general business conditions. Security prices fluctuate more widely than commodity prices. Panic conditions may make them not liquid at all. If the bank, however, takes as collateral securities with a quick market and watches the changes in price, it engages in thoroughly sound banking. The marketability of securities, however, varies widely, and ordinarily a bank would not require that all of its collateral for loans should have as quick a market as the most active stock exchange securities. The investment banker knows that he will have no difficulty in getting a loan on his active collateral. He wants to get accepted as collateral as many of his inactive securities as possible. Necessarily the investment banker must get some of his collateral released from time to time

as he proceeds with the sale of the securities, and substitute other securities in the place of those released. He may endeavor to get less active collateral accepted on these substitutions. If he meets with any success, the process is known by the expressive term of "milking the collateral."

The amount the bank will advance on the security of given collateral depends on the marketability of the collateral just discussed and on the possible or probable range of fluctuation in the market price. A bank would probably make a larger loan on the security of a good municipal bond than it would on the security of most very active high-grade railroad bonds. Though the municipal bond would not have as active a market as the railroad bond, the probable range of price fluctuation within a short time is not so great. In the same way a bank would not loan as much on stock collateral with the most active stock exchange market as it would on a well-secured bond with a good but much less active market. A bank might loan as much as 95 per cent of the market value of the very best municipal bonds and as much as 90 per cent of the market value of high-grade active railroad bonds, when it would not loan more than 75 per cent of the market value of an active stock. A bank

which makes a business of loaning on financial collateral of this kind must, of course, keep in the closest possible touch with the market for securities and watch the fluctuations in prices and their bearing on the loans of the institution.

We can now take up directly the statements of those who criticize the size of bankers' profits and who declare that they are an unwarranted charge on the community. Usually the critic accompanies his criticism with the advice that the corporations should seek their capital directly from the capitalist and cut out the banking-house middleman and its profits. We have already mentioned several reasons why the corporations are not successful when they attempt to do this, and have shown under what circumstances a corporation can, on appealing to its stockholders, get directly to the capitalist. Let us examine this charge of undue profits to the investment banker.

Such critics charge investment bankers with making a profit of two and a half per cent and sometimes as much as five or ten per cent. It is true that the difference between the price the banker pays for the securities and the price at which he expects to sell them does range from about one per cent to the higher figure charged against

them. The banking house bases its purchase price on its estimate of what it can sell the securities for. When the banker has decided on what price he can probably get for the securities, he offers the issuer a price of one point or more below this. The amount of difference he makes between his anticipated selling price and the price he offers to the issuer, he bases on the length of time the securities have to run, market conditions, and the probable amount of expense and labor involved in selling them. He can afford to make a smaller gross profit on short-time securities, not only because ordinarily they are easier to sell, but also because when they fall due he may have a chance to reinvest the fund and make another profit. Market conditions will influence him because, if they are stable, the transaction does not involve as much risk as when they are unstable; there is less chance that changing financial conditions will force him to sell at a lower price than he paid. If current interest rates are high, he will also have to take into consideration the possibility of loss on the interest account. Most of all, the probable difficulty of selling the securities will influence him. If they are of the kind which, however secure, will require a large amount of personal effort and consequently, under the

most favorable conditions, can be disposed of only from day to day over a considerable period of time, the banker will have to estimate a charge for the cost of selling, including the tying-up of his capital, and also for the risk of change in market conditions involved in the length of time necessary to complete the transaction.

Let us compare the profit the investment banker hopes to make with charges for service in other forms of financial work. Brokers in real estate mortgages make a minimum charge of one per cent for negotiating the highest grade of real estate mortgages on New York City property. Such mortgages as they will handle on a one per cent commission are a legal investment for New York savings banks.

When dealing in bonds that are a legal savings bank investment, the investment banker, acting only as a broker in the transaction, often charges as little as one sixteenth of one per cent and sometimes only one thirty-second of one per cent. The usual commission for selling securities of this character is one eighth of one per cent, or $1.25 per $1000 bond.

If a mortgage on improved property in New York City exceeds in the slightest degree three fifths of the appraised value of

the property, it is not a legal investment for the savings banks. For mortgages which do not fall within the savings bank class the broker immediately advances his rate of commission to two per cent or more. His risk is not increased, for he assumes no risk or responsibility. He does not buy the security as does an investment banker the securities he deals in. The mortgage broker charges the increased commission because he finds it harder work to locate a buyer for a mortgage which does not fall within the legal limitations of a savings bank investment. There is a broad market for investments within the savings bank class and it is not difficult to convince an investor of the merits of such a security.

The difference between these two rates of commission does not express the full situation. The mortgage may run for only three years, the bond for thirty years. When the mortgage falls due, it may be paid off. Then the broker will have another chance to make a commission on selling the investor a new mortgage. But the bond broker may not for thirty years have an opportunity to reinvest for his client the capital placed in bonds. Investment bankers are fully aware of the value to them of more frequent periods in the investment of capital and are glad to

handle short-term securities, one maturing, say, in three or five years, on a smaller anticipation of profit than that sought for handling a long-term bond.

Dealers in commercial paper, which runs from thirty to ninety days, receive a regular commission of one quarter of one per cent for selling it. Allowing for only the longest maturities the fund is reinvested four times a year, giving the note broker, if he is fortunate enough to command the reinvestment each time, an opportunity to make one per cent a year out of a given fund of capital.

Both these commissions — that of the mortgage broker and that of the note broker — are only for the work of locating the capital and inducing the capitalist to make the commitment. Note brokers sell almost entirely to banks, and each transaction reaches an amount of some magnitude. The high-grade real estate mortgage, although usually having only a local market, is a well-known security in its market. On account of certain market disadvantages, the uneven denominations, and the fact that no two mortgages are exactly alike, the work of selling is greater than the work of selling the most active bonds. It is not nearly so great as the work of persuading a capitalist to commit his funds to a relatively unknown though a thoroughly sound enterprise.

More than any other merchant the investment dealer assumes a moral responsibility for the goods he sells, irrespective of their grade. A dealer in merchandise is not expected to guarantee the wear of his goods unless he represents them to be of the best class. Though a merchant in investment securities does not represent everything that he sells to be as safe as government bonds, those who buy from him are disposed to hold him responsible if the investment proves unprofitable and the interest and principal are not paid promptly. A default is a severe blow to his prestige and to the confidence in his judgment, by virtue of which he holds his clientèle.

These facts justify the profits that the investment merchant is accused of making. The larger differences between buying and selling price are a consideration for the difficulties of the business. The credit of corporations varies widely, as does the market for their obligations. Thousands of people know the value of the Pennsylvania Railroad's promise to pay and need no persuasion to buy its securities. Few people know the value of a similar obligation made by an electric light company in some small city of a remote State. Though the security may seem safe to those who are experts, the larger public has to be convinced of it.

Each investor to whom such securities are offered must be persuaded to believe in them. It may take a year of negotiation to induce him to buy. Bond salesmen have often found it necessary to wait as long as that to sell good but slow paper.

Meanwhile, the dealer's capital is tied up in the bonds he has bought and his money is being spent to convince the investor. The purchase and resale of securities which, though good, are but little known, involves more capital, time, labor, and risk than are required for the purchase of standard securities that always command a market, and it is altogether reasonable that such operations should pay a larger profit.

If the investment merchant were unwilling to undertake this more hazardous and laborious sort of business, the small municipalities in Western States might have to do without their transportation or lights, or to get them at a higher cost. Such communities are without the capital required for their development, or, if it can be locally obtained, the cost would be higher than that at which it can be procured in the financial centers. The dealer is paid for making a market and for the cost of the selling; he does not in any way deceive the purchaser.

The investor does not expect, and knows

that he is not purchasing, a security immediately salable through any other channel than that through which he bought it. Usually the dealer stands ready in case of need to repurchase the securities so sold at a reasonable concession. High standards prevail in this business. In comparison with the work done and the responsibilities assumed, the charges are moderate.

Though it is admitted that there is risk in the merchandising of securities, also it should be admitted that often there is actual loss. With all the experience and skill the merchant can bring to bear on his purchases, the conditions under which he works are so complex that he often cannot foresee the outcome. If the hoped-for per cent of profit is not made, the transaction may turn to the loss of many per cent, besides the cost of selling. If a dealer has not been shrewd enough to sell out in advance of falling prices, or does not gauge accurately the duration and rapidity of the decline, he may take heavy losses. Probably no investment banker went through the transition, from the period of rising security prices culminating in 1905 to the subsequent period of declining prices and the panic of 1907, without taking large losses. Bonds bought in the hope of selling at three fourths of one per

cent above the purchase price were sold at a loss of from four to five per cent. Except in the case of specialty bonds sold through a careful education of the investor in the merits of the particular security, a sale in a declining market must be practically immediate in order to be really profitable. If a dealer misjudges the appetite of purchasers, he gets "hung up" with an issue of securities which the investor will not even masticate, to say nothing of digesting.

A closing-up of the market, the refusal of investors to purchase, is a common, periodic phenomenon, which becomes particularly acute in London. It takes place whenever investors generally think the present is not a good time to buy. If an investment merchant fails to foresee its coming, he has to carry a heavy burden of securities that he cannot sell. Security selling differs from other selling in that purchasers are under less pressure to buy. People must eat — must buy from the grocer. Clothes wear out and the tailor must be seen. No such necessities help the seller of securities. Capital can linger in the bank for months, until enticed by lower prices or driven out by fear of higher.

Any one not familiar with the facts would infer that an investment merchant's great-

est difficulty is in finding securities to buy. That is not the case. Goods are pressed on him as on any other merchant. Day after day promoters, new and old, cool their heels in his anteroom. Out of the many things offered him, which is the best for his clients? Which is most likely from subsequent success to enlarge his reputation as a merchant and further that confidence forming the very life of his business? A corporation manager without an established connection with some security-selling house is likely to have a weary time when he wants to place an issue. His securities may be good and in every way merit confidence. But the pressure to get access to the capital supply is enormous. A given merchant may much desire to take on the business, but he is already so largely committed that he could not sell any more securities if he should buy them. The corporation manager may have to visit many merchants and wait a long time before he can find a buyer. This situation does not arise through any unfair discrimination. The capital supply is a very limited one. The capital demand exceeds it and absorbs it as the sand of the desert absorbs rain.

Contrary to the general idea, the business of investment banking is highly competitive. This results from the comparative

ease with which the investment banker may borrow a large part of his capital for certain kinds of transactions. Probably he does not stand in any better position in this respect than does the merchant in fairly standard commodities, who can do business from rented offices and salesrooms and borrow money with which to carry his merchandise. He does occupy a better position than most manufacturers, who, to be sure, may be able to finance their commodity in the case of production readily enough, but who must usually have a large capital invested in plant, on which they can borrow, and that with difficulty, perhaps one third.

As we have seen, a capital of $50,000 used in the purchase and sale of securities fulfills the capital requirement for membership in the national organization of the Investment Bankers' Association. Though so small a capital will limit the classes of business a new organization can engage in, it will enable men with the necessary professional experience to enter the business on their own account. Constantly men who have acquired the training in one of the older houses organize their own houses and start in for themselves. If a man has demonstrated his ability to place securities, — that is, to induce investors to commit their capital to the par-

ticular enterprises whose securities he has to sell, — and has proved himself a success in this branch of the business, — even though he has no capital himself, he may be able to persuade some one with capital to join him in organizing a new banking house. He has established a clientèle. Some of his clients have dealt with him mainly because of the house he represented, but many, and very likely the much larger number, have dealt with him because of personal liking or because of personal confidence in him. Such a connection is a valuable asset for the new house and the nucleus for the most valuable asset of any house, — a well-established clientèle, a list of capitalists who do most and perhaps all of their investing through the house.

Some of the older banking houses have become parents in this way of several new banking houses, in one case of possibly a score. The general process is no different from the process in other kinds of business, but easier than in some, and the relative ease of the starting of new organizations makes the competition for the good-will of capitalists very keen and extends the number of organizations to which a corporation may appeal when in need of new funds for the capital account.

Referring especially to the relationship between the banking houses and the corporations, accusations have been made in recent years of a money trust. In these charges it has been said that corporations could procure funds only through the good-will of certain financial interests and, if these interests were not well disposed, the corporation could not get help anywhere. It is true that the capital requirements of some of our largest corporations are so great that probably only one or two banking houses, or groups of financial interests, have the financial strength to handle them, and the corporation therefore cannot be financed without the assistance of one of these financial groups. A concentration of control over capital has been necessary to meet the magnitude of the requirements of modern business. If any smaller enterprise were likely to be a thorn in the flesh of one of these big business undertakings, the banking connections of these undertakings perhaps might make it difficult for the smaller enterprise to get financial backing. Business is competitive and the methods of competition extend into the financial as well as into other business fields.

Probably it is a fair generalization to say that, with the exception of the very largest corporations which are limited for the rea-

son just given, any corporation has at least several entirely independent and competitive banking houses to which it may appeal for financial support. The business of financing our medium-sized corporations is an open field and no favors. Our smaller industrial enterprises find difficulty in getting capital on account of their very smallness. A banking house must do a large amount of work in making a corporation well enough known to capitalists for them even to give consideration to its securities. It takes even more work to make the small corporation known than the large one. The large corporation has already advertised itself. It is impracticable to build up a course of dealings in the securities of small corporations which will give them the valuable element of marketability. With all the work involved the possible profits in providing $100,000 of capital for a small corporation will not compensate a banking house for its preliminary labor: especially if the banking house is organized to handle issues of a larger size.

Banking houses have overcome much of the difficulty of financing small corporations in the case of public service enterprises. Because of the more nearly uniform nature of the business the bankers do not have to do as much "educating" of the capitalist. He

knows the general nature of the business and the kind of risks involved. Each industrial enterprise is more nearly a law unto itself. Banking houses have developed some special methods of financing the public service corporations. The holding company and the engineer bankers operating a series of properties all help in the financing of the relatively small public service corporation. So the small public utility gets financed and the small industrial enterprise goes begging.

We have wandered somewhat away from the matter of the accusations of the existence of a money trust. Some of the accusations doubtless originate with those in control of enterprises, either under way or in the course of promotion, who have had no experience with the demands of capitalists. Many people of this kind come to the "street" to raise capital and do not succeed. They charge their failure to the money trust, which for some reason does not wish them to succeed. As a matter of fact their proposals are probably of a kind no banking house could handle. Many come with promotion projects and these, however meritorious, do not interest most banking houses. Some actually are meritorious yet, because they are in the promotion stage, cannot get a hearing. Many are not meritorious, yet the promoter feels

confident of his judgment and charges up to the malevolence of the money trust a failure which results from the class of his business and its demerits within that class.

Managers of going concerns, who have not had occasion before to appeal to the banking houses, come to the street with proposals impossible of acceptance. Until they are educated in the requirements of the bankers, — which means, in the last analysis, the requirements of capitalists who will ultimately advance the funds, — these managers will blame the money trust for the non-acceptance of their proposals. The most important and the most general reason for the inability of many of these corporation managers to get funds is the simple fact that there is not money enough to go round.

For every dollar of capital in existence a multitude of people are seeking a dollar to further their interests. The demand for capital is unlimited, provided the terms are not too unfavorable, and the supply of capital is strictly limited on any terms whatever. An insistence that the risk be not too great is most likely to be that part of the terms which the seeker for capital cannot meet. Out of a hundred people seeking capital the capitalist will supply it to that one who will offer the most favorable terms, the

best bargain in risk, income, and control. The investment banker acts for the capitalist, and will commit himself to that enterprise which he believes most likely, under existing conditions, to meet with the favor of the capitalist, in view of other opportunities for commitment which other banking houses are offering. The man who comes to the street for funds, however, does not see the pressure of all the other enterprises seeking capital. If he did see the pressure, he probably would consider the enterprises all inferior to his own. He even regards those enterprises which are financed as inferior to the one dear to him. His preference for his own is natural. But it leaves him with no reason for the banker's rejection but the machinations of the money trust.

Some get confirmed in their impression of monopoly by certain aspects of the ethics of the investment banking business, which are unfamiliar to them. It is a general principle of investment bankers to decline to consider a proposal for financing while it is before another house. As soon as one house rejects it, then another house feels free to take it up. This aspect of the business has something in it of the ethics of the lawyer and the physician, in refusing to take away the client or patient of another member of

the profession. It does not, however, have the full foundation of injury to the client's interests and to professional reputation existing in the case of the lawyer and physician. Besides this matter of professional feeling, a banking house does not want to spend its time considering a piece of business which, before it can arrive at a conclusion, may be taken care of elsewhere. The ethics of the situation serves to protect the banker's time. To be sure, it equally serves to cause delay to the man seeking capital. But in determining which one is to occupy the better position in this respect, the banker has the advantage in the number of enterprises which are constantly pressed upon his attention. Besides, the existing disposition of the situation settles it the right way in the end. If several people are considering a piece of business at the same time, all but one of them are bound to do their work fruitlessly. Though the limitation to one at a time delays the seeker for capital, it greatly lessens the amount of useless work in the world.

Some people who come to the street for money, without especially knowing the banker's ethics of the situation, have themselves an ethics of business which prevents them from taking their proposal to more than one banker at a time. Others, who chafe under

the restriction, nevertheless know the unwisdom of trying to avoid it. Frequently, however, men come to the street whose own ideas of business include making as many proposals as possible and closing with the first one who will come to terms. When the fact that they are dealing with several people comes to the attention of one of the several, as it probably will, that one is likely to decline further negotiations, and so with the others as they find out the situation. So the man who is seeking the funds gets an idea of monopoly, that a money trust exists.

Let us assume that our banking house has made an agreement with the corporation to supply it with funds on the delivery of the issue of securities which the corporation has authorized. If the amount involved is so great that the banking house does not care to assume the entire risk of the transaction, it will have distributed the risk by getting one or more other houses to join it in the transaction. To use the language of the street, it will have formed a "joint account," and the other houses will have taken a "participation" in the account. Later the banking house which initiated the joint account, or the several members of the account acting together, may still further distribute the risk by arranging an underwriting syndicate.

This, however, will not be formed until after the securities are purchased, or until at least a binding agreement to purchase them has been made. One banking house may form the joint account in anticipation of committing itself to the purchase. Though simple enough in the idea of distribution of risk, in details these joint accounts are somewhat complicated transactions. We will take a fuller discussion of them for our next topic.

As soon as the banking house has definitely contracted to purchase an issue of securities, it will begin to plan for its sale. It is not an investment institution like an insurance company or a savings bank, but employs its capital and organization simply as a means of assuming the risk of the transaction and of establishing the direct connection between the corporation and the body of capitalists who will ultimately be supplying its fixed capital requirements. In pursuance of this end the banking house may make a formal public offering inviting capitalists to subscribe to the issue, or it may undertake to sell the bonds without a formal public offering. This statement does not mean that in either case the banking house will not publicly advertise the securities, but rather distinguishes between the manner of advertising. If the banking house, or syndi-

cate, extends a formal invitation to subscribe, it will say in so many words that it is offering the securities for sale and will receive subscriptions at the price named up to the stated hour of the stated day.

Such an advertisement does not mean that the banking house is relying upon it to interest enough capitalists to take up the entire issue. It does not even mean that it has an expectation, or hope, that it will interest a large enough number of capitalists to place the entire issue. More probably the house, or the syndicate of several houses, has been hard at work creating an interest in the issue for a considerable time before the advertisement appears. The house may have informed its clients by personal interview or by letter that such an issue would be brought out. Its salesmen may have quietly, but rather busily, talked it up for a number of weeks. Just before the house inserted the advertisement in the newspapers it probably sent circulars to all its clients containing the information about the issue and inviting subscriptions. The advertisement appearing in the newspapers, in all probability, simply focuses this anticipatory work. The banking house or syndicate does hope that the issue will prove sufficiently popular to attract enough people, other than regular

clients, to make a demand that will take up the issue or materially diminish the amount that will remain unsold. If the issue is highly successful, the house may stop taking subscriptions even before the day and hour announced in its advertisement. In that event it will announce that the issue was oversubscribed and the books closed at the time stated. Such a procedure gives the regular clients of the house an opportunity to get the full amount they have subscribed for, or near to it, and leaves unsatisfied a demand on the part of many, who may seek to purchase the bonds in the open market at a price higher than the subscription price; thus giving the regular clients an opportunity to make something immediately on a resale, if they wish to do so, or to feel that they have made a highly advantageous purchase. Closing the books before the announced time may also be taken by the investing public to be a better indication that an issue actually has been oversubscribed, than an announcement to that effect when the books have been kept open for the full time advertised.

It seems rather the better practice, however, to allow the full length of time announced. Many people who want to subscribe may interpret the announcement that the books will be closed by the stated time

as meaning that they will remain open till that time, and some regular clients of the house may be among that number. The house is at full liberty to prefer its own regular clients in making an allotment of the securities. Subscriptions of such a character that the house would favor them may be late in coming in. The extra work involved in handling an actual large oversubscription hardly offsets the various reasons for keeping the subscription book open.

Of course it is undesirable, from the market point of view, that an impression should get out that the offering was not wholly successful. Undoubtedly banking houses often announce that an issue was fully subscribed for or oversubscribed, when that is, at best, only technically the case. Some subsidiary organization of the banking house may have put in a "subscription" large enough to provide for the amount not really, as well as technically, subscribed for; or another joint account may have been formed to "subscribe" for and take over the bonds. Since the possible use of such subterfuges is well known in the street, an announcement of an oversubscription is likely to be taken with a grain of salt unless there is corroborative evidence. The future conduct of the market, the course of prices in the particular

security, may indicate that the announcement is really true. On the other hand, if the original offering house, or even another house, appears to be offering the bonds in substantial amounts or with a degree of continuity, people in the street surmise that the oversubscription announcement may have been made with a mental reservation.

Such a formal advertisement for subscriptions is more likely to be made of the larger than of the smaller issues. In the case of most issues the banking houses are more likely to advertise the issue for sale without stating formally that subscriptions will be received and the books closed at a definite time. If the house advertises that the books will be closed at a certain time, it draws attention to that time and causes an expectation that it will make some announcement of the favor with which the issue is received. In the event that investors do not fully take up the issue the banking house faces the dilemma of being obliged to resort to some subterfuge, or of having emphasized the lack of the complete immediate success of the issue. If it simply advertises the securities for sale, it can announce that they have all been sold; if the public fails to take all the securities at once, it does not have to say anything. When the banking house takes

the position of an underwriter to the issuing corporation, it offers the securities for sale on behalf of the corporation. The transaction will need to take the form of a subscription, with bankers bound to take up and pay for any part of the issue remaining unsold. Often, especially in the case of small issues, the banking house does not advertise the issue in the public press at all.

After the banking house has presented its advertisement in the public press, and the "public" has failed to purchase all of the securities, the house faces the second and difficult part of its selling problem. It must dispose of the rest of the issue by the much slower process of convincing capitalists, not in the mass but one at a time, of the merits of the security and that it is a good bargain at the price. It will do this largely through the efforts of its salesmen. Probably Jay Cooke first showed the power of salesmen in the marketing of securities. He succeeded, by the use of salesmen and extensive advertising in other ways, in raising the large sums required by the North for the Civil War. Cooke's salesmen did not form part of a distinct profession like that of the securities salesmen of to-day. It did not require a wide comparative knowledge of securities and of financial conditions and

methods to offer bonds of the United States Government. The selling of Civil War issues was a big canvassing campaign conducted in much the same way and by much the same kind of people as book canvassing. It demonstrated, however, that personal contact is as powerful in the selling of securities as in any other kind of selling. Though the modern investment banking house with its force of salesmen did not develop at once as a result of Jay Cooke's example, the men who now go out to meet the capitalist in his office have formed a well-recognized class for a generation.

Banking houses recruit their force of salesmen from various sources. Sometimes the men have been successful in selling of other kinds and have looked to the investment banking business as of a higher grade. They may come from almost any other occupation. The tendency in recent years has been for a house to train its own salesmen and for the most part to recruit its apprentices from recent graduates of colleges. It will take such young men into its offices, giving them a little guidance to sources of information about corporations and investment banking matters. Occasionally the manager or office employees of the house will set them to some office task. Though some houses

give them a measure of regular instruction, for the most part they leave them a good deal to their own resources to acquire an understanding of what is going on about them and a knowledge of securities. Some houses will not keep them at this for more than three months before letting them go out of the office to make their first efforts at selling; other houses will keep them in the office for two or three years. They are essentially in the position of students during this period and receive only nominal compensation for nominal services. The difference in the time of this part of the apprenticeship required by different houses depends on varying ideas about the minimum of financial matters a man ought to know before he should be permitted to approach a possible and prospective client.

Though the banking house picks these young men with an eye to their probable capacity for the work they are to undertake, the employer finds it difficult to say which of those he has chosen will succeed in selling and which will fail. When they are permitted to go out and seek the capitalist face to face, they have a difficult task ahead of them. Naturally the house does not entrust them during this apprentice period with any well-developed territory. So they must for

the most part first discover the capitalist. They will not have any great difficulty in identifying the capitalists in the smaller communities and in securing at least a brief interview with them. But competitors find it equally easy to learn of the capitalist members of the small communities and to gain access to them. In the larger communities the problem of finding the capitalists at all is much harder. Since the number of substantial capitalists in any community is necessarily a small percentage of the inhabitants, a canvass of the entire population is obviously impracticable. To describe some of the many devices to locate them would extend this discussion unduly.

The reader will, of course, see that not all capitalists are available material for the securities salesmen to work on. Most men owning, and actively engaged in, their own business use all their capital in it. Of active business men only those who have a surplus to invest outside of their own business can take any part in furnishing funds to those corporations which look to the general investing public for supplying their capital account. Those business men who do have surplus funds for investment, and those capitalists who are not actively engaged in a business of their own, may not invest all or

any of their capital in the financing of corporations. Ownership and improvement of real estate require financing as well as corporate enterprises. A large proportion of capitalists with surplus funds, on which they do not want to accept the risk of unprotected ownership, invest in ordinary realty mortgages,—rural mortgages if they live in the country, or in close association with the country, and urban mortgages if they live in the city.

Under most circumstances it is natural for the man with surplus funds to turn first to the ordinary real estate mortgage for investment. It offers the simplest form of security. Though some people begin to suspect that investment in real estate mortgages is a more complex matter and more worthy of analysis than investors have commonly thought, involving, as it does, the whole problem of shifting realty values and economic rent, on the surface it is much simpler than what, to the novice in investment, is the labyrinth of corporate securities, with their finely differentiated gradations of risk, income, and control and all the intricacies of business income. Moreover, people who invest in mortgages for the most part invest locally. They can see the tangible property in which their funds are invested. The mat-

ter has a degree of reality about it which an investment represented by a piece of corporation paper does not possess. All these considerations incline the man getting his first experience in investing to select the ordinary real estate mortgage. Many capitalists all their lives adhere exclusively to this form of investment.

So our young bond salesman will find that he not only has the task of finding capitalists, but of finding that selection of investors among the class of capitalists whom he can interest in financing corporations. When he has found a man whom he knows to be an investor, and whom he knows as willing to consider an investment in corporation securities, he has only begun his selling task. Only the very wealthiest of capitalists are wealthy enough to have funds to invest at almost any time. Our salesman must, in the first place, command the confidence of the capitalist. A reasonably cautious man does not invest a thousand dollars or more through an entire stranger. Our salesman cannot reasonably expect to do business until the capitalist feels acquainted with him and has formed a good opinion of him. Even though the capitalist may be thoroughly familiar with the name of the banking house which the salesman represents, and knows

that it is a house of the highest reputation, he will still want to feel personally well acquainted with the salesman. Investing is too intimate a business to transact with, or through, a stranger. After the salesman and the capitalist have reached the degree of acquaintanceship at which the capitalist is willing to make an investment through the salesman, our young man may still have to wait a long time before the capitalist is in funds and ready to invest. So our young salesman will not be likely to put through many transactions during his first few months of work in the endeavor.

When the salesman has once put through a piece of business with an investor, he has made a client, for a man who has money to invest at one time will probably have money to invest at another time. Even if the investor lives up to his full income, he will probably have some investments maturing, part of his capital paid back from time to time. If our salesman has grit to stick to the work, energy and resourcefulness in prosecuting it, he will gradually build up a clientèle which will be as valuable an asset to him as the clientèle of any professional man. But after all, this aspect of the selling problem of banking houses does not differ greatly from selling through a personal representative in any kind of business.

When most young men first entertain the idea of selling securities, they think of visiting financial institutions, especially of calling at the banks. In the largest financial centers some salesmen, who have developed in that direction and to that point, do confine themselves largely to the financial institutions. Outside of the largest centers, and even in those centers except for the specialized salesmen, selling to these institutions will form only a small part of the work of the bond salesman. In the first place, selling to them at all must depend upon having available to offer the kind of securities they buy. If the salesman is approaching the investing officer of a savings bank or an insurance company, he must be able to offer securities in which they may legally invest. If he is endeavoring to sell to an ordinary bank of deposit, he probably will not have a chance of success unless he is offering some very active market security protected by an equity. Some trust companies, acting more in the capacity of savings banks than of commercial banks and, outside of the States in which the savings bank is well developed as a financial institution, some national and state banks which people use much as savings banks, may invest to some extent in relatively slow market securities. Some of these banks un-

doubtedly go too far in this direction: for any security which is a legal investment for savings banks in the important savings banks States enjoys a rather ready market.

Institutional business of this kind is much more highly competitive than selling to private investors. The personal relationship of the salesman and the purchaser is not so important. The institution will buy from any salesman who offers, at a time when it is in funds for investment, securities which are of a kind and at a price to make them the best offering presented. The fact that an institution once buys from a particular salesman does not carry any probability that the next time it has funds to invest it will invest them through the same salesman. It makes a regular business of buying. Most capitalists make the business of investing only an incidental matter. They are much more likely to rely on one or, at most, a few salesmen through whom to make their commitments. It is the list of private investors, who are clients of a banking house, that furnishes the best foundation for financial strength.

Salesmen for the banking houses vary in quality. Some have little knowledge of securities or skill in salesmanship and are hardly more than canvassers, but they never-

theless succeed in doing some selling. From the low level they grade up to men expert in salesmanship and often having an extended knowledge of financial matters. These higher grade men achieve a good professional standard and become real financial advisers to their clients.

Most banking houses have a simple organization. If the organization is complex, it is so because of activities other than those strictly of the investment banker. Commercial loans, foreign exchange, engineering and operating departments, outside of the business of finding funds for municipal and private corporations, sometimes extend the scope of the banking house to that of a complex concern. In the house that confines itself to dealing in securities, the work of any one man may take him into all the fields covered by the work of the house. Usually an investment banking organization makes at least four general divisions of the work — the selling, the buying, the statistical, and the cashier's departments.

We have already discussed the work of the bond salesman in selling. The work of the sales department looms large in the banking house as in any other merchandising organization. The buying department may buy only if the selling department can sell.

On the other hand, it is as true of the securities business as of any other that goods well bought are half sold. In the office a member of the firm, or a sales manager, will have charge of the selling. It will be his duty, and, if the house is one of some magnitude, that of his office assistants, to keep closely in touch with the salesman. They may send the salesman a daily letter of information and advice. They will write letters at the request of the salesman and of their own initiative to clients of the house. Usually the salesman will send in daily reports of his work. These reports contain information the salesman has gathered about the needs and holdings of his clients. From these reports the office organization makes a record of such matters as when the client is likely to be in funds for investment, what kinds of securities he will invest in, and the names of any securities the salesman may have learned that he already owns.

When clients feel complete confidence in their banking house as really an expert adviser in financial matters, they will sometimes voluntarily give the salesman a complete list of their securities. In some cases the client has made his first and all subsequent commitments with the banking house and the house has a record of all his holdings as a

matter of course. Such information is valuable to the house. From the investor's standpoint it is desirable that the house should have it. As a result of having this information the banking house can often advise him of possible advantageous changes in investments. Though possession of this information may offer a temptation to the banking house to suggest changes disadvantageous to the client, considering all his circumstances, for the sake of stimulating business, the house, looking forward to its best interests in the long run, will not suggest them. The better the client's financial affairs prosper under the advice of the bankers, the closer the client's business attachment to the banker and the less chance some competitor has to win away his allegiance.

It is part of the duty of the office sales organization to keep the mailing list revised to include all live prospects and to exclude all dead ones. The house does not confine its mailing list to those whom it may count as its clients because it has actually done business with them, but wants on the list the names of all people to whom it is worth while for that house to send its circulars describing the securities it has for sale.

In all these matters of selling, the banking house does not differ widely from any selling

organization. One aspect of its selling, however, is especially important. Its supply of any one issue of securities is limited, and it must not sell any more of a particular issue than it can deliver. To avoid getting into an embarrassing situation the salesmen must make all sales subject to confirmation from the office and promptly notify the office by telephone or telegram of any sale. The same prompt notification must be given as between the main office and the various branch offices, so that each may know at all times the balance of any particular issue available for sale.

We shall have something to say at another place about the work of the banking houses in buying and will only mention it here. Some houses are large enough to have experts in their own employ for the investigation of properties the financing of which they are considering. The fact that a house has its own engineer and its own lawyer does not mean that it does not also employ outside experts, but only that the expert employees make the preliminary investigations and the house retains the independent professional men for final reports only after its own men have made favorable preliminary reports. Undoubtedly the buying depends upon the selling. What will investors pur-

chase under existing conditions and what price will they pay? The answer to these questions supplies the guide to the buying. Those members of the banking organization in charge of the buying must keep in the closest possible touch with those in charge of the selling. Nevertheless, banking houses can and do accomplish much in educating capitalists in investment. They constantly educate them in types of securities, and in kinds of enterprises. Though they follow, they to some extent shape, the demand for securities. This is to say that, to a considerable extent, they decide what enterprises can most advantageously use new capital. In this way they do largely direct the flow of capital into industry and exert a strong influence upon the economic life of the community.

The name alone of the "statistical department" largely describes it. It serves both the buying and the selling sides of the banking organization with statistical information. It prepares the circulars for use in the selling; and the preparation of a good circular, one that will not unduly emphasize either the good or the bad aspects of a security, one that will be honest yet a good selling circular, requires excellent judgment. A cautious house will submit its circular to the attorneys who acted on the legal side of the

issue to be sure that it does not contain any unintentional misrepresentation of the legal aspects of the security. The responsibility of a banking house for what appears on its circulars goes far. In a rather well-known case the dealers in a security were held liable for a representation on a circular, made in good faith on the opinion of eminent counsel, that the legal situation was as stated, when afterwards the courts held that the opinion of counsel was a mistaken one. Clients constantly make inquiries of banking houses about the market standing and intrinsic value of particular securities. The statistical department looks up all matters of this kind; and in general it is the duty of the department to supply all the people in the organization with information about securities.

To assist it in its duties the statistical department will have at hand up-to-date copies of the various financial manuals and of the *Commercial and Financial Chronicle*, all running back at least as far as to the time of the organization of the house. It is somewhat the insignia of honor to have the bound volumes of the *Chronicle*, as the standard weekly periodical of the business is known, running back to the first volume. The department will probably have also other finan-

cial periodicals. It will take an information service, by which up-to-date information of earnings and other facts will be supplied on printed cards, to file and serve as a supplement to the information in the manuals and keep them up to the latest news. It may somewhat extensively clip and keep on file information coming out generally in the press. It will collect and file for reference the circulars through which other houses advertise their securities. It will gather copies of mortgages and trust deeds and other legal documents, which are the original "sources" of much of the information about securities. Since these documents are regularly printed, it is not difficult to get them when they first come out, on application to the house bringing out the issue. Afterwards they are hard to get and quick access thereto is often wanted.

The cashier's department keeps the accounts and records of the banking house; attends to receiving, paying for, delivering, and collecting payment for, securities that pass through the organization. It also has charge of the loans from the banks and the collateral deposited to secure them. The partners will have attended to the bank connections of the house and to the more important matters in connection with arrang-

ing the loans, but the cashier's department attends to all details. In making deliveries of securities to out-of-town clients the cashier will usually, on the instructions of the client, send them by registered mail, insured, to a designated bank with draft attached. Unless the client gives contrary instructions, however, the cashier may estimate whether it may not be cheaper to deliver the securities by an express company, in which case the express company is the insurer. The cashier's department will have to compute all accruals of interest, and all other matters of price and "bases" of true income on all purchases and sales, whether the purchases are of the issue from the corporation or of securities from a client.

During the process of distributing securities the bankers must support the market. After they have sold the securities they must make a market for them, so far as the nature of the issue permits. We will discuss later the matter of listing securities on the stock exchange. If the bankers, while they have any part of an issue to sell, should permit quotations at prices less than their offering price, on the exchange or off the exchange, —for hardly anything in the way of a transaction fails to become known on the street, —it will become impossible for them to dis-

pose of the securities. Of course no one will pay the bankers their price for the security if it can be bought from some one else at a lower price. While the bankers are selling an issue they must keep the market clean of the security, and must be careful in their selling to place securities where they are not likely, for the time being, at least, to be offered in the market.

The banker will prefer the small investor in making sales to this end of keeping securities off the market. If the securities are offered publicly and are oversubscribed, the bankers will allot small subscribers all of the security they subscribe for, or a proportionally greater part than the large subscriber, and the allotment of the large subscriber will be proportionally cut down. The small subscriber is more likely to be an investor, or, stated the other way, the large subscriber is more likely to be a speculator simply hoping to make a market turn on the possibility of an oversubscription, and intending to put his securities right back into the market, whatever happens.

We should remember that since the market in listed stocks is on the exchange, and practically no dealings take place in them off the exchange, then in building up a market in a stock the banker will especially have

to watch the exchange. The market will be largely off the exchange in other securities, whether listed or not. When building up a market in such securities the banker will enlist the interest of brokers who are not connected with the stock exchange, and of smaller dealers whose clients may want to purchase some of this particular issue, but who would prefer to purchase through their regular dealer. Through allowing such brokers and dealers a commission, though only a quarter of a point, for purchases or subscriptions through them, the bankers stimulate their interest in the issue. Once such a dealer or broker has handled the security for some of his clients he feels something of an interest in the security, and may go on recommending it or offering to deal in it. Interest of this kind will prove very useful in working up a really active market.

In underwriting syndicates bankers lay a much stronger substructure for a market. Through them, many other banking houses are interested with that vital interest arising out of a financial stake in the transaction. Every one of them becomes in some degree a trading post for the security thereafter. Usually these syndicates are thought of only as a means of getting sufficient distributing power to dispose of the issue in the first

instance. They are also highly important as a base for that trading which makes an active market and gives an issue that valuable quality of marketability.

When a banking house has disposed of an issue, it will not drop the matter entirely and turn its attention absolutely to other matters. For the sake of its own clients it must maintain a trading position in the security. Though these clients may have had no thought but investment at the time they bought the securities, situations will arise which, without any prior thought of speculation, will require some of these clients to sell. In such circumstances the bankers will have to be ready to take the securities off the hands of the client or else lose his good-will. Unless the bankers have built up a trading market with known quotations, they will have to pay, in order to satisfy the client, a price somewhere near the price at which he bought the securities, even though financial conditions are such that all securities have suffered in their market value for causes quite outside the issuing corporation. If the security has had a regular course of dealings with known quotations, the client is more likely to have drawn his own conclusions. In any event, he knows that he cannot get more than the market price. So, for

their own protection, the satisfaction of their clientèle, and for their general reputation, the bankers will endeavor to build up a course of dealings in any issue of large enough size to make a market really possible.

In building up such a market the bankers perform a service of value to the corporation for future issues. The dealings constantly advertise the corporation. Its outstanding securities sell at a higher price because of their marketability. Quotations for outstanding securities make the basis for estimating what their new issues will command. One should take these facts into account when considering the value of the work the bankers do.

Since we shall not discuss the nature of the market off the exchange as a special topic, we may appropriately consider it here. As the "curb" market is in itself an exchange of a kind, we do not now refer to that in speaking of the market off the exchange. Through the weave of telephone wires the whole financial section of a city, which is a financial center, is one great exchange. Either the sales manager of the banking house, or some special "trader" or telephone man, constantly watches opportunities to do business of a trading nature. Through its salesmen the house offers to its clients especially

the securities it owns, those "on its list," as the phrase goes. None of these securities may exactly meet the requirements or ideas of the client. He may have definitely in mind some particular issue. The salesman, finding that the securities on his list do not satisfy the client, may suggest some other security obtainable in the market. When the client expresses a preference for such a security, the salesman will communicate with his office and name the price limit the client will pay. It then becomes the task of the trading man of the house to make the purchase; even if it is a listed bond he will probably inquire around the street to see if he can pick it up more advantageously than by putting in an order on the exchange. He may telephone to the trading men in several banking houses in the effort to locate the bonds he wants. For special reasons he may not care to disclose the fact that he is in the market for the security. In that case he will make use of the services of one of the many street brokers who come into his office every day.

Mention of the street broker calls for a further word about him. He is not, as some one might naturally surmise, a member of the curb exchange, but a man who daily makes the rounds of the dealers in securities

to see if he can match up orders and by so doing make a little commission for himself. Such a broker may have received an order to sell some C. B. & Q. Collateral Joint 4's. In the course of his rounds he steps into the office of Jones & Company. On learning that they are not interested in his Joint 4's, or in any other security that he may have an idea he would be able to supply or to sell, he will ask Jones & Company's trading man if he wants to buy or to sell anything. Jones & Company's order may call for some X. Y. Z. Debenture 4's and the trading man may indicate this to the broker, and some idea of the price he would pay, as, say, 98¾. The broker now has something further to work on. In the course of the next hour of his rounds he may find that Robinson & Company display some interest in selling X. Y. Z. Debenture 4's, but want 98⅞. The bid and asked price are an eighth apart, without allowing any commission. The broker may succeed in bringing Jones & Company up and Robinson & Company down an eighth each. That would allow the broker an eighth. It may be that the purchaser will not come up the full eighth, but will make the price he will pay three quarters plus a sixteenth. The offer will be expressed that way instead of 98$\frac{13}{16}$. The broker will regret-

fully put the transaction through on that basis. It means that he makes a commission of only one sixteenth, but after all he has done a piece of business. He may give up his principals and let them clear the transaction. Very likely, however, one of the houses is taking advantage of his services for the very reason that it does not wish to appear as principal in the transaction. In that case the broker will have to clear the transaction himself. Very likely the broker has desk-room in or near the offices of some banking house, which, in return for such services as the broker can render, will clear the broker's transactions. This is a matter of some importance, because it involves having a bank account large enough to get a check certified with which to pay for the security. Of course, on delivery of the security the same day the broker will in return get a check in payment to refund the account, so there will be no loss of interest. But for a little while the account will be debited the cost of the bonds. Since the transaction may run up to $50,000 or more, the reader will see that the minutes or hours between the time the broker has to pay for the security and the time he gets paid for it are important ones for him to bridge.

If a broker can make arrangements for

these clearings, he need not have any capital. He is acting entirely as broker. Deskroom, a place to telephone from, and where he can be reached by any one who may want his services, are the material needs of his business. Otherwise his office is wherever he happens to stand.

Since the street broker was the only broker concerned in the transaction, he could put the purchase and sale through cheaper than it could be done on the exchange. There one broker would be acting for the seller and one for the buyer, and each must, by the rules of the exchange, charge a full eighth. So the transaction would cost a quarter of a point on the exchange. The street broker, though expecting an eighth, in this instance has put it through for a sixteenth. Of course, if both the banking houses had been members of the exchange, but without a partner actually on the floor, which would be the usual situation, some floor broker would put the transaction through, as permitted by the rules, for another member on the basis of $2 for an amount of $10,000. Under such circumstances the employment of the street broker would not have had the advantage in the matter of commissions. Even then the street broker would have the advantage of working quietly. A bid for a large block,

$25,000, $50,000, or more, on the exchange would have more of a tendency to stiffen prices than the efforts of a street broker to find some one ready to sell, but not offering to sell for the same reason, namely, the tendency of an open offer of a good-sized block to depress the market.

Visits of these street brokers and telephone calls from banking house to banking house indicate the course of the market, and when they result in transactions they make the market. The trading man in the banking house becomes intimately acquainted with the ways of the market and sensitive to its indications. From the tone of brokers and other trading men he knows that the market in X. Y. 5's, which were worth 98⅞ at 10 A.M., has softened, and that if he wished to purchase at 11.30 A.M. he could probably get them at three quarters or better.

One phenomenon, somewhat amusing, shows the sensitiveness and range of this outside general market in securities. Often when the trading man starts an inquiry he finds his own inquiry coming back to him from many quarters. Assume that he starts out an inquiry through a street broker for a good-sized block of X. Y. 5's. The next house at which the broker inquires may not have any, but may surmise that it might get

some from another house and its trading man will, phone an inquiry. That house does not have any of the bonds, but, eager to do business, its trading man may recollect that at some time in the past he had been offered a block from Montreal and telegraphs to some Montreal dealer. The Montreal man may have an idea that he could get them in London and cables. The London correspondent may in turn cable to New York, and the trading man of the New York house receiving the cable, and knowing nothing whatever of the real origin of the inquiry, may telephone to the very house that first sent the inquiry on the way. Usually the inquiry will come back by a much shorter route to the man who started it. Within an hour after starting the search the trader may recognize his own inquiry in half a dozen telephone calls. This is significant in showing the scope of the market off the exchange, and how far-reaching and thorough is the search of the outside market to find a buyer or a seller for a given security at the most advantageous price.

CHAPTER III

SYNDICATES: JOINT ACCOUNTS AND UNDERWRITINGS

WHEN a corporation requires at one time an amount of financing too great for the banking house which has undertaken to supply the corporation's need for capital, or to which the corporation is applying, to supply alone, the banking house seeks coöperation. How great the amount must be for the banking house to seek aid depends, of course, on the particular house and its "placing power"; that is, its ability to distribute securities and lodge them in the hands of investing financial institutions or individuals. With a particular house the amount may also vary from time to time. It will depend on the other commitments of the house at the time, its opinion of the probable course of the market, and, in general, all the considerations which enter into a determination of the amount of risk it is willing to assume at a given moment.

Such coöperation in the sale of securities takes the form of joint accounts and underwritings. Though these two business methods — joint account and underwriting trans-

actions — differ in degree rather than in kind, they differ enough to make the two terms desirable. Joint accounts are more common than underwritings. Though an underwriting may not follow a joint account, ordinarily a joint account precedes an underwriting. Sometimes an underwriting transaction is entered into without any joint-account transaction preceding it. A description of the two transactions will make the situation clearer than any amount of preliminary general statement.

Let us assume that a banking house has committed itself to purchase, or learned that it can purchase, an issue of corporation bonds. The transaction is larger than at the moment it cares to undertake to handle entirely on its own account and it seeks the assistance of several other banking houses. Ordinarily the house is in the position of extending an invitation rather than of asking a favor. It has the business in hand. Though it has done part of the work already, it will not stand in any better position with regard to the profits than the other houses which coöperate.

Each house invited to coöperate either states that it is not in a position to do so, or that for some other reason it does not care to, or else indicates how large a participation it wishes to take. The word "participation" is the technical term for the share

in the transaction that each house takes. Profits are divided and losses shared in proportion to the size of the participation.

We will assume an issue of $5,000,000, and that the house of Brown & Company regularly does the financing for the issuing corporation, or for some other reason is in a position to purchase this particular issue from the corporation. Of the several houses Brown & Company invite to participate in the purchase and sale of the securities, Jones & Company, Smith & Company and Robinson & Company decide to join in the undertaking. It is decided that Brown & Company shall keep a participation of $2,000,000; Jones & Company to take a participation of $1,500,000; Smith & Company, a participation of $1,000,000; Robinson & Company, a participation of $500,000. The number and amounts of the participations may vary to almost any extent. Our supposititious case, however, may be taken as fairly representative.

Assume that Brown & Company have agreed to pay the corporation 95.50 for the bonds. We will assume also that the situation demands that the corporation receive all the money in one payment. This, of course, would be the case in a refunding operation. If the corporation had been financing on

short-term securities in anticipation of a better market and had, say, $4,500,000 of such "notes" about to mature, it would require the cash in order to meet the maturity. Let us suppose also that the corporation needs some cash for the extension or improvement of its plant or line. The sale of $5,000,000 bonds at 95.50 will meet the payment of the $4,500,000 of notes that are falling due and will provide in addition the estimated requirement of $225,000 of cash.

To facilitate expression and speak in the ordinary language of the street, we may use the term "syndicate" to express either the joint account or the underwriting as a form of coöperation in the sale of securities. The syndicate must be prepared on the stipulated day to pay the corporation $4,775,000 and take delivery of the securities. After the negotiations for the purchase of the securities and the determination of the price, the requirement of making payment presents the first matter that must be settled in the formation of the joint account. Presumably, the banking houses forming the syndicate are not prepared to pay for the bonds out of their own capital, but must arrange for a loan in order to "take them up." Financing the purchase and holding of the bonds during their sale is one of the most important

parts of the whole transaction. It is called "carrying" the bonds.

Since many details necessarily come up in the course of the transaction, and because it is important that some one have authority to act in these matters of detail, one member of the syndicate must occupy the position of "manager." Because Brown & Company were able to purchase the bonds and brought the other members of the syndicate into the transaction, they would naturally become syndicate manager in the particular transaction we are describing. As syndicate manager they might arrange a loan to carry the entire issue of bonds for the syndicate. The bank advancing the funds would take the bonds as collateral security for the loan. It would not, however, advance as a loan the entire amount the syndicate must pay for the bonds. Let us assume that this particular security is of such a character, is assured of a sufficiently good market, and has such qualities as an investment that a bank would feel justified in lending 85 per cent of the purchase price. Then the bank will loan $4,058,750 on the security of the entire issue as collateral. The syndicate must pay $4,750,000, or $716,250 more than the bank will loan, in order to take delivery of the bonds from the corporation when the time

comes. This $716,250 the syndicate must supply from its own capital in order to swing the transaction.

Let us assume that the syndicate manager has undertaken to procure a loan or loans on the entire amount of bonds and that Brown is the particular individual of Brown & Company who is handling the matter. He will call on each of the other members of the syndicate to supply funds in proportion to their participation sufficient to make up the required $716,250.

Recapitulating, the several participations stand as follows: —

Brown & Company	$2,000,000
Jones & Company	1,500,000
Smith & Company	1,000,000
Robinson & Company	500,000
	$5,000,000

For these $5,000,000 bonds the syndicate must pay the corporation $4,775,000. Brown & Company, the syndicate managers, are arranging a loan at the bank for 85 per cent of the purchase price, or a total of $4,058,750. This leaves $716,250 to be contributed by the syndicate members in proportion to their participations as follows: —

Brown & Company	$286,500
Jones & Company	214,875
Smith & Company	143,250
Robinson & Company	71,625
	$716,250

When the day comes for taking delivery of the bonds and paying the corporation for them, each of the members of the syndicate pays into the bank which is making the loan its proportional contribution as just stated. According to instructions the corporation will deliver the bonds at the bank, accompanied with a draft for the $4,775,000 purchase price, and the bank will make the payment with the loan of $4,058,750 which it is making to the syndicate, and the $716,250 the syndicate manager has deposited as the contribution of Brown & Company and the other members to make up the balance. This detailed description of the banking transaction is not meant to indicate that the business always follows exactly that form, but simply to state a form that it might follow and make clear the immediate sources of the money paid over to the corporation. By this method it is seen that the bonds are "carried" through a loan or loans arranged by the syndicate manager on behalf of the entire syndicate. Such a method of financing the payment for the bonds is called "undivided carrying."

Following another method it might have been the agreement that each member of the syndicate should finance the payment, and take up the bonds, to the amount of its

participation in the account. This method is called "divided carrying." If the account were arranged in this way, then each member would arrange its own loan at its own bank or banks, and the corporation, under instructions, would deliver to it there bonds to the amount of its participation.

If worked out by the "divided carrying" method, the situation would stand this way:—

Syndicate member	*Participation*	*Value at 95.50*	*85% of purchase price of 95.50 procured by each member on loan*	*15% of purchase price advanced by each member from capital to "take up" the bonds*
Brown & Company	$2,000,000	$1,910,000	$1,623,500	$286,500
Jones & Company	1,500,000	1,432,500	1,217,625	214,875
Smith & Company	1,000,000	955,000	811,750	143,250
Robinson & Company	500,000	477,500	405,875	71,625
	$5,000,000	$4,775,000	$4,058,750	$716,250

We will assume now that the method of carrying the bonds has been settled as either "undivided carrying," the syndicate manager arranging the loan to carry the entire issue, or as "divided carrying," by which each member arranges its own loan and carries its own participation. The origin of these terms is obvious enough. We will as-

sume also, as would probably be the case with an issue of this size, that the joint-account syndicate will not seek further coöperation, by arranging an "underwriting" syndicate, but will proceed to sell the bonds directly to investing financial institutions and to individual investors. The next thing to settle is the selling price. Of course this was determined essentially before the purchase price was decided on. When Brown & Company agreed to take the bonds at the price of 95.50, they had already come to a conclusion as to the price at which the bonds could probably be sold. From the price at which they believed the bonds could be sold they deducted an amount which they considered would pay the expenses of the business, if the bonds sold as readily as it was thought they would, and leave what, all things considered, they would regard as a fair profit. In this way Brown & Company determined the price they were willing to pay for the bonds. If they had done something toward arranging the syndicate, or actually had arranged the syndicate before finally agreeing to purchase the bonds, the purchase price was determined in this way on consultation with the other syndicate members.

It should be stated before proceeding that special arrangements for carrying the bonds

might be made other than those described. One member might agree for some special advantage, or because of some special ability, to carry all the bonds and advance all the capital necessary. Or, if one member did not arrange to carry all the bonds, the several members might carry them in amounts other than the amounts of their participations. It is safe to say, however, that only a very small minority of joint-accounts arrange for carrying the bonds in any other way than those described.

This seems a proper place to mention the profit or loss in interest. If the syndicate bought the bonds on a 5 per cent basis and is able to borrow at the banks at 4 per cent, obviously the carrying itself does not make an item of expense to the syndicate, but yields a profit to the account. If the bonds are bought on, say, a 4.5 per cent basis, however, and the syndicate must pay the banks 5.5 per cent interest on the loan, again obviously the carrying makes an item of expense to the account. The street picturesquely says of the situation, in which the rate of interest paid is greater than the rate of interest received, that "the bonds are eating their heads off."

We must return now to the question of the selling price. Let us assume that the syndi-

cate agreed to the purchase price of 95.50 because it believed the bonds could be sold at a price of 98.50, and that the bonds would be easy enough to sell to make the difference of three points cover the expense and give a fair profit.

Mention of the selling price raises the whole issue of division of profits and the bearing of losses. Unless otherwise stipulated the account will be entirely regular; that is, profits will be received and losses borne in proportion to the respective participations. This is the ordinary unlimited liability account. More commonly the banking houses call it "undivided liability." The word "unlimited" describes the situation more accurately. In an unlimited liability account profits are received and losses borne in proportion to the participations, entirely irrespective of the amount of the securities the member of the syndicate may sell.

It is the regular understanding in these transactions that each member of the syndicate will engage in selling the securities. When a banking house joins a syndicate the other members assume that it expects to sell an amount of bonds approximately equal to its participation. Unless a "selling commission," which we will discuss a little later, is arranged for, it makes no difference in the

distribution of profits or the bearing of losses whether the house sells bonds to several times the amount of its participation or does not sell any bonds at all. If a house which has been "taken aboard" does not sell any bonds, or does not sell bonds to an amount somewhat approaching its participation, then the house is said to have been "given a ride." A house which fails to do its share of the selling will suffer the penalty of being regarded as an undesirable associate in joint-account transactions and, on a frequent repetition of failure, will not again be invited to join.

Assume that this particular joint account is successful and results within a reasonable time in a sale of all the bonds at the agreed price of 98.50. Members of a syndicate naturally do not sell the exact amount of their participations in any case. In the particular case we are discussing we will assume the several members sold these amounts: —

Brown & Company	$2,250,000
Jones & Company	1,000,000
Smith & Company	1,150,000
Robinson & Company	600,000

On this transaction in selling $5,000,000 of bonds the total of the difference of three points, between the price at which the bonds were bought and that at which they were sold, amounts to $150,000.

Of course this is not net profit any more than any difference between a purchase and a selling price. Actual expenses of the syndicate itself amount to considerable sums. Such expenses must necessarily vary widely in different joint-account transactions. Any figures given here are not to be taken as typical or even as approximating the figures of any account that ever existed. Like all other figures on the matter, they are presented simply to illustrate the principle and methods of syndicate transactions. Expenses connected with delivery of the securities from the issuing corporation to the syndicate and from the syndicate to the purchasers, legal expenses, telegrams and telephone calls, circulars and advertising are a few of the many expenses of conducting the account. The several members of the account themselves bear all the direct cost of the selling, salaries and traveling expenses of salesmen, and their own office overhead charges.

We will assume that during the process of sale the interest accruing on the bonds amounted to $2500 more than interest paid out on the loans to carry them. We use the word "accruing" advisedly. No interest may actually have been paid on the bonds between the dates within which they were sold. Since they are sold at *98.50 and interest,*

on each sale the amount of interest accrued to the date of sale is added to the sale price. We will also assume that all the expenses of the syndicate amount to $27,500. So, adding the profit from the interest account and deducting the expenses, the syndicate has left $125,000 as syndicate profits.

Although Jones & Company did not sell bonds equal in amount to their participation and the others all sold bonds in amounts more than their participations, the syndicate manager will distribute this $125,000 to the several members strictly according to their participation. The participation of —

Brown & Company	was	4 tenths
Jones & Company		3
Smith & Company		2
Robinson & Company		1
		10

Since one tenth of the profits is $12,500, it follows that the syndicate manager will distribute to —

Brown & Company	$50,000
Jones & Company	37,500
Smith & Company	25,000
Robinson & Company	12,500
	$125,000

Again, we must remind ourselves that though these sums are profits of the syndicate, the several members cannot count them

as net profits. Each member has had to bear selling expenses, including perhaps some advertising, certainly office overhead and the pay and expenses of salesmen.

If, instead of proving a profitable transaction, the syndicate should find that it could not sell the bonds at 98.50, but that, on the contrary, financial conditions had become such that it could not sell the bonds for as much as it paid for them, what would happen? We will assume that the syndicate meets such a condition of affairs. If the syndicate is not satisfied simply to hold the bonds in expectation of a better market, when it can sell them without a loss, it can choose between lowering the selling price to one at which it can "move" the bonds now or distributing the unsold bonds to the members and dissolving the syndicate. Ordinarily the members will not want to continue the syndicate to hold the bonds for a better market. The better market is always problematical and may well seem too remote. Some members may want to liquidate the account and take their loss. The syndicate is not so likely to lower the selling price as it is to distribute the bonds. Some members may hold the opinion that the market will improve and feel reluctant to take a loss. Various considerations will determine the

decision. Suppose the syndicate determines to distribute the bonds and dissolve. We will assume that it has sold $2,000,000 of the total issue of $5,000,000. Again, for the purpose of this distribution it does not make any difference how many bonds each member has sold; the unsold bonds will be distributed to the members in proportion to their participations. To show more specifically the working of the transaction, we will state an assumption of the amount of bonds each member has sold, and say that

Brown & Company have sold	$200,000
Jones & Company have sold.....	300,000
Smith & Company have sold.....	900,000
Robinson & Company have sold.....	600,000
	$2,000,000

Robinson & Company have sold more than the amount of their participation; Smith & Company, almost the amount; Jones & Company, only one fifth; and Brown & Company, only one tenth of their participations. Of the total issue $3,000,000 of bonds remain unsold. Just as in the case of the profits these will go to the members in proportion to their participations. Brown & Company will get four tenths; Jones & Company, three tenths; Smith & Company, two tenths. Although Robinson & Company have already sold much in excess of their participation,

they will nevertheless have to "take up" one tenth of the unsold bonds. So the unsold bonds will be distributed as follows: —

Brown & Company must take up.....	$1,200,000
Jones & Company must take up.....	900,000
Smith & Company must take up	600,000
Robinson & Company must take up..	300,000
	$3,000,000

With an original participation of only $500,000, Robinson & Company have become responsible for a total of $900,000 of bonds. On the $2,000,000 of bonds sold the syndicate made three points between the purchase price and the selling price, a total of $60,000. Let us assume a loss on the interest account in carrying and expenses to a total of $30,000. The manager would distribute the $30,000 net syndicate profit in this way: Brown & Company, $12,000; Jones & Company, $9000; Smith & Company, $6000; Robinson & Company, $3000. The joint account is now closed. The several members are carrying on their own account the bonds distributed to them and may dispose of them in such ways and at such prices as they see fit.

Instead of having the syndicate distribute the unsold bonds, let us assume that, after holding them for a considerable time, it decided to reduce the price to one at which the bonds will "move" in the existing market.

The members of the syndicate decide that the bonds will sell at 94. On offering them at that price the syndicate succeeds in their disposal. A marked advance in interest rates undoubtedly accompanied so sharp a decline in the market. We have assumed, too, that the syndicate carried the bonds a considerable period before it determined on the reduction in price. So we can fairly assume a loss in the interest account, which we will place at an average of one per cent for four months on an average loan of $3,000,000. This would make a loss in interest of $10,000. The syndicate has sold $3,000,000 of bonds at one point and a half below the purchase price, a loss of $45,000. We will assume that the holding of the bonds for the joint account has increased the total of syndicate expenses to $45,000. So the account has total costs and losses of $100,000 against which it can offset only the $60,000 advantage of selling price over purchase price made on the first $2,000,000 of bonds. Syndicate members would have to bear the loss of $40,000 in this way: —

Brown & Company would stand a loss of.....	$16,000
Jones & Company would stand a loss of.....	12,000
Smith & Company would stand a loss of.....	8,000
Robinson & Company would stand a loss of..	4,000
	$40,000

We should keep in mind that the syndicate apportions the losses in this way in the face of the fact that Robinson & Company sold more than their total participation at the full advantage of three points above the purchase price. It does not make any difference in the result, either, how many each member sells of the $3,000,000 of bonds which the syndicate sells at the price of 94. Even if the members sell these bonds in amounts as disproportionate to their participations as the $2,000,000 they sold at 98.50, the losses would be distributed as indicated. If it is objected that this is obviously an unfair situation, we may answer that the parties knew the kind of a transaction in which they engaged and its liabilities. A group of people, who probably know each other exceptionally well, are willing to accept the hazards of fortune and take the chances of loss for the sake of the chances of gain in the coöperation. To keep this fact absolutely clear we can hardly too often reiterate that each member of the syndicate must add to his share of the account loss the large direct cost of selling.

Sometimes a group of investment bankers wish to coöperate without running the risk of this unlimited liability of the regular joint account, "undivided," as the word is, as to

liability. They may in that case agree to an account limited or "divided" as to liability. Such an account would naturally also be divided as to carrying. Each member of the syndicate would take up and carry an amount of the bonds equal to its participation and would proceed to sell the bonds as if on its own account, except that it cannot vary from the syndicate price so long as the account continues. Each member would be responsible for the expenses of the syndicate in proportion to its participation. Otherwise each member, subject to the syndicate price, deals with its share of the bonds as if they were its own, is responsible for selling, and enjoys the profits and suffers the losses of its own participation. At the close of the syndicate each member must take for its own account that part of its participation which it has not succeeded in selling. If the houses of Brown, Jones, Smith, and Robinson, in the transaction just sketched through, had formed an account divided both as to carrying and as to liability (limited liability), and, instead of the amounts before indicated, Brown & Company had sold $300,000 and Robinson & Company had sold $500,000, the transaction would have worked out as follows: —

Member	*Participation*	*Sold during life of account*	*Must still sell*
Brown & Company.....	$2,000,000	$300,000	$1,700,000
Jones & Company.....	1,500,000	300,000	1,200,000
Smith & Company.....	1,000,000	900,000	100,000
Robinson & Company.....	500,000	500,000	000,000
	$5,000,000	$2,000,000	$3,000,000

Obviously this makes a very different showing from the regular unlimited liability transaction.

Occasionally some variations are made in the general form of the joint-account transaction as described here. People entering into a syndicate sometimes make stipulations which modify the full unlimited liability without narrowing the account to the strictly limited liability form. Such syndicates present possibilities of modification far beyond anything yet attempted in practice. If such modifications are desirable we may well leave them to recommend themselves.

Before going on to a brief description of the management of an account, we should mention one way in which joint-account syndicates commonly modify the effects of inequalities in selling. As we have seen, some members may sell bonds to an amount out of proportion to their participation.

Selling commissions afford some mitigation of these inequalities. If the account agreement provides for a commission, as it ordinarily does, then the members actually selling bonds get the stipulated commission on the sales to augment their profits or lessen their losses. Suppose a half a point selling commission had been allowed in the transaction in which Brown & Company sold $200,000, Jones & Company, $300,000, Smith & Company, $900,000, and Robinson & Company, $600,000 at the price of 98.50 and all the rest of the bonds had been distributed. Then the $30,000 of net syndicate profits on the sale of the $2,000,000 at 98.50 would have been cut down by the half a point on the $2,000,000, or by $10,000. The result would change in this way: —

Member	*What each receives as proportionate distribution of profits of $20,000 when half per cent selling commission allowed*	*Selling commission on bonds actually sold*	*Profits plus commission ($30,000)*	*What was received when no commission allowed and distributed*
Brown & Company.....	$8,000	$1,000	$9,000	$12,000
Jones & Company.....	6,000	1,500	7,500	9,000
Smith & Company.....	4,000	4,500	8,500	6,000
Robinson & Company..	2,000	3,000	5,000	3,000
	$20,000	$10,000	$30,000	$30,000

Such a statement sufficiently shows that the allowance of a selling commission may con-

siderably change the results in favor of the member which performs a disproportionate share of the work.

Many brokers and other dealers in securities may desire to sell some of the bonds of this issue. Regular clients of such brokers and dealers may wish to buy some of the bonds of the issue, but naturally prefer to purchase through their customary channel. To get the benefit of such possible extension of the market the syndicate may allow a broker's commission. If the syndicate allows its members a selling commission, as just described, presumably the member which makes a sale through a broker entitled to a commission will have to pay the broker's commission. Since the selling member's commission we have assumed is one-half a point, — that is, one-half per cent on the par of the securities, — the broker's commission would be one eighth or a quarter, — that is, that fraction of one per cent on the par of the securities. Both the size of the member's commission and of the broker's commission would ordinarily have some relation to the difference between the price the syndicate paid for the securities and the price at which it is selling them. The syndicate established that difference between the purchase and the selling price on its estimate of probable diffi-

culty in selling the securities. Of course, by this we mean the difference originally established. If a change in the market forces a lowering of the price, or permits an advance, that is quite another matter. A member must not share its selling commission, except with a broker in accordance with the syndicate agreement, and a broker must not share his commission with any one. Fairness to all, both that the members may have an equal chance to sell and that purchasers may all receive the same treatment, demands a single price to all. A member or a broker discovered in "splitting commissions" would suffer an injury in reputation that would tend to make it difficult to participate in further business of this kind.

So far we have not considered the internal management of the account, but have stated simply its general form, liabilities, and incidents. In the details of its management a joint account presents a somewhat intricate situation. Here are several independent selling organizations selling the same issue. All the bonds are deposited as collateral for a loan or several loans. To make delivery of any of the bonds to a purchaser on a sale, they must be released as collateral. The possibility of overselling the issue, that is "selling short" of the bonds, must be guarded

against. Such matters all require careful attention.

The syndicate manager takes charge of all these details of the account, keeps the syndicate books, and generally performs the service of a clearing house for joint-account affairs. The largest amount of detail work comes in arranging for the delivery of the bonds. Members must promptly report to the manager all sales of the securities. Quickness in reporting sales is essential in the business of selling securities.

Consider the situation first in the case of undivided carrying, in which the manager has arranged the loan or loans to carry the entire issue. This offers the simplest state of affairs. Brown & Company are the managers. A salesman of Robinson & Company telegraphs to the office of his house that he has sold ten of the bonds. On receiving the telegram Robinson & Company immediately telephone to Brown & Company the fact that they have sold ten bonds. In the course of the day Robinson & Company have occasion, in a similar way, to telephone to the syndicate manager the successive further sales of three, two, and five bonds. Robinson & Company want these bonds the next day to deliver. But the bank which has loaned the syndicate the funds to carry the

bonds has possession of all of them as security for its loan. It will not give up any of the bonds unless the syndicate reduces proportionately the amount of money it has borrowed. We have assumed that the bank loaned 85 per cent of the purchase price. Since the bonds cost the syndicate $955 per bond, the loan was at the rate of $811.75 for each bond. The manager must pay off this amount for each of the bonds it asks the bank to release. Since Robinson & Company want twenty bonds to deliver the next day they must supply the manager with sufficient funds to pay for each bond. The amount Robinson and Company actually turn over may be anything between this and the full $985 which they will receive from their clients when they deliver the bonds. Robinson & Company had already paid out of their own capital 15 per cent of the purchase price, to make up the difference between the $811.75 that the bank loaned and the $955 that the syndicate paid, or $143.25 for each bond on the amount of their participation. By one arrangement, perhaps one of the simplest, Robinson and Company, for each bond they want to deliver, pay over to the syndicate manager $841.75, which is the sum of $985 Robinson & Company will receive from their client less the $143.25 they

have already paid. Obviously this would leave all the gross profits — that is, the difference between the purchase and selling prices — in the hands of the syndicate manager for him to distribute at the close of the transaction. It would also return to the member capital it has tied up in the transaction from time to time as the member sells bonds. If the transaction should prove to be a very quick one, the bonds all sold, and the syndicate dissolved in the course of a week or ten days, this releasing of capital would not be important; but if the syndicate should continue for a number of months it would be a matter of consequence. On the other hand, if Robinson & Company should sell more than the amount of their participation, they would, for each bond of this excess amount, have left in their hands $143.25 of syndicate capital which they would have to account for to the syndicate manager.

If the syndicate agreement were that each member must pay to the syndicate manager the full selling price in order to get delivery of bonds, then the manager would have accumulating, for the member's account, this $143.25 for each bond sold. Of course the manager may distribute this fund of unnecessary syndicate capital back to the members, from time to time as it accumulated. As

will be indicated later, several other plans are possible. Though the term is not commonly used, the amount the members pay the manager in order to get bonds for delivery is sometimes called the "take-down price." Often it is stated simply that the member "pays" the manager for the bonds.

We have assumed the situation of an account undivided as to carrying, in which all the bonds are carried by a loan arranged by the manager. If the syndicate has divided the bonds for carrying purposes and each member has arranged the loan for the amount of its own participation, deliveries to purchasers would be made only through notification to and instruction from the manager. In this way the manager keeps entire control of the account and can adjust the amount of bonds each member is carrying in proportion to that member's participation. Members must report all sales to the manager promptly, as in the case of the undivided carrying account. The manager will either direct the member to make delivery from bonds the member is carrying or will procure bonds from some other member for the member who has made the sale. If the member makes delivery from the bonds it is carrying, it will be accountable to the syndicate manager for the difference between the

purchase price, which the member has already paid, and the price at which the bonds are sold. If the manager wishes to supply the member which has made the sale with bonds for delivery from those which some other member is carrying, then the manager will call on the selling member to pay just the same as in the case of the undivided carrying account, and, of the money so paid in by the selling member, the manager will pay over to the carrying member, from which the manager wants to take the bonds, a sum equal to the purchase price of the bonds, which is the amount the carrying member had borrowed and advanced to carry them. The carrying member then has the funds to pay off the *pro rata* of its loan and is reimbursed for the *pro rata* of the capital advanced for the syndicate operation.

To recapitulate, let us take the case of the first account presented. We assumed that the syndicate sold all the bonds at the full price of 98.50 and that the syndicate expense totaled $27,500, of which profit on the interest account reimbursed $2500. Assume that this account was undivided as to carrying and that the members were to pay the manager the full selling price when calling for bonds to deliver. Then, taking a single bond as the unit transaction, we get these results:

Selling price which members paid to manager when they took bonds for delivery.....	$985.00	
Manager used to pay off *pro rata* of loan at bank in order to release bonds from collateral.....		811.75
Manager pays back to members their contribution to the syndicate capital.....		143.25
Manager uses to pay syndicate expenses, which totaled $27,500, less $2500 made on interest account, or $25,000, i.e., for each of the 5000 bonds of the issue.....		5.00
Seller's commission		5.00
Syndicate profits distributed to members in proportion to their participations.....		20.00
		$985.00

All the conditions governing the conduct of the account are not necessarily determined at the time the syndicate is formed. Ordinarily only absolutely necessary matters are stipulated at the time the members agree to join. After the formation of the syndicate the members hold a meeting to settle such further things as need to be determined. Even so important a consideration as the exact selling price may be left to this meeting. The several banking houses joining in the account will not sign a formal legal document drawn up by their lawyers. They will simply confirm by an exchange of letters the

understanding arrived at in the formation of the account and in the subsequent meeting.

Our discussion of the account has shown in a general way the powers and duties of the manager. We assumed, what would ordinarily be the case, that the member who had control of the issue, or who was most influential in forming the syndicate, became manager. Such an account as we have discussed has really the characteristics of a partnership and the manager would in no sense be a dictator. Each member would have an opportunity to exert an influence in determining the conduct of account affairs. Naturally the manager would keep the books of the account and attend to the distribution of profits or apportionment of losses.

Showing the informal manner of the organization of such a syndicate as we have described these letters might be the only evidence in writing of its terms: —

July 8th, 1916.

MESSRS. JONES & COMPANY,

DEAR SIRS: —

We are writing to confirm our conversation of this morning to the effect that you will join Smith & Company, Robinson & Company, and ourselves in a joint account for the purchase and sale of $5,000,000, Central & Western R.R. Co. 5%, 20 year bonds due August 1st, 1936, for

which a price of 95.50 and interest will be paid to the corporation, New York delivery and payment.

You are taking a participation of $1,500,000 in the account.

We are to be manager of the account.

The account will be divided carrying, unlimited liability. The rules for the conduct of the account will be agreed on at a meeting of the syndicate members to be held as soon as possible.

Will you please let us know if your understanding of our agreement is in accord with this letter?

Very truly yours,

BROWN & COMPANY.

July 9th, 1916.

MESSRS. BROWN & COMPANY,

DEAR SIRS: —

Your letter of the 8th inst., referring to the joint account for the purchase of Central & Western R.R. Co. bonds, correctly states our understanding.

Very truly yours,

JONES & COMPANY.

July 10th, 1916.

MESSRS. JONES & COMPANY,

DEAR SIRS: —

We are writing to confirm the understanding for rules of the account entered into at a meeting held at our office this morning of the members of our joint account in Central & Western R.R. Co. bonds.

We determined that the selling price should be 98.50 and interest. A member shall have a

selling commission of a half and may allow a broker's commission of a quarter. Expenses of a member for purposes of the account shall be deducted from the amount allowed him as commissions. Delivery shall be only on the manager's order and on receipt by him of the selling price and interest without allowance for commissions. Members may offer and sell the bonds without restriction as to territory. All advertising shall be done and circulars prepared and printed by the manager at the expense of the account in the name of Brown & Company, Jones & Company, Smith & Company, and Robinson & Company, in the order stated. Unless earlier terminated by agreement the account shall continue until all the bonds are sold.

Will you please confirm this understanding of the rules of the account?

Very truly yours,
BROWN & COMPANY.

July 11th, 1916.

MESSRS. BROWN & COMPANY,

DEAR SIRS: —

Your letter of the 10th inst., referring to the rules of the joint account for the purchase of Central & Western R.R. Co. bonds, correctly states our understanding.

Very truly yours,
JONES & COMPANY.

Since these syndicate transactions are regularly entered into and carried out in good faith, and the parties are thoroughly

familiar with them, serious difficulties seldom arise. The agreements, however, might well be more fully expressed.

Notice that these letters say that the members may offer and sell the bonds without restriction as to territory. If banking houses located in different cities compose the syndicate, the agreement sometimes restricts the selling of each member to that member's special territory. Assuming that Brown & Company have their principal office in New York City, Jones & Company in Boston, Smith & Company in Philadelphia, and Robinson & Company in Chicago, then Jones & Company might have all of New England reserved for them, Brown & Company have the City and State of New York and northern New Jersey; Smith & Company, the State of Pennsylvania and southern New Jersey; Robinson & Company, Ohio, Illinois, Michigan, and Wisconsin. Any member would be free to sell in the unrestricted territory. Under such an arrangement the syndicate might agree that each member should do its own advertising and in its own name only. Generally syndicates do not restrict their members territorially. The larger houses have offices in several cities and find their clientèle over a rather large area. If their territory were restricted they would not be able to

exert their full selling power. Besides, it is rather problematical how many more bonds a house would sell by reason of having reserved territory.

Unless otherwise expressly stipulated the syndicate comes to an end when its purpose is accomplished by the sale of all the securities. By mutual agreement the account may be closed at any time, and the agreement forming the account ought to stipulate that the vote of a majority, or a majority in interest, should govern for this as well as for other questions that may arise.

Recapitulating the considerations entering into the formation and carrying out of a joint-account transaction, we may consider it then as represented by the agreement forming the account and the supplementary agreement providing for what we may call the rules of the account, and summarize them by an outline of the matters that need be taken care of.

Agreement forming the Account should provide for these Matters:—

1. *Name.*
   The name or names in which the purchase is made and the order in which they are to appear.
2. *Purchase price.*
3. *Carrying.*
   Divided, undivided, or special.

4. *Liability.*

Unlimited, limited, or limited but unlimited as to selling; and option to limit and proportional lessening.

All other matters of the account are to be provided for in rules of the account expressed in a supplementary agreement.

Rules of the Account should provide for:—

1. *Selling price.*
2. *Broker's commission.*
3. *Member's selling commission.*

Shall there be any at all?

If a commission, shall it begin at once?

Or only after the member has sold his proportion?

4. *Duration of account.*

To continue until securities are sold, unless sooner terminated by agreement of members.

To continue for a definite period and to be terminated at the end of that period, unless members agree to extend.

5. *Take-down price.*

Selling price.

Or selling price less member's commission.

Purchase price less any *pro rata* already paid by members.

Selling price less any *pro rata* already paid by members.

Selling price less commission and any *pro rata* already paid by members.

6. *Delivery.*
   Only on manager's order.
   Without manager's order.
7. *Territory.*
   Unrestricted.
   Restricted.
8. *Advertising.*
   By manager in name of all at expense of account.
   Or by each in the name of all and at his individual expense.
   Or by each in his own name and at his own expense.

Since a joint account is one of the commonest transactions with our bond houses, it speaks well for the general good faith and mutual understanding with which these undertakings are carried out that the cases which express the law applicable to them do not arise out of the joint accounts of the bond houses. Such cases have their origin in almost any other form of endeavor carried on by joint effort. In its legal aspects the joint account comes under the special classification of "Joint Adventure." So far as it is discussed in general treatises on the law it is dealt with in works on "Partnership." Even the most extensive of these works, however, hardly more than mentions it.

A joint adventure, or "joint account," as the bond houses call their particular form of

joint adventure, may, indeed, properly be considered as a special form of partnership, and the legal considerations governing it may be considered as differing from those of the general law of partnership only as the special nature of joint adventure requires them to differ.

Frequently the cases point out, by way of stating a general principle to cover some special point in issue, that, though a joint adventure is not in a strict legal sense a co-partnership, the rules of law applicable to the partnership relation govern the rights and duties of those jointly engaged.

Ordinarily, in the cases of joint adventure the rules of a general partnership apply to the questions involved, and the court properly limits itself to the remark that, though a joint adventure is not fully a copartnership, the law of partnership applies. The court has no occasion to discriminate more precisely. However, some of the distinctions are interesting and important. Since the general treatises afford little help to a clear understanding of the law of joint adventure as applied to the joint account, it may be helpful to present a brief discussion of some of the legal issues involved in the entering into, and conduct of, a joint-account transaction.

Though in applying the analogy of the

law of partnership to joint adventurers the courts are careful not to say that a joint adventure is a partnership, nevertheless, the seeker finds upon a search through the cases that the precise differences from a partnership are somewhat elusive.

The essential partnership nature of joint adventure is dwelt upon because of its bearing on the matter of liability. Members of a joint account have, as to third parties, — that is, as to those with whom the account deals, — the general liability of partners. A stipulation in the agreement for the account that they are not acting as partners has simply the effect of calling attention to the fact that the transaction is a joint account, with whatever limitations on the general law of partnership such fact may imply.

The most important difference in the legal aspects of a joint adventure and a partnership seems to lie in a limitation, in the case of the joint adventure, of the doctrine of agency as applied to partnership. Speaking broadly, a person dealing with any member of a partnership may consider that member the agent of the partnership for all purposes of the partnership business. Any partner can bind his copartners in any transaction within the scope of the partnership. Obviously the scope of a joint account is limited to the specific pur-

poses of the account. Apparently any one dealing with the syndicate — that is to say, with a party to the joint account purporting to act on behalf of the joint-account syndicate — is bound to know the specific purposes of the syndicate transaction and cannot hold the syndicate liable on an undertaking outside the scope of those specific purposes. This doctrine is carried far enough to involve, perhaps, a real distinction between a joint adventure and an ordinary partnership formed to carry on a business of a specific and limited kind.

Suppose our corporation, instead of having $5,000,000 of bonds to sell, must, in order to meet its capital requirements, dispose of $25,000,000. Our syndicate of Brown & Company, Smith & Company, Jones & Company, and Robinson & Company may be in a position successfully to negotiate the purchase of the issue, but may not want to undertake to sell so large an amount. Distributing such an issue, to its ultimate lodgment in the hands of permanent investors, involves a really tremendous effort. Because one can say "a million dollars" as readily as saying "a hundred dollars," any sense of the real magnitude of the sum involved in the larger figure easily eludes one. If the permanent investors should each take $5000 of the bonds, on the average,

the bankers would have to find 5000 investors who may be induced to prefer this particular investment rather than one of a hundred of others equally available at the same time. The number of people who are in a position to invest $5000 at one time is very limited. So, though a few financial institutions may buy the bonds in larger blocks, probably the $5000 average is too high rather than too low.

Our syndicate, however, does not want to lose the opportunity to do business. In order to undertake this particular piece of business it must secure coöperation on a much larger scale than is afforded by these four houses working together. They must get the full advantage of the clientèles of numerous houses.

In order to get this larger coöperation more houses must be taken into the syndicate. But Brown & Company and their associates feel that they can get some return and are entitled to it for their business advantage in being in a position to buy the bonds and for their work in organizing a syndicate of the size necessary to handle so large a transaction. So they first decide to form a syndicate composed of the four houses in order to purchase the bonds from the corporation and to sell them to another syndicate which they will organize. Of course, too, if they actually

effect the purchase before they complete the organization of the second syndicate, they are assuming a risk for which they are entitled to compensation.

To distinguish the general nature of the two syndicates, we call the first a "joint account" and will call this second syndicate an "underwriting syndicate." It would be in the interests of clear expression not to use the term "syndicate" in connection with joint accounts, but to confine its use to the underwriting. As a matter of fact, on the street these terms are used interchangeably, with a tendency, however, to make the discrimination we have indicated between the terms "joint account" and "underwriting." On this matter of nomenclature I have remarked elsewhere:[1]

The term "joint account" implies, in securities transactions, an undertaking entered into by the parties for the purchase and sale of securities, in which the rights and liabilities of all the parties are essentially the same in proportion to their interest. This is in distinction from an "underwriting syndicate" in which the parties are not on the same basis, or rather, in which, strictly speaking, there are two accounts. It seems desirable to reserve the terms "syndicate" and "underwriting

[1] Report by the writer to the Investment Bankers' Association of America on "Joint Account Letters and Forms, and Some Considerations of the Law of Joint Account."

agreement" for this form of undertaking and use only the words "account" or "joint account" for undertakings of the kind discussed here. It seems also desirable to keep the terms "subscribers," "subscriptions," and "underwriting" for the syndicate agreement and use the terms "members" and "participations" for the joint account.

We will assume that the original syndicate bought the bonds for 95.50 as before, and we will also assume that it sells them to this second syndicate at an advance of one point, or at 96.50. Again warning should be given that any figures stated in the discussion must not be taken as typical. In practice the figures vary widely and in the discussion specific figures are stated merely for the sake of clearness. In organizing the second syndicate the members of the original group, in becoming members of the second, must clearly state that they are making this profit. Since the relationship of parties to a joint adventure is of a fiduciary nature, they must exercise the utmost good faith toward each other. One may not make a secret profit. So the statement of the profit of the original account regularly appears in the underwriting syndicate agreement. Members of the original account could not well avoid, if they would, making substantial subscriptions to the un-

derwriting. They must do this to show their belief in their own undertaking. Though they might have the fullest confidence that the undertaking by the second syndicate would result in all the anticipated profits, they might, for perfectly good and proper reasons, prefer to stay out of the underwriting. They might be able to employ their capital in some matter that promised better returns than those to be anticipated from the most successful result of the underwriting. Naturally, however, the people who are invited to subscribe would be suspicious of the proposal if the people who are extending the invitation failed to be among those subscribing.

Although joint-account agreements are ordinarily informal, — just an exchange of letters, as already indicated, — underwriting agreements, on the other hand, are ordinarily formal. The number of subscribers makes the full formal statement more important for the avoidance of misunderstandings. Generally the houses organizing the underwriting syndicate hand, or mail, to those whom they are inviting in, a copy of the subscription agreement, and each subscriber signs a separate copy. It will not do, in discussing syndicates, or indeed almost any other topic in the subject of "Corporation Finance," to speak in general terms without some express reserva-

tion. Sometimes underwritings of very large amounts, involving a considerable number of subscribers, are the most informal. When it becomes known that a syndicate is about to purchase a large issue of securities, representatives of other houses, which enjoy business relations with one or more of the purchasing houses, are likely to telephone and ask that they be put down for a certain amount. This subscription will generally be acknowledged by mail, but the letter will not state any of the terms of the agreement other than naming the subscription price.

If the subscriptions received total more than the amount of the whole issue, some or all of the subscribers will be scaled down in the "allotment." By "allotment" is meant the formal acceptance of the subscription. The subscription blanks which have been sent out contain a stipulation reserving the right to reject all or any part of the subscription. In legal terms sending out the application blanks is a mere bid for an offer; signing and sending them in constitutes the offer. Since the offer is for all or any part of the amount applied for, the allotment of less than the full amount constitutes an acceptance in accordance with the terms of the offer and completes the contract.

In forming the underwriting syndicate the

members of the original syndicate become managers of the second syndicate. Or it may be that only one of the members of the joint account, or first syndicate, becomes manager of the underwriting syndicate. The manager of the underwriting syndicate has much more power than the manager of the joint account. For one reason this is necessary because of the larger numbers of the second group. An expression of opinion cannot be had so readily from so many people. The second syndicate may have up to say two hundred subscribers. Since the size of the issue makes the whole situation more difficult to handle, some central authority must have the power to act quickly. The group that formed the joint account presumably comprises houses with more capital and wider reach. They are more powerful houses and are in a position to impose terms.

The power of the manager or managers of an underwriting syndicate often extends to making or changing the selling price, and in a general way the manager or managing group directs the policy of the business as well as takes care of the details. As one of the cares of the position the manager will have the duty of protecting the market. Until the syndicate has disposed of the entire issue, it is of course essential that no bonds should be

offered for sale at less than the price at which the syndicate offers them. If sales in the general market are reported at a lower price the syndicate naturally cannot command the price it has set.

Since the syndicate sold in the first place at its price all the bonds that have been sold, one might well inquire who has any bonds of the issue to sell at a lower price. People often purchase bonds on a new offering in the belief that the particular bond at the price, with the particular issuing houses back of it, under the existing general conditions of the market, will be in such demand that the issue will all be purchased at once and the price in the general market will go up. When such people have purchased and have seen that the securities were not all sold at once on issuance, they know that their speculative hopes will not be realized promptly. Since they bought as a speculation and cannot make the immediate profit, they prefer to sell at once at such loss as may be necessary rather than keep their capital tied up and run the risk of further loss. So they promptly turn around and offer their bonds on the market. Such a throwing of securities back on the market makes one of the dangers of the syndicate transaction. Avoiding such a situation so far as possible, and taking care

of it when it does arise, comprises a large part of the strategy of any undertaking to market an issue of securities. When securities are offered at less than the syndicate price, the only thing the managers can do to protect the market is to buy in such securities. The managers will usually try to trace the source of the selling and generally will succeed in the endeavor. They will make a mental note of who the seller is and when he wishes to purchase securities of some future issue which is oversubscribed the managers will not favor him in allotting the bonds.

Some one may wonder how the managers can find out who the seller is. Ordinarily such a seller would place his securities in the hands of a broker to sell and the broker would not disclose — "give up," as the phrase is — the name of his principal. But every bond has printed on it the particular number it bears in the issue. When the managers delivered the bonds to the selling house they noted in their books the numbers of the bonds delivered. In turn the selling house noted the numbers of the bonds it delivered to each purchaser. So when the managers buy in some bonds to protect the market they can look for the numbers and always trace the transaction through to the first purchaser. If the first purchaser is a broker, who has just

passed the bonds on to his principal and taken the broker's commission to which he is entitled, he may, and probably will, refuse to name the principal. The broker has run into trouble through his dealings with his principal and next time may be a little more cautious in dealing with him. Besides the check the managers have through the numbers on the bonds, they may trace the source of the selling through many indications readily apparent to a man skilled in the practices of the street.

Some recent syndicate agreements have sought to guard against speculative purchases by providing that the selling house shall be responsible for the character of its sales. Under such an agreement, if a house has made a sale to a man who turns out to be a speculator who throws his securities back on the market, the syndicate manager has the authority to buy the bonds in at the price at which they are offered, turn them back to the selling house, and charge up against the selling house, as a loss to be borne by it, the difference between the price at which the managers bought the bonds in and the full price at which the syndicate holds them for sale. The possibility of having to bear the full burden of such a loss would tend to make a member house very careful to get the bonds it

sells into the hands of purchasers who are buying for investment. At the time of writing one cannot foresee whether this experiment will succeed and the provision be increasingly used, or whether the difficulties of the situation are such that a provision of this kind will come to be regarded as undesirable.

Very large investors in securities may become members of joint accounts or subscribe to underwritings in order to get the advantage of the lower price in their purchases of securities. It is understood that these participations are for investment. When the syndicate takes delivery of the securities from the issuing corporation, such participants pay for and take up the amount of their participation. Such a transaction is called a "withdrawn participation." Whatever the arrangement as to other participants, as to an individual or institution taking a withdrawn participation, the transaction would be a strictly divided or limited liability account. The other members of the syndicate get the advantage of having that amount of the securities taken absolutely out of the market. Owing to certain abuses, which it was believed had crept into the practices of insurance companies in taking advantage of such participations, the State of New York made it illegal for them to engage in syndicate transactions.

We have discussed the formation of the underwriting syndicate as if there were always two syndicates whenever an intermediary makes, or attempts to make, a profit between the price received by the corporation and the price paid by the underwriters. Really, one of the several largest of the investment banking houses — the few investment bankers sometimes called the wholesaling houses — often occupies the position we have described as taken by the first syndicate in the underwriting transaction. These wholesaling houses occupy their position by reason of their capital, their credit resources, and the influential positions they occupy both with the large issuing corporations and with the dealers in securities, who are in direct touch with nearly all the frequent buyers of securities for investment in the country. They also have foreign connections in one or more of the European financial centers, — London, Berlin, Frankfort, Amsterdam, Paris, — and have been able to take some, or all, of an issue out of this market entirely.

Usually, on the sale of the securities held by an underwriting, the syndicate advertises them for sale in several cities simultaneously. Often these advertisements say that on such a day up to such an hour, or up to such an hour of such a day, subscriptions will be

received for the purchase of securities of the issue. Either phrase means that subscriptions will be received immediately and recorded. If, by the stated hour, the applications are greater than the amount, the issue is oversubscribed. The syndicate managers then proceed to allot the securities. Just as in the case of the allotment to the subscribers to the underwriting syndicate, the managers may not allot, in exact proportion to the subscriptions, to those who have applied to purchase the securities. The managers will especially favor the smaller subscribers. The presumption is greater that they are purchasing for permanent investment rather than for speculation. Usually they make the best possible purchasers of securities from the distributor's standpoint, because they buy to keep. The securities are lodged away and only infrequently will come out on the market to add to the floating supply and to tend to keep the price down. The distributors must keep the general market price up to the price they are asking while they are distributing the securities. They earnestly want the price to stay up and, better, to advance after they have sold the entire issue and have nothing further to gain or lose directly. But these investment bankers want to bring out an issue of securities another day, and nothing

is a better silent selling argument than the fact that the clients to whom they are appealing made money from an earlier purchase. So, in making the allotments of an oversubscribed issue, the managers favor those whose purchases will make for the best future for the issue.

Sometimes when the market is strong and a new issue catches the attention of the income-buying public as a particularly attractive investment, many people will surmise that the issue will be largely oversubscribed, with a consequent scaling down in the allotments; and in order to get as large an amount as they really want, they will subscribe for a much larger amount of the security than they want, in order to get, if possible, approximately the amount they actually do want. Such applications, representing an anticipation of scaled allotments, account for most of the very large oversubscriptions on the public offering of securities. If the syndicate fails on the public offering to sell all the bonds, the business takes the usual course already described. Some time necessarily intervenes between the agreement to purchase, when the price is agreed to on existing market conditions, and the offering of the bonds to the public. Even if the purchasing bankers correctly estimated market condi-

tions at the time of the purchase, conditions sometimes change rapidly, and on the offering the public may take only a small percentage of the issue. An attempt to sell the bonds at the syndicate price may result unsuccessfully, and the subscribers to the underwriting may have to take up nearly all the bonds and ultimately sell them at heavy losses.

Sometimes the issuing corporation appears as offering the securities on the public sale, or perhaps the syndicate managers on behalf of the corporation. In such a case the subscribers to the underwriting, instead of being in the position of owners of the issue, and selling it on their own account, are in the position of guarantors who are insuring the success of the sale. If the public does not buy all the bonds the subscribers to the underwriting must take up the unsold balance as purchasers. The term "underwriting" accords more strictly, perhaps, with the position of a guarantor syndicate insuring the success of the sale. The street uses it, however, without any discrimination between the two methods of handling the transaction. Both methods come to the same results.

Our discussion of syndicate transactions has assumed some specific figures for the sake of clearness. One must not suppose, however, that amounts alone govern the adoption of

the method of handling the transaction and determine whether only one banking house shall be concerned, or more than one, or whether there shall be one or two syndicates between the corporation and the investor. The size of the issue in relation to the capital, selling power, and other commitments of the banking house or houses does determine. An amount of $100,000 of securities or less might well afford the basis of a joint-account transaction. With only a little more than that amount an underwriting syndicate might take the securities over from an original joint account. Sometimes a banking house which has subscribed to an underwriting may proceed to form a joint account of its own to handle its allotment of the issue. Any discussion can give only a general idea of these joint undertakings for the sale of securities. They shade into each other in a way that eludes precise description. Their purpose, the one thing common to all, is to join financial resources and selling power sufficient to provide the amounts of capital required from time to time by the magnitude of economic enterprises.

CHAPTER IV

LISTING ON THE STOCK EXCHANGE

If a corporation should list an issue of its securities on the Stock Exchange, it would not, merely by so doing, provide any funds for itself. So far as listing alone is concerned the corporation by the mere authorization of the securities has accomplished as much toward procuring capital. Listing securities does not sell them; it only provides one means for making a market in them; that is, affording an opportunity for holders to sell them after they have been sold in the first instance.

We have already discussed the importance of having a market in an issue of securities. An active course of Stock Exchange dealings affords a quick and close, a free and open market, practically the best market possible. For reasons stated in the first volume (p. 205) the New York Stock Exchange offers little advantage for creating a market in small issues, and purchasers of securities of small issues do not expect to have them listed there. Investors do expect to see large issues listed on the Exchange, and with the largest issues expect an active course of dealings there. So, when bankers are offering a large issue for

sale, they announce that application has been made to list the issue on the New York Stock Exchange.

They have not already listed it at the time of offering the security for sale for one or both of two reasons. The undesirableness of having the security listed during the time the bankers are engaged in selling it has already been indicated. Such a listing offers a competitor a special advantage in trading purchasers out of the security, and a special opportunity for the speculative purchaser to close out his speculation. If the issue is on the Stock Exchange list while the banker still has part of the issue to sell, its appearance there will greatly increase the difficulty of protecting the market. At the same time it is possible for the bankers, especially with a somewhat speculative issue, by developing a course of trading, to utilize the Stock Exchange in disposing of securities. By buying in enough to protect the market, and by taking advantage of the buying of others at or above the price at which the bankers are willing to sell, they may dispose of a large part of an issue by means of the Stock Exchange market.

Besides the difficulty of protecting the market as a cause for delay in listing, the bankers and their counsel may not have had

an opportunity to bring the matter before the Stock Exchange authorities in time to have the issue listed before offering it for sale. As we shall see before the discussion is ended, the preparation of an application for listing requires a large amount of work in itself. All the other work of preparing the issue, getting the proper resolutions of the corporation, drawing up the trust deed, may have kept counsel under such pressure that they could not attend to any further matters. The burden of meeting the listing requirements is likely to fall on them. The Stock Exchange authorities require that applicants for listing submit specimens of all securities to be listed. It takes some time for the engraving concern doing the mechanical work of preparing and printing the issue to present a specimen for the Exchange authorities to examine. This would be true even for an interim certificate, or subscription receipt as the Stock Exchange Committee terms it, representing the definitive security while it is in course of preparation. Bankers frequently utilize such interim certificates, it may be remarked, to make delivery when they offer the issue for sale. Often the definitive certificate of stock, but more especially the definitive bond, — that is to say, the final piece of paper to represent the security, — cannot be prepared in time

for the bringing out of the issue. Time is of the essence when the bankers are bringing out a new issue. Financial conditions often change rapidly. Capitalists may be in an investing mood for the present but in the immediate future may refuse to purchase anything. The bankers must take no chances of losing their market. This fact explains the interim certificate, and would be sufficient often, if there were no other reason, to explain the failure to have the issue listed by the time it is brought out.

Once the issue is sold and the listing is complete, the bankers will have to watch the market until they are sure that the course of dealings is well established. During the process of sale they will have done everything possible to build up a market as described in the preceding discussion of raising funds through the banking houses. Building a market, in the sense of establishing a course of trading, is much like building an arch; if the process is complete the market will support itself. A buying demand will exist sufficient to meet without breakdown any pressure to sell. The bankers who brought out the issue can now welcome the speculators; every speculative purchase and sale means one more transaction to help make the market more active and therefore more stable.

Though this is not the place to discuss the function of speculation, we may remark that the result of speculation resembles the effect of a gyroscope in its stabilizing power.

Listing does not cost heavily in the direct charge imposed by the New York Stock Exchange. The Exchange exacts a fee of only $50 for each $1,000,000, or fraction, of the par value of securities, or, in the case of stock without par value, $50 for each 10,000 shares. The expense of complying with the requirements of the Exchange in the furnishing of information would substantially increase the total cost. Besides the costs, which, once met, do not recur, the corporation will have to bear the continuous expense of maintaining a transfer agency and a registrar of transfers in the Borough of Manhattan, New York City.

From the standpoint of the work of the Exchange this requirement of maintaining a transfer agency and a registrar of transfers conveniently near is most important. With the volume of transfers necessary as a result of active dealings it would be impossible to put through the business if every time a transfer were required the certificate had to be sent out of town. This applies with greater force to the American exchanges, with their daily settlements, than to the

foreign exchanges, with their settlements at longer periods. Since any real Stock Exchange activity in the securities of a corporation requires an organization to take care of the transferring anyway, the matter of the location does not work greatly to the disadvantage of the corporation. Some of the transfer agencies for the largest and most active issues are considerable, and, in active times, very busy organizations. Their work and problems deserve a more extended description than we have space for. It is hardly necessary to say that the Stock Exchange sees to it that the registrar of transfers forms no part of the same organization as the transfer agency. A trust company regularly attends to the duties of registrar. If transactions are not numerous, another trust company may perform the duties of transfer agent. Principal and interest of listed bonds and dividends on stock must be made payable at the office of the transfer agency. The corporation must not change its transfer agency or its registrar of stock without the approval of the Stock Exchange authorities.

The corporation must agree to publish and submit an annual report to its stockholders at least fifteen days before its annual meeting. This report must show an income account and balance-sheet and an income account and

balance-sheet of all constituent, subsidiary, owned, or controlled companies, and must contain a statement of the physical condition of the corporation. This requirement of annual publicity, together with the amount of information demanded at the time of listing, has proved an obstacle to the listing of the issues of some corporations. Doubtless the desirability of listing has overcome the unwillingness of the managers of other corporations to furnish such information. The corporation must agree also not to dispose of its stock interest in any subsidiary, owned, or controlled company, or to allow any constituent, subsidiary, owned, or controlled company to dispose of a stock interest in other companies, except for retirement and cancellation, unless under existing authority or on direct authorization of stockholders of the holding company. If the corporation issues any stockholders' rights it must notify the Exchange, and must make all rights transferable, payable, and deliverable in the Borough of Manhattan.

The Stock Exchange demands great care in the mechanical execution of securities as a prerequisite to listing. The reader will find some discussion of the importance of these requirements at page 212 of the first volume. The Exchange requires that securities must

be engraved and printed in a manner satisfactory to the committee on the stock list from at least two steel plates.

1. A border and tint plate from which a color should be printed underlying important parts of the face printing.

2. A face plate containing the vignettes and descriptive or promissory parts of the document. This should be printed in black, or in black mixed with color.

Everything must be done to make as effectual security against counterfeiting as possible. Classes and denominations of securities should be made distinguishable by printing them in different colors. The entire amount of the capital stock of a corporation which has listed its stock on the Exchange must be transferable at the transfer office in the Borough of Manhattan. If a corporation also makes a transfer of its shares in other cities, all certificates must, nevertheless, be interchangeable and identical in color and form. The corporation must not make any change in the form of a security without the approval of the Stock Exchange authorities.

The Committee of the Governing Board of the Stock Exchange, which considers all applications for listing and reports on them to the Board, is called the "Committee on Stock List." Besides the requirements already

stated, in the case of bonds, it also makes the following stipulations: —

The panel, coupons, and denomination of bonds must be engraved and printed in a manner satisfactory to the Committee; coupons must bear a vignette.

The text of bonds should recite conditions of issuance, terms of redemption, by sinking fund or otherwise, default, interchangeability or exchangeability of coupon and registered bonds, and conversion into other securities.

Registered bonds must carry a power of assignment in such form as the Committee may approve.

The Committee recommends that registered bonds be made interchangeable with coupon bonds.

Registered bonds interchangeable with coupon bonds and coupon bonds exchangeable for fully registered bonds shall bear a legend reciting the fact.

Coupon bonds issued in denominations of less than $1000 should provide for exchangeability into coupon bonds of $1000, the smaller bonds to bear a legend reciting such privilege.

Registered bonds made such by detaching coupon sheets are not eligible for listing.

In the case of stock the Committee makes these requirements: —

The border and tint plate for one-hundred share certificates of stock shall have said denomination engraved thereon in words and figures;

the plates for smaller amounts shall bear some engraved device whereby the exact denomination of the certificate may be distinctly designated by perforation; also conspicuously upon the face the words, "Certificate for less than one hundred shares."

Certificates for common and preferred stock shall recite preferences of the preferred.

Certificates of stock should recite (1) ownership; (2) par value; (3) whether shares are full paid and (4) non-assessable; (5) terms of redemption; (6) preference as to dividends; (7) distribution of assets upon dissolution or merger; (8) voting power, or (9) other privilege; and must (10) bear the following legend: — "This certificate is not valid until countersigned by the transfer agent, and registered by the registrar."

Though a detailed statement of the information required by the Exchange will make somewhat tedious reading, besides conveying the precise information, the reader can make it serviceable by way of a partial review of the subject of "Corporation Finance." Requirements stated are as of the 1st of January, 1916. The applicant for listing must file the following papers: —

For stocks: —

1. Seven copies of charter, with amendments to date, one copy attested by the Secretary of State where incorporated or other proper public authority.

2. Seven copies of by-laws, with amendments, one copy attested by secretary of corporation.

3. Seven copies of leases and special agreements, one copy of each attested by secretary of corporation.

4. One copy of resolutions of stockholders and directors authorizing issue, each attested by secretary of corporation.

5. One copy of resolutions of board of directors or executive committee, attested by secretary of corporation, authorizing, by name, official to appear for listing securities.

6. Opinion of counsel (not an officer or director of the corporation) as to legality of (*a*) organization, (*b*) authorization, (*c*) issue, and (*d*) validity of securities.[1]

7. Detailed distribution of securities.

8. One copy of resolution appointing transfer agent and registrar, attested by secretary of corporation.

9. Certificate of proper public authority for issue.

10. Certificate of registrar of amount of securities registered at date of application.

11. Report of a qualified engineer covering actual physical condition of property of recent date.

[1] The Committee will not accept the opinion of an officer or director of an applying corporation nor of a firm in which the officer or director is a member, as counsel on any legal question affecting the corporation; nor will it accept the opinion of an officer or director of a guarantor corporation on any legal question affecting the issuance of guaranteed securities.

12. Map of property and contemplated extensions.

13. Specimens of all securities to be listed.

For bonds: —

14. All papers required for listing stocks and also seven copies of the mortgage or indenture, one copy (*a*) certified to by trustee, (*b*) with copies of all certificates of proper recording.

15. Trustees' certificate.

16. If bonds are convertible into stock, certified copies of (*a*) action of stockholders, and (*b*) of directors, authorizing issue and reservation of stock specifically for conversion.

17. Certificate of disposition of securities redeemed or refunded.

18. Certificate as to collateral deposited.

19. Certified copy of release or satisfaction of underlying mortgages.

For securities of reorganized corporations: —

1. All papers required above for listing stocks or bonds, as the case may be.[1]

2. Certified order of court confirming sale on foreclosure or other authority for reorganization.

3. Certified copy of plan of reorganization.

4. Income account; balance-sheet at close of receivership, if available.

5. Balance-sheet at date of organization.

[1] Opinion of counsel shall also state that proceedings have been in conformity with legal requirements, that title to property is vested in new corporation, and is free and clear from all liens and encumbrances, except as distinctly specified; and also as to equities of securities of predecessor corporation.

For additional amounts: —

1. Nos. 4, 5, 6, 7, 9, 10 of papers required for original listings.

2. Nos. 1, 2, 3, 8, and 11 of said papers for stock, if any changes have occurred therein since last listing.

3. Nos. 14, 15, 16, 17, 18, and 19, of said papers for bonds, if any changes have occurred therein since last listing.

4. Certified copy of proper public authority for increase.

For certificates of deposit, voting trust, etc.: —

1. Papers required above for listing stocks or bonds.

2. Certified copies of any legal proceedings and court orders.

3. Seven copies of deposit or trust agreement, one certified to by proper authority.

4. Seven copies of circulars, issued by trustees or committee, one certified to by proper authority.

5. Amounts deposited.

6. Detailed distribution.

Besides filing the specific papers just detailed, the petitioner for listing must in his application convey the following information: —

A. Title of corporation.

B. (1) Date of organization; (2) name of State authorizing incorporation.

C. (1) Duration of charter; (2) and of charters

of constituent, subsidiary, owned, or controlled companies.

D. (1) History of corporation; (2) if a consolidation, merger, or reorganization, history of predecessor, and constituent, subsidiary, owned, or controlled companies, or firms, showing (*a*) names, location, and stock issues; (*b*) conditions leading to new organization.

E. (1) Charter rights; (2) nature of business, character and amount of annual output, number of employees; (3) special rights or privileges granted directors by charter or by-laws.

F. (1) Whether capital stock is full paid; (2) non-assessable; and (3) if personal liability attaches to shareholders.

G. (1) Issues, dividend rate, and par value; (2) total amount of each, authorized and issued; (3) increases and authority therefor, including (*a*) action by stockholders, (*b*) by directors, and (*c*) by public authorities, etc.; (4) amount unissued, (*a*) options or contracts on same, (*b*) specific reservation for conversion.

H. If preferred stock; (1) whether cumulative or non-cumulative; (2) preferences, including (*a*) voting power; (*b*) dividends; (*c*) distribution of assets on dissolution or merger; (*d*) redemption.

I. Voting power of obligations of debt.

J. (1) Dividends heretofore paid; (2) by predecessor, or constituent, subsidiary, owned, or controlled companies; (3) earnings for preceding five years, if available.

K. Description of property (1) owned in fee; (2) controlled; (3) leases; (4) franchises; (5) location, nature, and acreage; (6) railroads, mile-

age completed, operated, and contemplated, and trackage rights; (7) traffic agreements; (8) equipment; (9) character of buildings and construction; (10) timber, fuel or mining lands, water rights (see paragraphs T to Z, below).

L. (1) Purpose of issue; (2) application of proceeds; (3) amount of issue for securities, contracts, property, description and disposition of securities acquired; additional property acquired or to be acquired, with particulars, as required by paragraph K.

M. (1) Mortgage, and (2) other indebtedness, (*a*) date of issue, (*b*) maturity, (*c*) interest rate, (*d*) redemption by sinking fund or otherwise; (3) similar information regarding mortgage and all indebtedness of constituent, subsidiary, owned, or controlled companies.

N. Other liabilities, joint and several, (1) guaranties, (2) leases, (3) traffic agreements, (4) trackage agreements, (5) rentals, (6) car trusts, etc.; (7) terms of each, and provision for payment.

O. Fiscal year.

P. Financial statements; (1) income account of recent date for at least one year; (2) balance-sheet of same date; (3) similar figures for predecessor, constituent, subsidiary, owned, or controlled companies; (4) final balance-sheet; (5) when reports published; (6) for corporations consolidated within a year, income account and balance-sheet of all companies merged and balance-sheet of applying corporation.

Q. Names of (1) officers; (2) directors (classified), with residence; (3) transfer agents, and (4) registrars, with addresses.

R. Location of principal and other offices of corporation.

S. Place and date of annual meeting.

In addition to the above, corporations which are owners of mines must recite: —

T. Patented and unpatented claims, by numbers.

U. (1) A geological description of the country; (2) location and description of mineral and other lands; (3) ore bodies; (4) average value; (5) character of ore; and (6) proper methods of treatment.

V. History of prior workings, showing (1) results obtained; (2) production each year.

W. (1) Ore reserves compared with previous years; (2) estimate of engineer as to probable life of mines; (3) probabilities by further exploration.

X. (1) Provisions for smelting and concentration; (2) cost of (*a*) mining, (*b*) milling and smelting, (*c*) transportation; and (3) proximity of property to railway or other common carrier.

Y. Income account, (1) receipts; (2) expenditures; (3) disposition of income.

Z. Properties in process of development; if income account not available, what guaranties for working capital and for completion of development.

Bonds.

An application for an original listing of bonds shall recite all information required for listing capital stock, and

A. (1) Amount, denominations, and numbers; (2) full title; (3) amount authorized and out-

standing, authority therefor, including (*a*) action by stockholders, (*b*) directors, and (*c*) public authorities, etc.; (4) whether bonds are coupon (registerable as to principal) or registered, interchangeable or exchangeable; (5) exchangeability or convertibility into other securities, and terms.

B. (1) Date of issue and maturity; (2) interest rate; (3) places at and dates for payment of interest and principal; (4) where registerable or transferable; (5) kind and standard of money, and options; (6) tax exemption; (7) whether redeemable or purchasable in whole or in part, showing (*a*) dates, (*b*) price, (*c*) duration of published notice, (*d*) disposition of redeemed or purchased bonds.

C. Mortgage or indenture provisions for (1) serial issues; (2) values in United States gold coin, issuance in foreign languages and that the English version governs; (3) terms of exchangeability of bonds payable in foreign places for bonds payable in United States.

D. (1) Security-mortgage, indenture of trust, or other agreement; and, (2) liens; (*a*) properties covered, (*b*) mileage of railway lines, (*c*) buildings, (*d*) equipment, (*e*) securities, (*f*) rights, (*g*) privileges, (*h*) titles, (*i*) franchises, (*j*) leases, etc.; (3) other liens covering same or any part of same properties; (4) guaranty and terms.

E. (1) Names and addresses of trustees, and any unusual additions to or limitations of powers; (2) provision for declaration of principal due and payable in event of default of interest or other default, and waiver; (3) percentage of outstanding bonds controlling trustee.

F. Purpose of issue and application of pro-

ceeds, similar to that called for by paragraph L of the "Requirements for Listing Stock."

G. Disposition of bonds refunded and mortgage securing same.

Requirements for listing of additional amounts.

Refer to previous applications and last application by number and date; and recite: —

A. Title of corporation and name of State authorizing incorporation.

B. (1) Securities applied for; (2) amounts authorized; (3) authority, including (*a*) action by stockholders, (*b*) by directors, and (*c*) by public authorities, etc.

C. (1) Dividends (2) by constituent, subsidiary, owned, or controlled companies, since previous application.

D. (1) Purposes of issue; (2) application of proceeds; (3) amount, description, and disposition of securities exchanged for new issues; (4) additional property acquired or to be acquired, with particulars as required by paragraph K of the "Requirements for Listing Stock."

E. Income account and balance-sheet of recent date, with similar figures for constituent, subsidiary, owned, or controlled companies.

F. Names of officials, location of offices, place and date of annual meeting, as covered by paragraphs, Q, R, and S of "Requirements for Listing Stock."

(*Note*) Increases of capital stock are not eligible for listing until thirty days after notice of increase, or proposed increase, has been given the Exchange; increases of stock by conversion of listed bonds (of which notice shall be given the Exchange) may be immediately listed by the Committee and registration authorized.

CHAPTER V

CORPORATE INCOME

THIS discussion of corporation finance so far has assumed enough knowledge of accounting for an understanding of the elementary terms of the balance-sheet and the income account. The brief consideration of the subject in this chapter is presented for the benefit of those who do not have this preliminary acquaintance with the elements of accounting. The reader should not assume, however, that the statements made in this chapter are intended to present a model of accounting practice. The immediate discussion attempts only to give, as directly and briefly as possible, enough of an explanation to enable the reader to grasp the significance of corporation accounting in relation to corporation finance.

Though we have just used the term "corporation accounting" we must not assume that the accounting of corporations differs in any essential way from the accounting of any other method of conducting business. The nature of the business governs the method of accounting rather than the nature of the proprietorship; that is, whether the proprietor

is an individual, a partnership, or a corporation. The seeming though not real exception should be made of the holding company. This presents some special aspects of income which we shall discuss in the next chapter.

Throughout our discussion so far we have used an old and still the more familiar nomenclature of accounting, and made statements in a condensed form. For the purpose of making easy the process of comparison and presenting the financial discussion in its simplest form this has been desirable, and for these reasons the old condensed form of statement is still the one generally used in presenting the results of accounting to show conditions for the purpose of financing the capital account.

Our income account so far has presented only the items —

Gross Income.
Operating Expense.
Net Income.
Fixed Charges.
Surplus Available for Distribution.

Only the slightest thought is needed to see that such a statement presents a totally inadequate analysis of income and expenditure on account of conducting a business, and that elements of a very different nature must be included under a single head. With this condensed statement all sources of income of

whatever nature must be included under the head of "Gross Income." Obviously, however, if business for the manufacture of machinery includes the ownership, for some special reason, of $100,000 New York City 4 per cent bonds, the $4000 a year of income from this source is a very different thing from the money received for the sale of machinery. One can get no complete understanding of the business situation without recognizing the distinction and knowing such a situation when it exists.

The chapter in the first volume on "Trading on the Equity" set out the varying natures of gross incomes on account of the nature of the business producing the income, and made the general assumption for the purpose of the discussion that all the income of the corporation came as a result of conducting the business. If the corporation is wholly or in part a holding company, the nature of the income is a very different thing. We shall discuss this more at length in the next chapter.

The next item of operating expense obviously must include even more diverse elements. For example, lacking a special head for "Taxes," moneys paid out for that purpose must come under the head of "Operating." Yet the difference between an expenditure imposed on the business by the State and

entirely outside of the control of the management needs no further pointing out. If the nature of the business is manufacturing, and the income account has no other head, the cost of the raw material must come under the head of "Operating Expense." Again, the essential difference between the cost of the material and the cost of converting it into the finished product needs no elucidation beyond the mere mention. This is a distinction that applies as between a manufacturing business and a transportation or other public service business. The distinction between a merchandising business, in which the very goods which are bought are sold without any change in form, is even greater than the distinction between a manufacturing business and a public utility.

Another distinction in the nature of expenditures, which needs to be made to get an understanding of the business situation involved, is the difference between the cost of carrying on the operations of the business itself and the cost of maintaining the plant in a condition for the efficient conduct of the business, and generally the maintenance of the capital investment unimpaired. This distinction is usually made in accounting as between the cost of "Conducting Operations" and the cost of "Maintenance."

Fixed charges do not present the same kind of essential differences. They include any costs which the management of the business cannot cut off of its own volition. The management must meet them, and they do not diminish on a diminishing scale of business. Interest and rentals are the essential fixed charges; both incurred for the sake of additional capital in the business on the general principles discussed in the chapter on "Trading on the Equity."

With these remarks we have our income account recast into the following form: —

OPERATING REVENUE.
(Classified according to the kinds of business carried on.)
OPERATING EXPENSE.
Conducting Operations.
Maintenance.
NET OPERATING REVENUE.
TAXES.
INCOME FROM OTHER SOURCES.
DEDUCTIONS FROM INCOME.
Interest.
Rentals.
AVAILABLE FOR DIVIDENDS.
DIVIDENDS.
SURPLUS.
CONTINGENT LIABILITIES.

Such a form of accounts applies especially to a corporation conducting a transportation business. It is a skeleton adopted from the form of report required by the Interstate

Commerce Commission. It would present the essential facts of a public service enterprise of the nature of an electric light or power company, a telephone or telegraph company. A gas company has some of the aspects of a manufacturing enterprise.

In our previous discussion we have taken for our operating ratio — that is, the proportion of earnings consumed in the cost of operating — the whole of operating expenses including the cost of conducting operations, the cost of maintenance and taxes to boot. As a single figure summarizing certain totals this percentage serves a useful purpose. For further analysis we need to know about the items included in the total. To form conclusions about the combined efficiency of the management and the plant, we need to know specifically the cost of conducting operations. We say advisedly the combined efficiency of the management and plant. Consider the case of a railroad. Its location, the manner of its construction, and the nature of its traffic fundamentally affect its cost of conducting operations. If its grades are low, its curvature slight, and its construction heavy, it can use heavy, powerful locomotives and haul long trains at a minimum of expense for fuel and labor. If its traffic is dense, it gets the reduced cost of doing business resulting from

a large volume and a full utilization of its capital investment. The percentage of grades and curvature, the weight of rail, and various other figures serve to indicate at how great an advantage or disadvantage the management operates due to the nature of the construction of its plant. The traffic density shows the advantage it has owing to the location of its plant, the territory the road runs through. The kinds of traffic carried show whether or not the management has the advantage of high-grade traffic paying the higher rates or must haul a heavy tonnage at small profits. All these things help to show the efficiency of the plant and do not go to credit of management except in so far as the management brought these conditions about. If the management can claim credit for the conditions, it must first discount the cost of bringing them about and deduct the capital charge before it can make a showing of business wisdom. No single figure expresses these advantages or disadvantages due to plant. These conditions can be taken into consideration only in a general way in checking up the percentage of earnings expended for the cost of conducting operations. If we make allowance for plant conditions, we can then take the percentage of earnings consumed in the cost of conducting operations as indicating

the efficiency of management. If it is low as compared with the average under similar conditions, we may draw the inference that the management displays a high degree of efficiency.

Cost of maintenance indicates whether or not the management is returning enough of the earnings to the property to maintain the efficiency of the plant. If it is not doing so, the operating ratio — that is, the percentage of earnings expended in operating expense — does not afford a proper index of the condition of the business. A showing of net earnings is being made essentially out of capital. During dull years corporations commonly do this, and even maintain dividends in this way. Paying dividends out of capital has to take some more obvious form in order to be considered reprehensible and to run counter to the legal prohibition. If a business, which is not essentially a "capital business" in its nature, makes a full allowance for maintenance, it is returning enough to the property to take care of depreciation. In the words a "capital business" we have coined an expression for our immediate purpose. By the term we mean some business in which the labor and other costs are not greatly significant in comparison with the capital cost. For example, the proprietorship and conduct of an apart-

ment house may well be regarded as a business. The cost of capital in such a business, if it be considered one, far outweighs other costs. If the business consisted of conducting a single apartment house, the management probably could not advantageously expend enough in maintenance to cover the full amount of depreciation. If the case were that of a large corporation owning and operating a considerable number of apartment houses, it might conceivably consider some new construction as essentially in the nature of maintenance, and amply provide for depreciation in that way out of earnings.

Directly opposite to an insufficient maintenance resulting in a showing of earnings not really made but amounting to an essential conversion of capital, the management may return to the plant more earnings than are necessary to keep the capital unimpaired. If earnings are diverted to capital by way of maintenance the management is developing a concealed asset which may be discoverable by analysis. Cost of proper maintenance comes much nearer to a standard than cost of operating, which depends directly on conditions of plant which cannot be standardized. The expense of maintenance depends directly on the cost of materials and of labor. These are the same for one enterprise as for another of the

same kind. An examination of maintenance costs in a given business over a series of years indicates the amount a management must average to expend to keep the capital value of a property unimpaired. By comparing the proper average cost with the amount the management of a given enterprise actually expends for maintenance, a skillful analyst of accounts in the given business can make a pretty close estimate as to whether capital is just being maintained or is being encroached upon or added to through the operation of the maintenance account. It should be remarked that what is said of an excessive maintenance account does not apply to railroads since 1907. Since that date the accounting regulations of the Interstate Commerce Commission have stipulated against such practices. In that year expenditures for other purposes than strict maintenance were limited to $200 for any one item. Since 1915 even the $200 has not been allowed.

Especially in railroad enterprises, for which so much accounting information is available through the accounting requirements of the Interstate Commerce Commission, skillful analysts of railroad reports can draw many important inferences from an examination of the accounts besides the information the reports convey directly. With some knowledge

of the physical condition of the road derivable from various sources they can come to some pretty accurate conclusions about the operating skill of the management from an examination of the cost of operating account.

Of course the ability to draw the inferences from the accounting reports depends largely on the volume of material available for comparison. The most accurate and extensive reports of a single enterprise leave too much open to surmise. Variations in the cost of operating may indicate that the management is now more efficient or less efficient than formerly. They do not show at all that the best management the corporation has had may not be worse than a management of average efficiency. Variations in the cost of maintenance, unless over a very long term of years, with a full knowledge on the part of the analyst of variations in the cost of materials and labor over all those years, give no answer to the question as to whether the property is being over-maintained or under-maintained. For these purposes the analyst must have a fund of information gained from a knowledge of the business extensive enough to give him valuable averages for enterprises conducting that kind of business. Only the railroad business at present offers a sufficient fund of information to make analyses of this kind really

scientific. The various public utilities are just beginning to afford the basis of general information. For any kind of manufacturing enterprise conclusions are much more hazardous. In the railroad field, however, analysts of accounts have long made deductions from them that have gone much below the surface in arriving at opinions about the value of specific railroad securities.

The general form of income accounts presented so far serves substantially for a transportation or other public utility concern. With a manufacturing concern the cost of raw materials comes in to make such a fundamental difference in the nature of the business that expenditures cannot be accounted for in this manner and give anything like an adequate idea of the manner in which the business is being conducted. A form of income account which might be used would follow this outline: —

SHIPMENTS BILLED.
COST OF SHIPMENTS.
  Cost of Materials.
  Cost of Manufacturing and Selling.
  Maintenance.
NET MANUFACTURING PROFITS.
OTHER INCOME.
TOTAL NET.
INTEREST.
SURPLUS FOR DIVIDENDS.

With this form giving the "Cost of Materials," the item "Cost of Manufacturing and Selling" gives a clue to efficiency of management and plant, and "Maintenance" gives a clue as to whether or not the capital of the corporation is being milked or fed through the maintenance account. What has been said on this matter applies as fully in principle to a manufacturing business as to any other.

One can hardly overstate how important it is that a corporation should show, as completely and accurately as possible within the reasonable limits of an annual report, a statement of its affairs so far as accounting science can show them. The precise form that the report should take is no part of our subject. That is the province of the expert accountant, and affords a sufficiently large world for his profession to conquer. But the capitalist who has presented for his investment the securities of a corporation, without being shown a reasonably full accounting statement of the affairs of the corporation, ought to refuse even to consider them. If he commits his capital to such an enterprise, he takes the position of a man who buys a pig in a poke, or purchases "sight unseen." If the corporation is a holding company, the investor is purchasing almost equally sight unseen unless he also sees rea-

sonably full information about the affairs of the subsidiaries. The discussion in the next chapter will develop the reason for this.

As the outline of the income account has indicated, the corporation may not distribute in the form of dividends all the profits which are stated to be "available for dividends." All the phrase means is that of the earnings stated for the period of the report the corporation has the legal right to distribute to shareholders that amount as profits of the business. Legal right and financial expediency ordinarily in this respect come to two very different results. It is generally desirable to adopt such dividend policy as to avoid, so far as possible, the necessity for reducing dividends during ordinary periods of depression. From the viewpoint of the corporation itself the investor occupies a much more important place in the financial scheme than the speculator. The investor seeks steadiness of income and commits his capital to such investments as seem likely to give it. He does not want merely an average of five per cent or six per cent over a period of years; he does want the actual five or six per cent every year. So the management of a corporation would ordinarily find it desirable to pitch its dividend policy at such a point that they feel confident they can maintain it.

The directors will, therefore, not declare as dividends the entire amount legally available for that purpose, but will set aside part of it to surplus account.

The amount so set aside does not, of course, ordinarily, except for accounting purposes, constitute a distinct fund. The directors simply invest those earnings back in the plant in extending or bettering it. Though accounted for in a separate account as surplus, they really make essentially an addition to the capital account. By reason of the extensions or betterments the corporation should increase its earnings. The surplus ought to be sufficient to enable the corporation in its dullest years to earn the amount required for its regular dividend rate. When the earnings, as a result of this policy of accumulation of surplus, reach a point where they can be relied upon to do more than this, then the directors can increase the dividend rate. If the directors are not certain that earnings have reached a point to justify an increase in the regular dividend and the surplus cannot be invested back in the plant to the best advantage, they may increase the distribution, but expressly announce the addition as a "special dividend" by way of giving warning that it is not to be relied upon as a regular disbursement of income.

Just how much of earnings should be set aside as surplus for the sake of establishing the continuity of dividends presents a question requiring much wisdom in judgment. The general subject of corporation finance needs the results of much study on this problem. Only a few kinds of business yet afford even the materials for this study. Due to the requirements of the Interstate Commerce Commission the railroads have made public an abundance of material for that form of business. Various state public service commissions are bringing out enough material for the several kinds of public utilities. But for the various kinds of manufacturing business, not only is the material not available, but the problem is more difficult. In the public utilities field, however, this study is especially needed as part of the foundation for rate-making. Public service commissions purport to fix rates at a point that will allow a fair return on the capital. Earnings must be large enough to allow interest and dividend rates sufficient to attract new capital to the enterprise to provide the extensions and betterments demanded by a community growing either in size or in its demands for quality of service. As already stated, investors demand, or prefer, a steady income, and will advance funds on more advantageous terms on the

assurance of a steady income than on the fact of an equivalent average income. So, part of the problem of rate determination is what rate of steady income reasonably assured will prove sufficiently attractive to procure necessary new capital for the enterprise, and what amount of surplus set aside under circumstances of favorable earnings will give that reasonable assurance of continuity. Rates must be established at a point which will enable the payment of the required steady income and provide for a surplus fund which will in a degree guarantee the continuity of this income. That word "guarantee" indicates the essential nature of a surplus fund; it might with sufficient propriety be described as a "guaranty fund."

We have said that the directors invest the surplus back in the plant. In most cases they do. It may happen, however, that they cannot advantageously make this investment, or that they have special reasons for not doing so. Under such circumstances they may invest in special ways some or all of the earnings which form the "surplus after dividends," just as a sinking fund is invested. The corporation then has a distinct surplus fund which affords earnings from sources outside the regular business it carries on, and shows its guaranty nature more distinctly than an

investment back in the plant. Though created primarily for the purpose of assuring continuity of dividends, the surplus fund also goes to the building of a larger equity back of the bonds. The stockholder wants as much of the earnings available for dividends distributed to him as possible without interrupting the continuity of dividends, and always welcomes any increase in the disbursement. The bondholder always likes to see earnings go back into the plant.

The market places a value on the stock of a corporation on the basis both of the dividend payments and of the earnings available for dividends. Since a present income which may be immediately enjoyed is more valuable than a future income, the earnings not declared as dividends will not enhance the price of the stock nearly so much as those earnings which are immediately distributed to the stockholders. But the purchaser will estimate the value to him of the surplus earnings in so far as, in the first place, they give an assurance of the present rate of dividend disbursements continuing, and in the second place, in so far as they hold out a prospect of an increase in the dividend rate at some time in the future. The capitalist contemplating a purchase of the bonds of the corporation is interested in the amount of earnings left after operating

and taxes, and, therefore, available for the payment of interest. From his viewpoint the less of this paid out in dividends the better.

Directors are generally under no obligation to declare any dividends, no matter what the earnings are, and cannot be compelled to declare them unless the circumstances of their refusal have an element that is essentially fraudulent. If the stockholders differ from the directors on this matter of dividend policy, their remedy is to elect other directors as the terms of the present directors expire. A board of directors may declare a dividend whenever the affairs of the corporation show that it has a surplus, and up to the amount of the surplus. If the surplus has all been invested back in the plant, and the corporation has no cash to pay out in dividends, it may, unless there is a statute to the contrary, borrow money to procure the funds for the disbursement; or it may declare a stock dividend. As already described in the chapter on financing by an appeal to the stockholder, the sale of stock, with a market value at a premium, to stockholders at par, amounts essentially to the declaration of a special dividend. The declaration of a stock dividend comes to the same thing, except that the stockholders are not called upon to pay anything for the stock instead of making a payment less than the

market value. A stock dividend regularly has the nature of a special distribution rather than of the ordinary dividend payment. Though directors who have consistently turned earnings back into the property may sometimes declare a stock dividend just to give the stockholders something in the way of a dividend distribution and keep them satisfied with the management, usually a board of directors resorts to it for special purposes. It may be desirable to increase the number of shares so as to reduce the market price of the stock. Stock that sells close to par sells at an advantage over stock that sells at a high premium. Again, it may be that a close corporation has conducted the enterprise. The few stockholders have held the stock representing their interest in the business. No occasion has arisen for any trading in the stock, and the number of shares in relation to the value of the assets has not been material. But the owners of the business now wish to liquidate all or part of their interest by selling it to the general capitalist public. To do this successfully they need to have their stock have a market value at the maximum not greatly in excess of par. They may effect the result by declaring a stock dividend large enough to amount to a distribution of the surplus in that way. Such a procedure, how-

ever, is rather in the nature of a recapitalization than of a dividend.

Sometimes, instead of borrowing money to pay a dividend when the corporation has a surplus, which is entirely invested in the plant, the directors, wishing to maintain the appearance of regularity in dividend payment and anticipating a date when the corporate income will produce a cash surplus, may declare a dividend to be paid by the issuance of dividend warrants. These are simply in the general nature of notes of the corporation payable at a time when the directors anticipate that the corporation will be in funds. Such payments maintain the semblance of regularity of dividends and give the stockholder something on which he can actually raise cash and so really do give him the benefit of a continuity of income. The term "dividend warrant" used in the explanation of this transaction is sometimes used in another sense as simply indicating the checks (or it may be drafts) by which a corporation disburses a regular cash dividend.

CHAPTER VI

SPECIAL NATURE OF THE INCOME OF A HOLDING COMPANY

A PRESENTATION of the earnings of a holding company offers some special problems. The corporation may be entirely a holding company and not conduct any operations at all, or it may be partly a holding company and partly an operating company. Heretofore we have generally been viewing the earnings of a corporation as the result of directly conducting a business. For the most part, when discussing earnings, we have assumed simply that the earnings were those of an operating company. We can come to a true understanding of the income account and of the relationship of earnings to the various security issues of the plan of capitalization only by tracing them clear through from their origin as "income from operations." Each corporation intervening between "income from operations" and any part of income available for interest or for dividends creates a difficulty of analysis.

Securities of holding companies are sometimes presented to the capitalist with the statement that earnings available for interest

amount to so many times the amount required for that purpose, or that the earnings available for dividends amount to such a per cent on the stock. The presentation does not go back of the income of the holding company and may mislead those who are not familiar with the special nature of the earnings of a holding company and do not reflect on the situations that may arise through the intervention of an operating company. Another way in which those who are raising funds through the sale of securities of a holding company may mislead the unwary is by failing to protect the investor from the possibility of having new claims superior to his own created against earnings and assets.

Let us take a concrete situation to show the difference between the earnings of a holding company and those of an operating company. Assume a holding company — D — capitalized and earning as follows: —

Holding Company D	*Capitalization*
Bonds, 5 per cent	$1,000,000
Stock	1,000,000
Net earnings	100,000

Obviously the statement can be made of the bonds of this corporation that the earnings available for interest are twice the amount required for that purpose. If the corporation were an operating company deriving its in-

come from rendering a public service, such a showing would indicate a minimum of risk in the bonds as an investment. Let us now make the further assumption that the holding company owns all the capital stock of three subsidiaries, Corporations A, B, and C, and that it has no other assets. Since the holding company owns all the stock of the subsidiaries, the number of shares of that stock does not matter; the holding company is entitled to all the dividends which the subsidiaries may declare.[1] So the only element of real concern to us at this point, in connection with the capitalization of the subsidiaries, is the amount of bonds they have.

Let us assume that the subsidiaries have bonds outstanding as follows: —

Bonds of subsidiaries

Corporation A, 5 per cent bonds.....	$1,000,000
Corporation B, 5 per cent bonds.....	1,000,000
Corporation C, 5 per cent bonds.....	1,000,000

For our purpose here we do not need to set out the entire income account of each of these

[1] Since corporation statutes regularly require directors to be stockholders in the corporations in which they are directors, in actual practice a few shares would appear in the names of the directors. These are called "directors' qualifying shares." Even of these shares the directors may have the mere legal title. The holding company may have paid for them and have the entire equitable interest. For every practical purpose we may speak of the holding company as owning all the stock of the subsidiaries.

corporations. So, without presenting this, we will show simply the totals of the several items of the income account for all three, — that is, a consolidated income account. Let us assume, then, that the consolidated income account of these three subsidiaries makes this showing: —

Consolidated income account of subsidiaries

Gross earnings	$500,000
Operating expense	250,000
Net earnings	250,000
Interest	150,000
Surplus available for dividends	100,000

To simplify the problem we can further assume that the management of the enterprise carried out by the holding company and these three subsidiaries has not adopted a policy of building up a surplus. Accordingly, let us have all this surplus available for dividends declared as dividends out of the treasury of the subsidiaries. The holding company, then, receives this $100,000 into its treasury. We can neglect the expenses of the holding company, which, since it does not conduct any operations, would be merely nominal, a matter of keeping a not very extensive set of books, and assume that this entire $100,000 becomes net earnings of the holding company. Looking back to the statement of net earnings of the holding company one will see that we have assumed this as the situation.

Suppose now that a period of business depression sets in and causes a decline of 10 per cent in gross earnings. Assume, too, that the management cannot keep maintenance up and at the same time effect a reduction in the cost of operating. This might very well be essentially the case. Since we will make the same assumption in the set of figures we will adopt for comparison to bring out the situation, it does not, anyway, affect the soundness of our argument. On this decline of 10 per cent in gross we have, therefore, this showing for the consolidated income account of the subsidiaries: —

Income account after gross has declined ten per cent

Gross income	$450,000
Operating expense	250,000
Net income	200,000
Interest	150,000
Surplus available for dividends	50,000

Owing to the inflexible nature of the interest charge a decline of 10 per cent in gross earnings has cut the surplus available for dividends in two. Then with respect to the holding company we have this showing: —

Net earnings of Holding Company D	$50,000
Interest charge of Company D	50,000

A decline of 10 per cent in the gross earnings of the subsidiaries has entirely wiped out the margin of safety for the bonds of the hold-

ing company, which, before the period of business depression, had earnings available for interest of twice the amount required.

Compare this situation with what the situation would be if D were an operating company able to show net earnings of twice the interest charge, with all the conditions of operating the same as for the subsidiary operating companies just set forth. We will assume then that an operating company shows net earnings of $100,000. Working under the same conditions with an operating ratio of 50 per cent, the cost of operating then would be $100,000, and we have as an income account for our Corporation D as an operating company: —

Income account of Corporation D as an operating company

Gross earnings	$200,000
Operating expense	100,000
Net earnings	100,000
Interest	50,000

That is, we have just the same relationship between net earnings and interest charge as before when our Corporation D was a holding company. Earnings available for interest are twice the amount required for that purpose. Now, let us again assume a decline of 10 per cent in gross earnings during a period of business depression, and we find our income account of corporation D as an operating company makes the following showing: —

Income account of Corporation D as an operating company after gross has declined ten per cent

Gross earnings	$180,000
Operating expense	100,000
Net earnings	80,000
Interest charge	50,000

When D was a holding company we found that, under the conditions stated as to the subsidiaries, a decline of 10 per cent in gross earnings of the subsidiaries reduced the earnings of D available for interest from twice the amount required right down to an amount leaving not a dollar in excess of the interest charge. With D as an operating company making earnings available for interest of twice the amount required, then suffering a decline of 10 per cent in gross, we have a margin of safety of earnings available for interest of 60 per cent in excess of the amount required. We have kept the same conditions in the cases compared. In both cases we assumed that the corporation would not be able to reduce operating at all on the decline of gross. The results would not have been different essentially if we had made some reduction in the operating cost in both cases. Our only reason for not doing so has been to keep the problem as simple as possible.

This discussion has traced through the argument to show the difference there may be between the earnings of a holding company

and those of an operating company due to possible existing fixed charges of the subsidiaries in the case of the holding company. We will go on with the discussion to show the possibility, unless guarded against, of increasing the fixed charges of the subsidiaries, and the effect of such an increase on the safety of the bonds of the holding company.

Let us assume an existing situation of the holding company as before: —

Capitalization holding Corporation D

Bonds 5 per cent	$1,000,000
Stock	1,000,000

Debt of subsidiaries

Corporation A has	$1,000,000 5 per cent bonds
Corporation B has	1,000,000 5 per cent bonds
Corporation C has	1,000,000 5 per cent bonds

For the purposes of this discussion we must make an assumption as to the actual total investment in the enterprise as a whole carried on by these three operating companies and the holding company. Let us assume, then, that the enterprise represents a total capital investment of $4,000,000. If distributed equally among the operating companies this would give an equity in each of $333,333.33 above the par of the bond issue. Then assuming a gross income of the subsidiaries of $500,000, and the same operating conditions as before, we have: —

Consolidated income of subsidiaries

Gross earnings	$500,000
Operating expenses	250,000
Net earnings	250,000

With net earnings, then, of $250,000 on a commitment of $4,000,000 of capital to the enterprise, it appears that the business earns 6.25 per cent on the actual investment. Now, let us assume that for some reason the management of the enterprise wishes to extend the plant, and has Corporations A and B each issue an additional $1,000,000 of bonds, which are disposed of at 80, and use the proceeds in plant extension. This makes an additional investment in plant of $1,600,000. We will assume that the business earns the same rate of return on this additional investment as on the capital originally committed, or 6.25 per cent. Then net increases by just $100,000. Let the operating ratio remain at 50 per cent. Since net was $250,000 before, it is now $350,000. With an operating ratio of 50 per cent, the operating expenses will, of course, be $350,000, and the gross $700,000. Stating this in tabulated form and we have:

New income account

Gross earnings	$700,000
Operating expense	350,000
Net earnings	350,000
Interest charge (increased on account of the $2,000,000 new bonds)	250,000
Surplus available for dividends	100,000

On the showing we have made we have increased the debt of the subsidiaries, but have not caused any increase in the earnings of the holding company. Now, assume that gross earnings decline 10 per cent and we have this showing (assume that the operating cost is not reduced): —

New income account on decline of ten per cent in gross

Gross earnings	$630,000
Operating expense	350,000
Net earnings	280,000
Interest	250,000
Surplus available for dividends	30,000

That is, we have available for dividends on the consolidated earnings of the subsidiaries, or as the net income of our holding company, the sum of $30,000. But the holding company has an interest charge of $50,000. Before the increase in the debt of the subsidiaries a decline of 10 per cent in gross reduced the earnings of the holding company available for interest from twice the amount required for that purpose down to an amount which left no surplus. Since the increase in the debt a corresponding reduction in gross of the subsidiaries would reduce the earnings of the holding company available for interest down to only 60 per cent of the sum required.

Of course this possibility of increasing the debt of the subsidiaries can be guarded

against, and the investor who is not willing to take this chance should be sure that it is guarded against. To safeguard the situation the stock of the subsidiaries should be deposited as collateral security for the bonds of the holding company. Though the directors of the holding company should be left free to vote the stock except in the event of default, the trust deed under which the stock is deposited should contain a covenant that the subsidiaries shall not incur any additional debt. The entire discussion in this chapter has obviously assumed that the bonds of the subsidiaries are outstanding in the hands of investors, and therefore exist as a claim against the earnings of the subsidiaries which must be satisfied before the holding company can get any revenue from the earnings.

Examples presented to illustrate the principles involved have been those of a corporation which is entirely a holding company; that is, one not doing any operating directly at all. Such examples were chosen for the sake of simplicity. If a corporation is partly an operating company and partly a holding company, the same situations may arise with respect to that part of the earnings which are derived as a result of the operations of the subsidiaries. And if the corporation which is offering securities for sale does not own all of

the stock of another corporation, but only a majority, or an amount sufficient to control, or even any amount of stock less than that, the same principles apply so far as the earnings derived as a result of the ownership of that stock are concerned. If the corporation owns less than a controlling interest in the stock of another corporation, one considering the securities of the holding company will ordinarily regard the stock owned as simply in the nature of an investment, and place a value on it as such.

In the chapter in the first volume on "Financing an Expansion" we discussed the creation of subsidiaries as a device to enable the giving of a first mortgage or other direct lien on specific assets when the existence of a blanket mortgage created by the existing corporation would prevent the creation of any claim ahead of or equal to it if the corporation should own the specific assets directly. The relationship of a holding company and a subsidiary may arise when one corporation desires to have an interest in another, but cannot advantageously buy all of the stock, or a sufficient amount to effect a merger. Or, if it can buy all of the stock, legal reasons — as the necessity of a public service corporation operating in a given State having a charter from that State — may make it necessary

or expedient to maintain separate corporations.

Legal reasons for the desirability of maintaining separate corporate entities, the advantage of financing with the large issues of the securities of a holding company rather than with the relatively small issues of the directly operating units, and the better organization possible if the directly operating units are bound together by a holding company, make very real advantages which have fostered the growth of holding companies especially in the public service field. Our discussion has several times indicated the advantage of the large issue in the possibility of making the security known and creating an active market. This chapter has simply pointed out the need for full information.

CHAPTER VII

ORIGIN OF THE COMPLEXITY OF LIENS

In the case of railway bonds the reader of financial advertisements and circulars, who is not entirely familiar with the processes of corporation financing, may not readily understand how it comes about that a bond may be secured by a first mortgage on part of a railroad system and have a second mortgage or other junior lien on other parts of the system. Though the chapter in the first volume on "Financing an Expansion" contains the clue to the situation, it seems desirable to extend the explanation by presenting a concrete illustration of the building up of an assumed simple railway system showing the result in diversified liens.

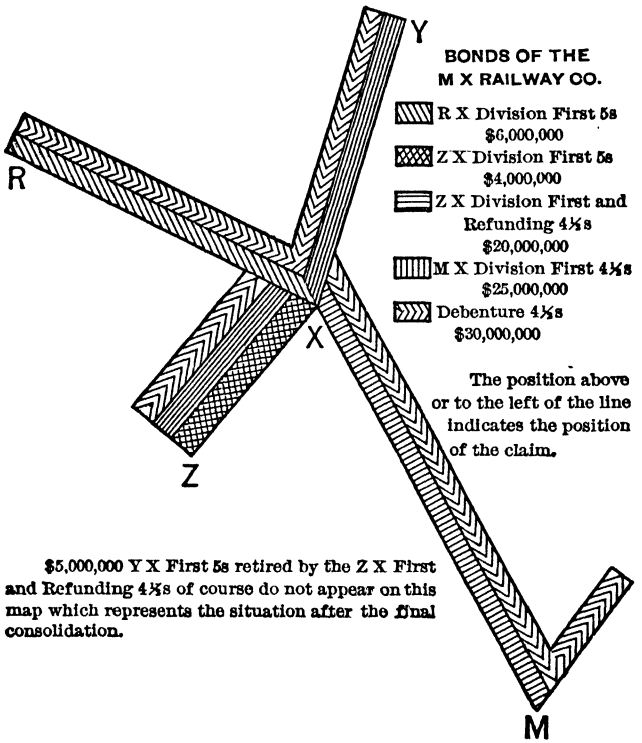
Let us assume that at about the same time one group of men formed a corporation to build a line of railroad from X to Y, and another group of men formed another corporation to build a line from X to R. One corporation, the X. Y. Railroad Company, financed its construction by an issue of $5,000,000 X. Y. 20 year first mortgage 5's and $7,500,000 of common stock, and the other corporation, the X. R. Railroad Company

similarly financed its construction by issuing $6,000,000 X. R. first mortgage 5's and $6,000,000 of common stock. Our earlier railroad mileage was built in just that way by different groups, in what would now seem small sections. No group had developed financial power enough to build or own a line from the Atlantic to Chicago.

The group in control of the X. Y. Railroad Company, we will suppose, now sees the desirability of having a line from X. to Z. The mortgage securing the X. Y. first mortgage 5's is a blanket mortgage, and the group in control of X. Y. wants to be able to offer a first mortgage on the new mileage in order to finance it. So they incorporate the X. Z. Railroad Company and have the new corporation proceed to authorize $4,000,000 X. Z. first mortgage 5's. The X. Y. Railroad Company owns all the $5,000,000 of stock of the X. Z. Railroad Company.

Since the lien of the X. Z. first mortgage 5's has attached to the property, the management of the X. Y. Railroad Company, as soon as the construction of the X. Z. is completed, vote the stock of the X. Z. Railroad Company for a physical merger of the X. Z. property to make it an integral and directly owned part of the X. Y. property. The X. Y. Railroad Company is now taking all the assets of the

X. Z. corporation and dissolving the corporation; it will, therefore, assume the bonds of the X. Z. corporation, — that is, become the



general obligor on and place its general credit back of the X. Z. first mortgage 5's, which, of course, continue to have their first mortgage lien on the line of railroad running from X. to Z. The X. Z. first mortgage 5's then

become the X. Y. Railroad Company X. Z. Division first mortgage 5's. Since the mortgage securing the X. Y. Railroad Company first mortgage 5's is a blanket mortgage, stipulating that the lien of the mortgage shall extend to all future acquired property of the X. Y. corporation, now that the X. Y. Railroad Company has acquired the property of the X. Z. Railroad Company, the lien of the X. Y. first mortgage 5's will extend over the X. Z. line. The X. Y. Railroad Company, however, has acquired the X. Z. line subject to the existing first mortgage, and therefore has bought, to speak in legal terms, the equity of redemption in the property. So the lien of the X. Y. first mortgage 5's is a mortgage on this equity of redemption, or, as we say, a second mortgage on that part of the property of the X. Y. Railroad Company which forms the X. Z. Division.

While all this has been going on, let us assume that another group of promoters in the city of M. has been projecting and building a line of railroad from M. to X. This is a much larger undertaking than any of those we have been considering. Its projectors capitalize the M. X. Railroad Company at $25,000,000 first mortgage 4½'s, $15,000,000 6 per cent preferred stock and $25,000,000 of common stock. The M. X. Railroad Com-

pany proves a profitable enterprise and increases in financial strength.

Meantime the X. Y. Railroad Company has prospered and its management has seen certain advantages that would result if it could add the X. R. Railroad Company to its property. It buys up quietly a good deal of the stock of the X. R. Railroad Company and makes an offer to the remaining stockholders which results in its acquiring enough of the stock to control the situation. Let us assume that, under the laws of the jurisdiction in which the X. R. Railroad Company is incorporated, a vote of seventy-five per cent of the stock of a corporation is sufficient to authorize a sale of the assets of the corporation. Of course, the sale must be at such a price as will afford the minority of stockholders a proper compensation. A majority sufficient to vote a sale of the assets must not exercise their power in such a way as to work a fraud on the minority holders. It would not be necessary for the X. Y. Railroad Company actually to acquire three quarters of the stock of the X. R. Railroad Company. If by means of a depository committee, or otherwise, they can count on a three-quarters vote to approve the proposal, they can go ahead. It may be that the management of the X. Y. Railroad Company does not want the stock of the

X. R. Company unless it can get enough to put through the merger. In that event, it will prefer not to begin buying the stock, since it may not be able to acquire enough on sufficiently advantageous terms. It can organize a depository committee of stockholders of the X. R. Railroad Company and agree to pay a stated amount for the X. R. property provided it gets enough assenting stockholders to put through the transaction. Then, if it fails to gain the adhesion of enough of the stockholders of the X. R. Company the depository committee can simply return the certificates to the stockholders, and the X. Y. Railroad Company is not possessed of any stock it does not want.

The management of the X. Y. Railroad Company, then, votes to acquire the X. R. property on certain terms, and the stockholders of the X. R. Railroad Company vote to accept those terms. We will assume that any minority stockholders of the X. R. Railroad Company are nearly enough satisfied with the transaction not to oppose it, and the transfer takes place. In view of the enlarged scope of their activities the management of the X. Y. Railroad Company has the name of the corporation changed to the X.Y. & R. Z. Railroad Company.

How did the old X. Y. Railroad Company

provide the funds to acquire the new X. R. property? Let us assume that at this time the X. Y. first mortgage 20 year 5's were closely approaching maturity. Then the X. Y. Railroad Company authorized a first and refunding mortgage bond issue. It authorized bonds to be issued under this mortgage of $20,000,000. Of this amount the mortgage provides that $5,000,000 are to be issued immediately to provide funds to meet the maturity of the X. Y. first mortgage 5's. The mortgage reserves $4,000,000 to provide for the retirement of the X. Z. Division first mortgage 5's when they mature. It authorized the issuance of the remaining $11,000,000 from time to time to provide funds for new construction or the purchase of additional property or the purchase of the securities of other railroads. Since the X. Y. Railroad Company has now had a long record of good earnings it can borrow money on more advantageous terms than it could while in the process of construction. We will assume that it makes these new bonds 4½'s and has them run for a term of fifty years. It carries out the refunding operation and retires the $5,000,000 first mortgage 5's. The X. Y. Railroad Company then buys stock of the X. R. Railroad Company, from time to time borrows funds at the banks temporarily to make

immediate payments, and, as it acquires the stock, issues additional 4½'s to pay off the bank loans. We will assume, as would ordinarily be the case, that the new 4½'s first and refunding mortgage is a blanket mortgage. Then after the X. Y. Railroad Company had carried out the merger of the X. R. line with its existing properties and had become the X. Y. & R. Z. Railroad Company, these new first and refunding 4½'s have a first mortgage on the line from X. to Y. (the previously existing first mortgage has been retired), a second mortgage on the line from X. to Z., — that is, subject to the X. Z. Division first mortgage 5's, — and a second mortgage on the newly acquired line from X. to Z., — that is, subject to the existing X. Z. first mortgage 5's. Of course the X. Y. & R. Z. Railroad Company assumes payment of the X. Z. first mortgage 5's and they become X. Y. & R. Z. Railroad Company X. Z. Division first mortgage 5's.

Meanwhile, the affairs of the M. X. Railroad Company continue to prosper. Its management becomes impressed with the advantages of bringing the M. X. and the X. Y. & R. Z. together in a single system. Just as the X. Y. had done in the case of the X. R., now the M. X. proceeds to acquire stock of the X. Y. & R. Z. To finance these purchases the M. X.

provides a collateral trust issue, the M. X. Railroad, X. Y. & R. Z. collateral trust 4½'s, of which it authorizes $20,000,000. Let us assume that by means of this issue the M. X. Railroad Company acquires practically all of the stock of the X. Y. & R. Z. So the management of the M. X. creates an extensive railroad system, and for some time operates it in this form. Let us assume that the management comes to see an advantage in unifying the system into the ownership of a single corporation. It must get the consent of its X. Y. & R. Z. collateral 5 per cent bondholders. Their security is the stock, and in effecting a merger the stock will no longer exist. So the management of the M. X. Railroad Company offers these collateral bondholders a new security. To make the problem simple, let us assume that the collateral trust 4½'s have a market value of just par. At the same time the management of the M. X. Railroad Company wants to provide funds for an extension from M. to P. that will cost about $5,000,000.

The management of the M. X. Railroad Company organizes the M. P. corporation, and constructs the line from M. to P. The M. P. corporation authorizes $5,000,000 of first mortgage 5 per cent bonds. The management of the M. X. Railroad Company

then organizes a new corporation, the M. X. Railway Company, with the same amount of stock as the M. X. Railroad Company and proceeds to authorize $30,000,000 of debenture 4½'s and to make terms to have the M. X. Railway Company take over all the properties of the M. X. Railroad Company. Holders of stock in the M. X. Railroad Company are willing to take the stock of the M. X. Railway Company share for share, provided that it owns all the properties which they now own. In the trust deed securing the debentures the railway company agreed not to create any new lien that would come ahead of the debentures, and if it should create any new mortgage at all, that it would secure the debentures equally with any bonds issued under the mortgage. Of the $30,000,000 authorized, $5,000,000 could be issued only on the deposit under the trust deed of the $5,000,000 first mortgage 5's authorized by the M. P. Railroad Company.

Holders of the M. X. Railroad Company X. Y. & R. Z. collateral trust 4½'s are willing to accept these new debentures in place of their collateral trust securities. The new debentures give the same income return. Though the new issue is larger than the old, it is given a stronger position in that no mortgage can be placed ahead of it. This improved position

extends to the line of the M. X. To offset part of the larger amount of debentures there is the additional security of the line of the M. P. on which the debentures have virtually a first mortgage claim through the deposit of the first mortgage security of the M. P. Railroad Company. For the other $5,000,000 additional of the debenture issue the trust deed provides that they may be issued only on evidence to the trustee of additions to the capital account of the railroad for a like amount. So, all things considered, the holders of the collateral bonds are willing to accept the new security in place of the old, and the exchange is made. Of course, on the transfer of the property the new corporation assumed all the outstanding bonds of the old corporation.

(*Note*) The White and Kemble maps show the various liens of bond issues on the railroad systems of the United States.

CHAPTER VIII

REORGANIZATIONS

So far our discussion has considered only those changes in the capitalization of corporations which result from the ordinary conduct of their affairs. We have contemplated the original issuance of securities at the time of organization and such additions as may be made from time to time to supply the funds for increases in the capital account required by an expansion of the business. We have also considered such changes as may result through the redemption of outstanding securities, either for sinking-fund purposes, or to allow their replacement by a larger issue with the same lien, or to absorb a surplus for which the corporation has no other immediate use. We have indicated the change which may result from the issuance of a convertible security through the conversion of part or all of an issue of bonds into stock or through the conversion of part or all of an issue of preferred stock into common stock. All such changes in the capitalization of a corporation come about in the ordinary course of the financial management of the business. We

have still to consider extraordinary changes which may take place in the financial plan of an enterprise.

Such extraordinary changes may come about as a result of insolvency or may take place without insolvency. They may be made to remedy some existing defect in the financial structure or to meet some new and unforeseen requirement of the business. If they are made as a result of insolvency, they may accompany foreclosure proceedings or be accomplished without foreclosure. When they accompany foreclosure we say the corporation has gone through a "reorganization." If the change in the plan of capitalization takes place as a result of insolvency without foreclosure, we may say that the corporation has undergone a "readjustment of the capital account." In the event that it has become desirable to make a rearrangement of the corporation's finances, although it continues as an entirely solvent or, indeed, it may be, an exceptionally prosperous concern, — in that event we will speak of the rearrangement of finances as a "recapitalization."

Let us first take up a matter of reorganization. We will assume a railroad corporation, the X. Y. Railroad Company, capitalized as follows: —

Various issues of divisional bonds aggregating	$10,000,000
First and refunding mortgage 4½ per cent bonds	25,000,000
M. X. Railroad Branch Line collateral trust 5's	5,000,000
General mortgage 5 per cent bonds	20,000,000
Preferred stock, 6 per cent cumulative	10,000,000
Common stock	25,000,000

We will assume that the corporation has committed some default in its obligations to its general mortgage bondholders which entitles them to foreclose on the property under their mortgage. The bankers who financed the corporation may stipulate, and the corporation may agree, that breaches of various agreements on the part of the corporation shall constitute defaults entitling the bondholders to foreclose under their mortgage. Of course, the default regularly leading to foreclosure is a failure to pay either principal or interest when it falls due. The mortgage regularly stipulates that a failure to pay interest shall make the principal due and payable.

We will assume, then, that the management of our corporation foresees that it will not be able to pay the interest falling due on its 5 per cent general mortgage bonds at the next interest period. The earnings of the corporation are sufficient to continue the payment of interest on the first and refunding

4½'s and on the underlying divisional bonds. We have to consider the $5,000,000 of collateral bonds secured by the deposit of all the stock and bonds of a branch line. The earnings of the branch line have fallen to a point where the net is not sufficient to meet the interest charge on account of the collateral bonds secured by the deposit of the branch line securities. So far as the claim of these collateral bonds against the issuing corporation is concerned, they are, of course, a general obligation merely and junior to the general mortgage 5's. The interest date on these bonds is, let us say, a month later than that of the general mortgage 5's, and the failure to pay this interest when it falls due will naturally follow the failure to meet the interest charge of the general mortgage issue.

Directors and officers of the corporation consult with the bankers who have done its financing and they decide to be ready to apply for a receivership. That the receivership should be foreseen and planned for under such guidance is usually in the best interests of all the people who have any concern about the property. Such managers of affairs are best equipped to proceed along a well-defined line of action and to harmonize the conflicting interests. We will refer to them as "the management." If the various inter-

ests should be permitted to proceed at haphazard, they would cause a much greater delay in reaching a settlement and largely increase the total losses. Usually it is desirable that the receiver be appointed by a federal court. It is especially important that the federal court should assume control of the property if it is a line of railroad running through or into more than one State. For the purpose of getting a federal receivership counsel for the management, looking forward to the anticipated default, will prepare a creditors' bill in which bondholders or other creditors, living in some State other than the State in which the corporation is incorporated will appear as the petitioners for the receivership. The fact that the petitioners are citizens of a different State from that in which the corporation is incorporated gives the necessary diversity of citizenship to enable the federal court to take jurisdiction and appoint a receiver.

If a state court appoints a receiver, the receiver can take only the property in the jurisdiction of the court. The court has no jurisdiction outside of its own State and for property of the corporation in another State another appointment of a receiver will have to be made. Even if no quarrel arises among different sets of creditors and even if the

courts of other States would appoint the same man appointed by the court of first jurisdiction, the delay in the appointment and his responsibility to the several courts would cause expensive and otherwise serious difficulties and delays.

The mere fact of a default in the payment of interest will not in itself give the court a sufficient ground for the appointment. The court must be shown that a receivership is necessary to prevent loss or injury to those financially interested. If there is a default, however, sufficient other grounds can usually be found to justify the appointment.

When the receiver is appointed, the management of the property owned by the corporation is taken out of the hands of the officers of the corporation and vested in the court appointing the receiver. He is simply the officer or agent of the court. On all large matters of policy and on any question outside of the ordinary matters of operation he must go back to the court for authority.

The appointment of a receiver does not change the nature of the legal rights of the security-holders. He acts, however, as an agent of the court exercising its equity jurisdiction. While the property is in the possession of the court acting as a court of equity, legal rights may not be enforced except with

the permission of the court. The principle underlying this suspension of the legal rights of the security-holders is that the prompt enforcement of the legal rights of any one set of security-holders or other creditors might work such an injury to other people who have a financial interest in the property as to amount to an essential injustice. The law says in substance to the defaulted bondholder that the damage he may do another by a prompt enforcement of his right will be so much greater than the damage he will suffer by delay that the real justice of the situation demands that he suffer the delay.

It is the duty of the receiver immediately on his appointment to take possession of all the property covered by the mortgage securing the bondholders, or subject to the satisfaction of the demands of the creditors, who made the application for his appointment. The corporation no longer has any voice in the management of the property. The receiver operates the road with essentially all the powers that the corporation had before his appointment. The directors of the corporation, however, necessarily looked at every question from the viewpoint of the interest of the stockholders. The receiver must pursue such a course as will best conserve the property for the benefit of all people finan-

cially interested. Whenever extraordinary matters come up, or he is in doubt about what course he ought to pursue, he should consult the court.

The receiver may do some things which have an important bearing on the financial position of the business. If any part of the property which comes into his possession consists of leased property and he considers the terms of the lease not advantageous to the business, he may elect to disaffirm the lease: that is, he may discontinue operating the leased property and turn it back to the lessors. He is not obliged to do this at once, but may take possession of the leased property and operate it long enough to learn whether it is profitable or not.

He may find, among other property that has come into his possession, certain cars and locomotives which the corporation had bought under the terms of an equipment trust agreement. Just as in the case of the leased line the receiver may elect to disregard this agreement. He may then turn the equipment back to the equipment bondholders. If the receiver finds the equipment necessary to run the business properly, he may retain it for his use, and he will, in that event, be obliged to pay whatever the use is reasonably worth. The retention of the equipment, though the

receiver may refuse to recognize the terms on which it was bought, is justified on the ground that the railroad is a public service corporation, — that is, a business affected with a special public interest, — and the importance of continuing to render the service to the public overrides other considerations. This general principle pervades the management of a railroad property in the hands of a receiver.

The most usual demand made on the receiver for new financing arises out of the general physical condition of the property. Ordinarily this is seriously depleted by the time it comes into the receiver's possession. The management of a corporation naturally pays interest at the expense of maintenance just as long as it can, until it is confronted with the fact that the cost of conducting operations has increased because of the bad condition of the property. The property may have reached such a state of deterioration that it would be impossible to continue operations, no matter how great the cost, without first spending substantial sums on maintenance. If the receiver is to operate the property, he must raise the funds to meet these necessary expenditures.

This brings up the problem of financing a business in a receivership. Since the business

is in such a condition that it cannot meet its obligations to its existing creditors, obviously no one will advance funds to the business without some special assurance of payment. To meet the situation the law must allow any one who supplies new funds a preferred position. To provide the funds the court authorizes the receiver to issue receiver's certificates, and in its order gives them such priority as it considers necessary. It may, and usually does, give them a lien on the assets and earnings of the business ahead of every other lien on the property except for taxes. The order of the court may, however, place the lien anywhere, and might place it only just ahead of that of the bonds in default. The court also determines the rate of interest the certificates may bear and the price at which they may be sold. If they should fall due before the receivership is terminated, they would ordinarily have to be refunded by another issue of certificates. Those outstanding at the time of the adoption of a plan of reorganization have to be provided for in the plan. Bondholders are entitled to notice of the application for the issuance of receiver's certificates and to appear in court and show that they are not necessary, or that it is not necessary to give them a lien ahead of the bonds.

Let us assume that in the case of the X. Y. Railway Company the general mortgage bondholders make application for the issuance of $500,000 of receiver's certificates to put the property in condition, and that after a hearing the court grants the application and orders that they bear interest at the rate of 6 per cent and fall due in three years. The court authorizes the receiver to sell them at $98\frac{1}{2}$.

In discussing the receivership we have run a little ahead of the story. At the same time that the creditor's bill making the application for the receivership was being prepared the management was also forming a bondholders' protective committee. To do this, they get four or five men whose names are likely to be favorably known to the bondholders to serve on a committee to take care of the interests of the bondholders during the receivership. The committee, it is anticipated, will also follow up the rights of the bondholders through the foreclosure. Presumably they will supervise the work of drawing up the plan of reorganization. It is desirable from the standpoint of the management to have the personnel of this committee all determined and ready to announce as soon as the application for the receivership is made. The prompt announcement of a pro-

tective committee may forestall the appearance of another committee. For the formation of a protective committee is purely a volunteer matter. Any group of men may announce themselves as a protective committee for any of the issues of securities and ask holders of the issue to place their interests in its hands. If the management does not have a committee ready to be announced, other volunteers are sure to appear. Though the management does form a committee which announces itself promptly, it is still possible that other committees will appear. Even in that case the committee arranged by the management gains strength from the very fact of being the first. It stands in the position of being the "official" committee. Later committees must assume the position of being in opposition. Of course the management hopes that if its committee is early in the field these opposition committees will not appear. No security-holder can be compelled to entrust his interests to any committee. But the influence of any committee depends on how large a proportion in holdings of owners of the issue it can win the adherence of. As one device for getting bonds deposited, the committee may offer to pay depositors the interest installment immediately in default and take the deposited bonds as collateral for the

advance. The present cash, the immediate continuance of income, may loom rather large in the eyes of the bondholder, and, seeing no special reason why he should not deposit, it may induce him to act. The mortgage securing the bonds may give to the holders of a majority of the bonds, or to the holders of seventy-five or of eighty-five per cent, certain powers, so that the action of the specified proportion will be binding on the rest. If such provisions are in the mortgage they form part of the contract with all bondholders, and the minority have no legal right to complain if the specified majority exercise the authority the mortgage gives them. If the committee can get the required majority to entrust their affairs to it, then it can take advantage of such powers as the required majority may have. Quite apart from these special provisions the weight of the committee in the proceedings looking toward reorganization will depend upon the number of security-holders it represents. Of course, in saying "number of security-holders" we mean the holders of a given number of bonds; that is, it is the number of securities held rather than the number of people holding them that counts. Besides, there is a wide difference between not representing all the security-holders and having those security-holders who have not chosen

the "official" committee to represent them represented by another committee.

While getting ready with the committee to solicit the support of the holders of the most important defaulting bond issue, the management will at the same time endeavor to have a harmonious personnel on the committees to represent the holders of other issues of securities. There will be a committee for every issue of bonds, debentures, or notes in default, and for each stock issue. Some of the issues which are not in default, and in which defaults are not anticipated, also may have protective committees. This may prove advisable because matters may come before the court in the receivership, particularly the question of placing the lien of receiver's certificates ahead of the lien of bonds not in default, which will affect their interests, and in which they will need to be heard. Of course, the holders of all securities prior to those in default have a lively interest in the processes of the receivership and the reorganization, and may need constant representation to see that their interests are protected. Though the interests of the holders of the various security issues are necessarily divergent, there is a great difference between having protective committees which will work together as harmoniously as their divergent

interests will permit, and having committees which will clash more than their jeopardized interests make inevitable. So it will be part of the problem of the management endeavoring to shape the general course of the reorganization to have as attractive a personnel as possible appear to solicit the representation of holders of the various other issues of securities as well as of the holders of the principal issue in default.

Leaving for the moment the consideration of these various other committees, let us trace through the procedure of the principal committee; that is, the one to represent the holders of the principal issue in default. The bondholders will signify their consent that the committee shall represent them according to the terms of the protective committee's agreement by depositing their bonds with some trust company designated as depository and accepting a depository receipt or certificate for them.

It is important from the viewpoint of those expecting to guide the reorganization that this protective committee's depository agreement should give the committee broad powers. Such broad powers are probably in the interest of the depositing bondholders. To act effectively the committee needs authority to meet emergencies and to choose its

policy from the widest possible field. This depository agreement looks forward to a plan of reorganization. The committee must get the special consent of a depositing bondholder to the plan of reorganization, or permit him to withdraw his bonds so that he will not become a bondholder assenting to the reorganization plan, and the protective committee's depository agreement will provide for such withdrawal. Showing how the protective committee's agreement anticipates the preparation of the plan of reorganization, read the following quotations from one such agreement: —

The committee shall have power, if and whenever it deems such action advisable, to prepare and adopt a plan for the reorganization or readjustment of the railroad company, its affairs and properties, including or excluding, as the committee shall determine, the affairs and properties of any one or more of the railroad company's subsidiary, controlled, affiliated, or allied companies or interests, or may approve and adopt any plan for the reorganization or readjustment thereof, though not prepared by it. Such plan may provide for the reorganization of the company or the adjustment of its affairs either alone or in conjunction with the reorganization of or adjustment of the affairs of any other corporation or corporations which, in the opinion of the committee, it is desirable should be included in such

plan, and for the acquisition of any property deemed desirable for the purposes of such reorganization or readjustment, and may provide for vesting in a single corporation, or in one or more corporations, whether the present railroad company or some other corporation or corporations, all or any of the properties of the railroad company and other properties and for the sale, lease or other disposition of any properties of the railroad company or other properties. Any such plan may recognize and make provision for any or all of the securities, obligations, and indebtedness of the railroad company and of any other corporation or corporations included in said plan, whatever may be their priority of lien, and also for any or all liens upon the properties of the railroad company or of such other corporation or corporations, or upon any other property acquired for the purposes of reorganization, and prescribe the respective terms and conditions on which the holders of each or either of the classes of stock or certificates deposited hereunder, or of others of the securities, obligations, indebtedness or liens aforesaid, may obtain such recognition and participate in the benefits of the plan. Any such plan of reorganization or readjustment may be prepared or approved, and adopted by the committee, either before or after a sale, or a contract for the sale, of the franchises, properties, or assets of the railroad company or any part thereof, or of any subsidiary or allied corporation. Such plan may provide for the sale or exchange of the shares of stock or stock trust certificates deposited hereunder or either class thereof (preferred or

common) or any of them, or for the sale or resale of any property or any part thereof acquired by or on behalf of the committee hereunder, and may contain all such provisions as the committee shall deem advisable for the reorganization of the company or the readjustment of its affairs either alone or in conjunction with the reorganization of any other corporation or corporations, and for raising or obtaining all funds deemed necessary for the purposes of such reorganization or adjustment.

Such plan may constitute managers of the reorganization or readjustment under it and provide for their compensation and expenses and the members of the committee, or any of them or the members of any other committee of the holders of the stocks, bonds, obligations, or liabilities of the railroad company, or representative of such stocks or of the stocks or securities of any other corporation or corporations, may act as such managers or may be members of any committee constituted by said plan.

Such plan may make provision for the payment of the compensation, disbursements and expenses of the committee and of any other committee or committees representing the holders of stock, bonds, obligations or indebtedness of the company or of any other corporation or corporations, or of certificates representative thereof, and may charge with the payment thereof or of any part thereof, as well as of all or any part of the indebtedness, liabilities, and obligations incurred by the committee and any such other committee or committees, the shares of stock, bonds,

obligations, securities and property or any part thereof at any time subject to such plan; and may confer upon the committee or any other committee or committees constituted thereby or provided for therein or upon the managers thereunder, any powers and discretion which the committee, in its uncontrolled discretion, may deem proper and expedient, although not expressed or contemplated in this agreement.

On depositing his bonds with the designated depository trust company the bondholder will be given a certificate of deposit, which will read somewhat as follows: —

Certificate of deposit of five per cent general mortgage bonds of the X. Y. & Z. Railroad Company, under deposit agreement dated May 28, 1916, between Thomas Brown, Henry Robinson, John Jones, Robert Smith, and Richard Ames and the holders of the five per cent general mortgage bonds of the X.Y. & Z. Railroad Company.

The Manhattan Trust Company of New York hereby certifies that it has received from five per cent general mortgage bonds as above stated, subject to the terms and conditions stated in the above-mentioned deposit agreement. The holder hereof assents to and is bound by the provisions of said agreement by receiving this certificate and is entitled to receive all the securities, benefits and advantages to which the depositor of said shares is or may become entitled, pursuant to the provisions of said agreement. The interest

represented by this certificate is assignable, subject to the terms and conditions of said agreement, by transfer upon the books kept by this company for that purpose by the holder hereof in person or by attorney, upon the surrender of this certificate duly indorsed for transfer.

NEW YORK, , 1916.

The Manhattan Trust Company of New York

By.....

Vice-President.

.....

Assistant-Treasurer.

Registered

The Financial Trust Company, Registrar,

By.....

Assistant-Secretary.

For value received hereby sell, assign and transfer unto the within certificate and all rights and interests represented hereby, and do hereby irrevocably constitute and appoint attorney, to transfer the same on the books of the said trust company, with full power of substitution in the premises.

Dated , 1916.

.....(L. S.)

In Presence of

.....

Though the form given shows a registered certificate transferable only by change of registration, such receipts may be issued to

run to "bearer." The registered form is usual, however, and an endorsement of the power of attorney in blank makes it sufficiently negotiable.

Of course, the purpose of issuing these certificates, besides their immediate service as a receipt, is to supply the bondholder with something he can sell. If the issue now in default had a market when it was not in default, the course of dealings will continue after the default at prices representing the condition and prospects of the security. Dealings will take place in the deposit certificates just the same as in the security itself. Note the statement in the protective committee announcement shown a little later that: "Application will be promptly made for listing the certificates of deposit on the New York Stock Exchange. In fact a course of dealings will go on side by side in the deposit certificates and in the undeposited securities, and a slight difference in the quotations may arise depending on an opinion as whether it is more advantageous to have deposited or not to have deposited.

Though the bondholder who does not at once deposit his bonds may be taking a position which somewhat resembles that of the dog in the manger, he is nevertheless making a fairly good speculation in not depositing

quickly. Every protective committee necessarily involves some expenditures which the depositing bondholder will have to bear in the proportion that the number of bonds he deposits bears to the total number of bonds deposited. The members of the protective committee are entitled to some compensation for their services. The depository agreement should specifically provide for the amount of this compensation, or the means of determining what the compensation should be. Probably they will have counsel fees to pay. There will be incidental expenses of printing, clerical assistance, postage, the fee of the trust company for acting as depository, etc. The various expenses may run to a considerable total. Though the amount apportionable to each bond deposited will not be great, it will nevertheless amount to something, perhaps from one half to one and a half per cent. If the committee is not able to bring about a reorganization and dissolves without accomplishing anything substantial, those who have deposited will have to bear this expense and will be no better off than those who did not deposit. Usually the desire of the committee to get as many bonds deposited as possible leads to its allowing a considerable period at the very start within which to deposit, and from time to time to announcing

an extension of the original time for deposit. So the bondholder who does not deposit at once is likely to have the opportunity open to him for a considerable period, and as time elapses he may be able to see more clearly whether it is desirable for him to deposit or not.

On the other hand, if a sufficient number of bondholders adopt this Fabian policy, they may so delay the process of reorganization as to cause loss to all bondholders, including, of course, themselves. So if the committee which solicits the deposit of his bonds is satisfactory, he may regard it, not only as a duty of loyalty, but his best financial policy, to deposit his bonds, and by so doing add all the strength he can to the committee, and by giving it strength lead to the coming in of the Fabian ones.

The following announcement of a protective committee will illustrate some of the statements made: —

To holders of Missouri, Kansas & Texas Railway Company 100-year second mortgage 4 per cent gold bonds, due June 1, 1990, interest payable February and August 1st —

The interest due and payable February 1, 1916, on the above described bonds has not been paid.

At request of the undersigned committee, formed for the protection of these bonds, the trus-

tee under the mortgage has intervened in the foreclosure proceeding now pending, and has filed its petition asking the court to order payment of interest on the bonds.

It is essential that holders should immediately deposit their bonds, with all unpaid coupons attached, with the Union Trust Company of New York, Depository. The committee will continue to receive deposits of bonds until the close of business on June 15, 1916, and, thereafter, only upon such conditions as the committee may determine.

The depository will issue certificates of deposit therefor under a deposit agreement dated December 23, 1915, copies of which may be obtained from the depository.

The deposit agreement provides an opportunity for any depositing bondholder to withdraw, in case any plan of reorganization formulated is not approved, on payment of a proportional share of expenditures and obligations of the committee, which share is limited to the amount, or rate, of $10 for each $1000 face value of bonds deposited.

Application will be promptly made for listing the certificates of deposit on the New York Stock Exchange.

New York, June 2, 1916.

G. K. B. WADE, *Secretary*,
80 Broadway, New York.
SPOONER & COTTON,
Counsel.
UNION TRUST COMPANY OF N.Y.,
Depository,
80 Broadway, New York City.

EDWIN G. MERRILL,
Chairman,
LEWIS L. CLARKE,
P. J. GOODHART,
W. J. MATHESON,
D. E. POMEROY,
Committee.

Note the statement of the limitation of expenses. This encourages depositing by letting the depositor know the limit of his liability.

If the bonds in default are a large issue, part of which has been sold abroad, banks at the financial centers of the countries in which the bonds are largely held will be appointed depositories for the foreign bondholders. Foreign bondholders may organize a protective committee of their own which may decide to coöperate with the American committee, or may oppose it in some or all of its proposals. In the designation of depositories the committee aims to make it as easy as possible for the bondholders to deposit and to present them with institutions sufficiently well known to them to have their confidence.

What has been said of the committee of the holders of the principal defaulting issue applies generally to the various protective committees of the other issues. Each committee desires to have deposited under its agreement as large a proportion as it can possibly get of the issue it seeks to represent. Just as the diversity of interest of bond issues of different securities makes it necessary to have separate trustees for the several issues, so the diversity of interest, when the business is looking toward a reorganization,

makes it desirable to have different depositories for at least the more important issues. Of course, the situation is not at all the same in the case of the protective committee depository as with the trustee. The trustees of different issues may actually have to take action in opposition to each other. The depository under a bondholders' agreement is filling a purely administrative function. Discretionary action lies with the committee itself. Still it looks better, and is better, to have different depositories.

Immediately on the default, and simultaneously with the filing of the bill applying for the appointment of a receiver, the protective committee organized for the principal defaulting issue will give notice of its formation by extensive advertising, in which it will solicit the holders of bonds of the issue to make the committee their representative by depositing bonds under the protective agreement prepared. The extent to which this agreement grants specific powers to the committee makes it run into a considerable document. Regularly it is printed as a pamphlet, and the bondholder may, if he wishes, procure a copy from the depository trust company. Its provisions will be drawn so that the committee can count upon the bonds during the life of the agreement, or until the reorgani-

zation plan is announced. Arranging for a reorganization is a tedious process and is likely to extend over several years. So it is desirable to make the life of the committee run for five years before it expires by limitation of time.

Meantime, after the bill for the appointment of the receiver has been prepared, and the protective committee agreement drafted, counsel for the management trying to steer a safe course through reorganization will be preparing the foreclosure suit, which they will begin as soon as possible after the appointment of the receiver. It will be their aim so far as possible to avoid the delays and complications of intervening parties. We have assumed that the holders of a majority of the bonds of the issue have deposited their bonds with the depository of the "official" committee. If the minority bondholders, or any part of them, have organized under a separate committee, counsel for the majority committee bringing the foreclosure suit may welcome the intervention of the minority committee in the foreclosure action in order that it may appear conclusively that the minority holders have had their hearing.

The mortgage regularly gives the trustee the right to other remedies besides foreclosure. It provides that the trustee, in the

event of a default by the corporation, may take possession of the mortgaged premises and operate the road and otherwise manage the business until the money due under the mortgage is either paid or provided for. When the trustee has taken possession under this provision, the trustee may, under the regular provisions of the corporate mortgage, also sell the property to satisfy the claims of the bondholders. The mortgage further authorizes the trustee, without first taking possession of the property, to sell it at public sale.

As a matter of fact these special remedies stipulated for in the mortgage are not taken advantage of. They raise perhaps too many questions of the rights of other parties. Yet the lawyer drawing the mortgage would not think of leaving them out. They are additional rights and protection, and a situation might conceivably arise when they would prove useful. But the path to settlement by way of the receivership and foreclosure is too well worn and relatively easy to travel to be departed from unless very exceptional circumstances should arise.

One of the first steps looking toward a foreclosure of the mortgage, after the action is brought, is to have an examination and appraisal of the property. This looks toward determining its real condition and value, and

when done will be helpful, especially in determining what shall be the minimum price at which it may be sold under foreclosure. Such minimum price is called the "upset price," and means that at the foreclosure sale no bid below the upset price will be received. In the case of a large railroad property this examination is bound to take a year or two. Engineers will have to go over the entire mileage and report on the physical condition of the property. Expert accountants will go over the books and make an auditor's report. A reorganization of a large railroad involves a great deal of real work. This discussion will probably give the uninitiated some idea of the reason why it usually takes several years, even with no especially unfavorable developments, to complete the process.

It is the duty of the trustee under the mortgage to bring the foreclosure suit. The bondholders bring the action directly only in case of the neglect or refusal of the trustee to act. The trustee is the mortgagee and the proper party to appear. The mortgage contains elaborate provisions for guidance in the event of foreclosure. Some of these are concerned with the protection of the trustee and are inserted in the mortgage at the trustee's instance. The trustee cannot be compelled to bring the action unless first given an indem-

nity against any liabilities it may incur in the course of the proceedings. Of course, the trustee has no real financial interest in the proceedings, and those who are attempting to guide the business through to reorganization will probably supply most of the energy necessary to push the matter along. They will find it desirable to push it as rapidly as possible, because the longer the matter is delayed the greater opportunity is given for hostile forces to arise.

With the foreclosure suit entered and the appraisal under way, those who are in charge of the movement toward reorganization will begin to work on the reorganization plan. All the work of reorganization looks forward, of course, to the formation of a new corporation, under such conditions and with such a plan of capitalization as will enable it to operate the railroad or continue the enterprise and meet its obligations. We will consider later the financial considerations of the new financial plan and its aim of reducing fixed charges to a point where the business can meet them.

Obviously a large railroad system cannot be bought offhand like a piece of second-hand furniture at an auction sale. The magnitude of the transaction requires that it be carefully prepared for. Even though the property is sold at public sale, as a matter of course

there is only one bidder, the group which has been in charge of the reorganization proceedings all along, and has carefully prepared its plan and arranged for the necessary financial backing. It is the magnitude of the enterprise that requires the holders of the defaulted securities to provide for carrying on the business in order that they may realize something on their investment. If the bondholders saw a chance of various outside interests coming forward and bidding for the property in such a way that it would realize approximately its actual value, then they would be very glad to let somebody else buy it, and they would take their share of the proceeds. But the only way they can actually realize the fair value of the property is to take the property itself for themselves. The foreclosure proceedings are gone through with to fix definitely the rights of all the parties in interest and to permit the business to go ahead on a well-defined basis. Because those who have been in charge of the proceedings have a well-organized plan and financial backing arranged, they are prepared to purchase the property at the foreclosure sale.

The statutes of some States expressly provide that the purchasers of a railroad property at a foreclosure sale do not need formally to incorporate. Such States incorporate the

business through the operation of the law by reason of the fact itself of the purchase under foreclosure. In the absence of such a statute, if the new corporation is not already formed by the time of the foreclosure, those in charge of the reorganization can effect the purchase and hold and operate the property as individuals until the new corporation is formed and ready to take over the property.

A railroad corporation involves two distinct franchises, the franchise to operate the railroad and the franchise to be a corporation. It is not necessary to be a corporation in order to enjoy a franchise to operate, and the fact of being a corporation does not in itself give the right to operate. Sometimes the franchise to operate is expressly mortgaged and passes to the purchaser at the foreclosure sale. Though many States forbid the corporation to mortgage its franchise to operate, nevertheless on a foreclosure sale this franchise passes to the purchaser. Many technical legal considerations revolve about this point, and we will not discuss it further here, but assume that the franchise to operate effectively passes under the foreclosure.

The next matters in the process of reorganization center about the reorganization agreement. These matters may be summarized as: —

The financial plan.
The reorganization agreement.
The filing of the reorganization agreement with the depositories and advertising the filing.
Giving depositors an opportunity to withdraw.
Declaring the plan operative (or inoperative).

We have already mentioned the idea of the financial plan of cutting down fixed charges and providing the cash necessary to put through the reorganization. The big work of the reorganization comes in arranging a financial plan that will accomplish these results and at the same time be acceptable to a sufficient number of the parties in interest to enable it to be put through. We will reserve for the present a discussion of the principles and difficulties involved in drawing up this plan and assume that the reorganization committee has done the best it can. For at this point the various protective committees agree on a new committee which will go ahead and directly plan the details of the reorganization. Though it will, of course, represent principally the interests of the protective committee for the issue most concerned, its duty will be to formulate a plan which will, if possible, win the adherence of the other protective committees.

The reorganization agreement provides for the consent of the various parties in interest that the reorganization may be carried

through under the financial plan proposed. Note that this is the second agreement which the security-holder is asked to make. The first, the depository agreement, under which he was asked to deposit his securities with some trust company and constitute the protective committee his agents for taking steps toward a reorganization, we have already discussed. The reorganization agreement names the managers whom the reorganization committee has decided upon. They are likely to be one or more of the banking houses which have in the past handled the financing of the corporation, and which are therefore interested in having the reorganization as successful as possible. The reorganization plan itself needs to win the adherence of the various protective committees, and the managers under it must be such as to meet with the approval of these committees.

Recall that each protective committee, in soliciting the adherence of the holders of securities of the issue for which they sought to act, designated some trust company or bank with which the holder was asked to deposit his security. Copies of the financial plan and agreement will be filed with each of these depositories. The fact of the filing will be advertised in the city of each depository bank or trust company. It is also customary

for a committee to advertise in any cities in which the securities have been sold to any large amount and if any considerable amount of the securities has been sold abroad, a committee will advertise there also. Since the certificates of deposit the security-holders have received are negotiable, in the sense that the rights under them may be made to pass by delivery, the protective committee does not know just what individuals may constitute the parties in interest at the particular moment. So this advertising is necessary to give notice of the situation. The reorganization agreement will provide that security-holders who have deposited their securities under the provisions of the protective committee's agreement may withdraw their securities within a stated time, say twenty days, and that if they do not withdraw they will be presumed to have assented to the terms of the reorganization agreement. If they withdraw, they must, of course, surrender the certificates of deposit they received when they deposited their securities under the protective committee agreement. If they do not withdraw, these same certificates will continue to represent their interest in the reorganization agreement. At this time another opportunity will be given to security-holders who have not already deposited their securities to come in

and deposit. When they do so they will receive a certificate of deposit just like that of those who have already deposited. Naturally any one depositing his securities at this late date will be required to assume as large a proportion of the expense of the protective committee as if he had deposited at the very beginning. In fact, the protective committee's depository agreement probably limited the time within which the security-holder could deposit, but left it in the discretion of the committee to extend this time. It is so desirable that the committee control as many bonds as possible that this time limit is likely to be extended and perhaps extended again several times before finally further opportunity is given to deposit after the filing of the reorganization agreement. The original depository agreement may have provided that if a holder did not deposit within the time limited he could subsequently deposit only on the payment of a penalty. The penalty would be fixed at perhaps one per cent, or $10 a bond. The protective committee will adopt whatever policy as to depositing it thinks likely to give it most strength. But, of course, it would be unfair to the earlier depositors if people who came in subsequently were not obliged to bear their full proportionate share of the expenses. Filing the reorganization

plan and agreement marks one of the critical times in the process of a reorganization. How many of the deposited bonds will be withdrawn? How many bondholders who have stayed out heretofore will come in and deposit now that they know definitely the terms of reorganization? When the shift is over, will the result justify declaring the plan operative?

Another situation now needs further explanation. We have mentioned the appraisal of the property as helping the court to fix the proper upset price for the foreclosure sale. This is one of the delicate and critical matters of the procedure. Some of the bondholders will refuse to become parties to the reorganization agreement. Their refusal to enter into this agreement cannot, however, deprive them of their rights as bondholders. The property must be sold at a definite price. The bondholders who become parties to the agreement undertake to accept new securities, under such conditions as the agreement indicates, in settlement of their rights under the foreclosure which they have entrusted to their protective committee. Let us assume that a sufficient number of bondholders join in the reorganization plan to make the managers feel justified in declaring it operative. At the time of the foreclosure sale the managers will have to be prepared to bid for the

property, and the upset price will indicate the lowest price which will be accepted as a bid. Each bondholder is entitled, so far as the foreclosure proceedings are concerned, to his proportionate share of the price established at the sale of the property as the selling price. Those who have joined in the reorganization agreement, however, have cast their lot with the property or business itself, and to that end have given the reorganization managers the disposition of their interest in the proceeds of the foreclosure. Since this is the regular and normal thing, the procedure will provide for cutting out some of the motions that simply counteract each other. Let us assume, as ordinarily the case would be, that a property is being sold at the foreclosure subject to the underlying mortgages. We will also assume that the court has named $16,500,000 as the upset price, and that of this amount it will take $1,500,000 to provide for obligations of the receiver and other obligations which the court requires to be taken care of. This will leave $15,000,000 as that part of the proceeds which would be available to satisfy the general mortgage bondholders. We will assume that the mortgage secures an issue of $20,000,000. That is to say, at the price named the general mortgage bondholders are entitled to seventy-five cents on the dollar of the par value

of their bonds. If this entire amount of $16,500,000 were to be paid in cash at the foreclosure sale, it would mean that every general mortgage bondholder would get for each $1000 bond $750 in cash. Then those bondholders who want to stay by the property and have come in under the reorganization agreement would simply pay back the cash for the next securities provided for by the reorganization agreement. If the business were ever put through in this way, it would mean probably that the reorganization managers had borrowed a large porportion of the amount required to be paid at the sale, and would repay the loan when they were paid back by the bondholders who had agreed to the reorganization plan. To require the reorganization managers, when purchasing the property under the foreclosure, to pay the full purchase price in cash, most of which they would have to borrow until the very money they paid was paid back to them on presenting the bonds which had been deposited with them, would greatly embarrass the process of reorganization. So, when the managers make their bid at the foreclosure sale and have the property awarded to them, they are permitted to make payment in part with the bonds which have been deposited under the reorganization agreement. That is to say, since

every bondholder would have received seventy-five cents on the dollar, if the foreclosure price were paid in cash, then the purchasers at the sale will be permitted to make payment in bonds which will be received in payment at the rate of seventy-five cents on the dollar.

Let us assume that 95 per cent of the bondholders deposited under the reorganization plan. Then the reorganization managers have $19,000,000 of bonds they can pay in as part payment of the purchase price. That is equivalent to a payment of $14,250,000 and leaves $2,250,000 of cash to be provided.

Since it is not within the bounds of probability that any holder will appear at the foreclosure sale other than the reorganization managers, the upset price which, within every reasonable expectation, will become the purchase price, assumes a large importance in the reorganization process. The court must be careful to fix it high enough to give the depositing bondholders everything they are justly entitled to get out of the property. Exactly what they are justly entitled to get may be very difficult to determine. No matter how active a market there may be for railroad securities, there is not an active market for whole railroads. However, the appraisal of the general investing public —

that is, the market values of the securities — is shown by such dealings as there may be in them. The present earnings and condition of the property will be helpful in arriving at some conclusion about what may be fair terms for the minority non-depositing bondholders.

Since the majority is essentially buying out the minority interest, the value of which is being fixed on the basis of the value of the entire property, the majority, represented by the reorganization managers, want that value for present purposes estimated as low as possible. If they have to pay the minority holders too great an amount for their interest, the purchase of the property will not be a desirable one. The price may be absolutely too great, — that is, more than the interest is really worth, — or it may simply involve the payment of more cash than the managers can provide the means of raising.

Assuming that the reorganization managers do not regard the price as too high, how will they provide whatever cash may be necessary? This question brings us to another aspect of the reorganization. The plan of reorganization shows the means the managers have provided for raising the cash. But they must have some assurance that these means will prove sufficient. So the bankers interested

in the reorganization will enter into an agreement with the reorganization managers underwriting the cash requirements; that is, guaranteeing the sufficiency of the means provided in the financial plan of the reorganization. The bankers, in turn, to protect their position will form an underwriting syndicate. This banking transaction does not differ in any essential respect from the assumption and shifting of risk involved in any purchase or underwriting of securities and the formation of a syndicate as described in an earlier discussion. Whatever the precise form for raising cash which the plan of reorganization may set out, it will amount essentially to selling some of the new securities provided for in the new plan of capitalization.

The means which a reorganization plan may provide for meeting the cash requirements of the reorganization are ordinarily thought of as two: (1) an assessment of the stockholders of the old corporation; (2) the selling for cash of some of the bonds or other securities arranged for in the reorganization plan. Though thought of and spoken of as separate means, both come really to the same thing, a selling of some of the securities of the new corporation for cash. The first means is usually stated somewhat in this way: On the payment of $20 for each share of the stock of

the old corporation against which the foreclosure proceedings are being taken, the stockholders of the old corporation will be given a share of stock in the new corporation on purchasing a par value of a certain issue of bonds of the new corporation at a certain price. The manner in which this is put sometimes has the superficial appearance of "taking care of" the stockholders of the old corporation and recognizing that they have still an equity in the property. In most cases the appearance of preserving an equity will vanish on closer examination, and it will be seen that the amount of what is called an assessment on the old stock is based upon the anticipated value of the stock of the new corporation, or the combined assessment and price to be paid for the new securities amounts to the estimated value of the new securities to be received. In a word, the so-called "assessment" is really a purchase of the new securities.

No holder of the old stock can be obliged to pay the assessment and purchase the new securities. When he bought his stock it was fully paid-up stock, and the liability of the purchaser was absolutely limited to what he had already put into it. Of course, there is nothing to prevent him from entering into special agreements over the stock that will

create new liabilities, but these new liabilities do not and cannot arise from the mere fact of his existing status as a stockholder. If he deposits his stock at the instance of a protective committee signifying his joining in the depository agreement, he creates new liabilities in connection with his stock. His status as a stockholder precludes any obligation to deposit his stock. So when the so-called "assessment" is made it cannot impose any duty to assent to its terms and become bound to its obligations.

The situation may strongly invite the stockholder, however, to pay the so-called "assessment." Most people feel a distinct aversion to marking entirely off their books anything they have ever carried as an asset. If the stockholder does not come in and pay the assessment, he must confess to himself that he has suffered a total loss and has no possibility of salvage. His interest in the enterprise will be entirely gone. He feels that the property owes him something. It does. It owes him whatever he invested in purchasing the stock. He feels a natural creditor's desire to collect some of the debt if possible. His only chance of collecting from the property some of the debt it owes him is to advance some more money to it, and, by helping get it under way in its reconstituted form,

hope that it will ultimately pay him back more than the additional amount he is now putting in. Though the investment may be good, the motives on which it is made rest upon a subconscious reasoning that is mostly fallacious. However, these motives are often taken advantage of to raise, or help raise, the cash requirements of the business in reorganization.

The other method of raising cash accomplishes the same result with less appearance of indirection. In arranging the capital plan of the new organization the managers will make one or more of the new bond issues large enough so that part of the issue will be available for sale to raise additional cash beyond the amount necessary for the requirements of distribution among the depositing bondholders.

If the so-called "assessment" plan is tried, and managers estimate that all or any given percentage of the old stockholders paying the asssessment would provide the cash needed, then the underwriters have to be prepared to stand in the breach and provide any part of the necessary cash which the old shareholders do not supply. As already stated, this procedure is in no sense different from that of any underwriting syndicate operation. If the new funds are to be provided by the

sale of bonds, then the position of the underwriters is just the same as in the case of a syndicate purchasing any issue of securities.

It should be pointed out that the assessment method is not confined in its operation to the common stockholders or to any other class of stockholders. The reorganization plan may apply it to any class of security-holders junior to the issue on account of which the property is being foreclosed or even to that issue itself. If in case of the capitalization plan presented at the beginning of this discussion, for example, the default had been in the first and refunding $4\frac{1}{2}$'s, the chance to pay an assessment and participate in the reorganization might have been presented to the holders of the general mortgage 5's. With the foreclosure at the instance of the holders of the general mortgage 5's the assessment plan may be presented to both the preferred and the common stockholders. Each situation presents its own aspects, and the reorganization managers must decide on the best methods. Most reorganizations utilize the psychological appeal of the assessment, either alone, or combined with a more frank selling of new securities.

If an assessment forms any part of the reorganization plan, presumably the cash will be called for before the foreclosure sale, to be

returned if anything should still prevent the reorganization from being accomplished. It may be remarked that for the series of reorganizations which Mr. Stuart Daggett considered in his book on *Railroad Reorganizations*, he points out the fact that a short time after the reorganization the new securities could regularly have been bought at less than the assessment price.

Obstructionists are most likely to appear in connection with the fixing of the upset price. If the price is placed too high the reorganization managers and their supporting syndicate cannot carry the reorganization through. It will require more cash than they can raise without jeopardizing the success of the reorganizing enterprise. Minority holders may endeavor to get the price higher simply for the direct benefit that may accrue to them. It should be remembered, however, that a minority holder may have a much more important interest in some other issue and may be seeking to get a better bargain for the other issue. This is not a legal treatise, and we will not go into a discussion of all the legal resources of those who are trying to make better terms. Even though their contentions might ultimately be rejected absolutely, time is of the essence with the reorganization syndicate. It has made its

agreement with the reorganization managers on the basis of existing financial conditions. These may change at any time and make the transaction on the proposed terms a certain loss. The reorganization managers may deem it business expediency to make terms with objectors which the managers do not regard as really just, but which they are financially able to meet. The objectors have a "nuisance" value, and sometimes are very well aware of the fact. Objectors may, however, simply cause such delays as to prolong the situation beyond the time for which the syndicate is bound, and it may then throw up the entire matter. The necessary time limit of its agreement with the syndicate puts the reorganization committee under pressure to be able to declare the plan operative within the time allowed.

In connection with the discussion of cash requirements we will quote the statement of the provisions for this purpose made in the reorganization plan, dated November 1, 1915, of the St. Louis & San Francisco Railroad Company: —

Provision for cash requirements

For the purpose of meeting the estimated cash requirements of the plan, Messrs. Speyer & Co., J. & W. Seligman & Co., Guaranty Trust Company of New York, and Lee, Higginson & Co.

have undertaken to form a purchase syndicate, of which they will be syndicate managers. The purchase syndicate, among other things, will

(*a*) purchase

$25,000,000 prior lien mortgage bonds, Series B (five per cent);

$43,180,000 common stock (trust certificates), for the sum of $25,000,000 (and accrued interest on the bonds), against which will be credited the amounts paid by stockholders as a condition of participating in the plan, and will offer the prior lien mortgage bonds and common stock (trust certificates) so purchased, to the extent and on the terms stated in the plan, to depositing holders of stock who shall have complied with the conditions of the plan;

(*b*) purchase at the request of the reorganization managers additional prior lien mortgage bonds, to an amount not exceeding in the aggregate $5,000,000.

No provision has been made for underwriting the cash required for payment to holders of non-assenting refunding mortgage bonds and general lien bonds of their distributive share of the proceeds of the foreclosure sale, as, in the judgment of the reorganization managers, the failure to deposit undeposited bonds has been in the main due to existing conditions in Europe, where such non-deposited bonds are mainly held, but it is intended, on the completion of the reorganization, to set aside, under such restrictions as the reorganization managers shall deem proper, the new securities and cash to which, under the plan, hold-

ers of non-deposited refunding mortgage bonds and general lien bonds would be entitled if deposited under the plan, if deemed practicable until the expiration of one year after the conclusion of peace by treaty, to be deliverable on the terms stated in the plan, at any time during such period, to holders of such bonds who may desire to avail themselves of the benefits of the plan and shall give satisfactory reason for their previous inability to deposit the same under the plan; the securities and cash deliverable in respect of any non-deposited bond to be available for providing, if necessary, the moneys required to pay the cash distributive share of such bond. Such refunding mortgage bonds deposited under the agreement of June 20, 1914, and such general lien bonds deposited under the agreement of May 28, 1913, as may be withdrawn from said respective agreements, will not be entitled to avail themselves of such provision.

Guaranty Trust Company of New York has undertaken to form a loan syndicate, of which it will be syndicate manager, which among other things will, against the pledge by the purchase syndicate of such of the prior lien mortgage bonds and common stock (trust certificates), specified in subdivision (*a*) above, as shall not be purchased and paid for in full by depositing stockholders, and reserved against fully paid subscription certificates, agree to advance to the purchase syndicate, up to ninety per cent of the face amount of said bonds so pledged. The loan syndicate will agree to make, for account of the purchase syndicate, deliveries in accordance with the

terms of the purchase warrants, to holders thereof complying with the terms of such purchase warrants.

The reorganization managers for their services shall be entitled to compensation in such usual amount as shall be determined to be fair by the persons, or a majority of them, who at the time of such determination are respectively Presidents of The New York Trust Company, Columbia Trust Company, and The Equitable Trust Company of New York.

The compensations and commissions to be paid to the reorganization managers and the respective syndicates are to be paid as part of the expenses of the reorganization. The reorganization managers may become participants in either syndicate.

Finally the day set for the foreclosure sale arrives. The reorganization committee, or a subcommittee of it, attends the sale prepared to submit its bid based on the upset price already set by the court. As already remarked, it would be an extraordinary thing for an unexpected bidder to appear. The court has fixed the upset price on the basis of what the reorganization committee can afford to pay for the property. No one else could afford to pay as much, because any one else would have to provide so much more cash. The reorganization committee can make a large part of the payment in bonds of

which it holds a substantial majority, or else it would not have declared the plan operative. A minority bondholders' protective committee could not pay so large a proportion of the purchase price in bonds, and any one else would have to pay the entire purchase price in cash. We have already seen that providing the necessary actual cash is one of the crucial points of a reorganization undertaking, even for the majority bondholders. Since they do not need to provide as much cash as any one else they have a great advantage at this point over any other possible bidder. Now that the reorganization committee has done so much work, it does not, however, want to lose the purchase of the property through the submission of a bid only a trifling amount, as a dollar or two, higher than its own. Through the requirement of the cash deposit, making bidders disclose their intention of bidding, the committee will know of any competitors, estimate their strength, and conduct itself accordingly.

The decree of foreclosure which the court has made provides all the conditions governing the sale. Just as for any bidding, it provides that a substantial cash deposit shall be made with the bid to assure the good faith of the bidder. If the bidder commits any fraud in connection with the proceedings, the sale

may be subsequently upset. After the sale has been made, it must go back to the court for its confirmation.

Assume that the court names as an upset price a sum less than the amount of the mortgage under which the foreclosure proceedings have taken place. Of course, it is the regular situation that the sum is smaller than the face of the mortgage. In the case of a railroad, the mortgage foreclosed is so generally a blanket mortgage covering the entire assets of the corporation that the deficiency judgment for the difference between the sale price and the face of the mortgage would have no value. The foreclosure of a mortgage on an industrial enterprise would not so invariably involve all the assets of the corporation. Since, however, the business and assets must be sold as those of a going concern, the decree would provide for the sale of all the property, and in the event that not all were under the mortgage the deficiency judgment might have some value.

One element of uncertainty in reorganization becomes increasingly important. Public service commissions more and more have jurisdiction over capitalization. Where they have jurisdiction their approval must be obtained for the capitalization proposed for the reorganization of a public service enterprise.

Delay caused by the necessity for satisfying a public service commission may result in the failure of the attempt to reorganize.

Let us assume that the reorganization committee has taken every step successfully, and that the new securities, either in the form of interim receipts or definitive certificates, are ready for distribution. The depository certificates which so far have represented the depositors' interests in the reorganization were transferable, and the committee has no means of knowing who now are entitled to the new securities. Therefore the committee will publish notice that the new securities are ready for distribution.

It is likely to be one of the provisions of the reorganization agreement that the stock of the new corporation shall be placed in a voting trust. The reorganization syndicate wants the voting trust in order to insure continuity of management, and to avoid embarrassments that would result from the hostility to the management of a voting minority. As a result of the consideration they have given the enterprise on account of the default in its obligations, those who are interested in the reorganization have probably formed a definite idea about what policies will be most advantageous to the business. These policies are likely to involve a large construc-

tive work of business organization which will take the management several years at least to carry out. To meet the requirements of the Stock Exchange Listing Committee and of state law, the trust agreement is ordinarily made for a period not exceeding five years. The wording of a reorganization plan establishing a voting trust follows: —

The preferred and common stock of the new company issued in the reorganization will be assigned (but in the event hereinafter stated, subject to the prior pledge thereof) to the following voting trustees: Frederic W. Allen, James W. Lusk, Charles H. Sabin, James Speyer, Frederick Strauss, Eugene V. R. Thayer, and Festus J. Wade, and be held by them, jointly, and their successors (under a trust agreement prescribing their powers and duties and the method of filling vacancies), for five years. The voting trustees will issue certificates of beneficial interest entitling the registered holders thereof to receive, at the time and on the terms and conditions stated in the voting trust agreement, stock certificates for shares of the number and class specified in such certificates, and in the meanwhile to receive payments equal to the dividends received by the voting trustees upon shares of the number and class therein specified. In the event of the death or failure or refusal to serve of any person designated as a voting trustee, prior to the creation of the voting trust, the vacancy shall be filled by the reorganization managers.

If, in their unrestricted discretion, the reorganization managers shall so determine, the preferred and common stock of the new company issued in the reorganization may be pledged as additional security for the prior lien bonds for five years, and for that purpose be vested in the corporate trustee under the prior lien mortgage by agreement made or approved by the reorganization managers, under which the voting power on the stock so pledged shall be exercised by the corporate trustee under the prior lien mortgage as from time to time directed by the voting trustees, or, in the absence of such direction, or in case of default in the payment of any installment of interest on any prior lien bond, as directed by a majority of the corporate trustees under the prior lien mortgage, the adjustment mortgage and the income mortgage.

Now that we have considered the general procedure of a reorganization, let us take up the specific problem presented in the beginning of our discussion, the reorganization of the X. Y. Railroad Company. We will assume that the divisional bonds shown in its capitalization bear interest averaging five per cent for the $10,000,000. This makes fixed charges on account of: —

Divisional bonds, interest.....	$500,000
First and refunding 4½'s, interest.....	1,125,000
	$1,625,000

The corporation has not defaulted on these obligations, its earnings are ample to provide for them, and no one at any time has thought of disturbing them in the reorganization. Besides the fixed charges the corporation is subject to an account of these undefaulted securities, the interest obligation on account of the securities in default amounts to: —

General mortgage 5's, interest.....	$1,000,000
Collateral trust 5's, interest.....	250,000
	$1,250,000

Or, total fixed charges of the system at the time of default were $2,875,000. Net earnings at the time of default were, let us say, $2,750,000. The receiver has been able, during the term of his operation of the property, to increase the net, we will assume, by $50,000, and makes a showing at the time the reorganization plan is finally formulated of net earnings of $2,850,000. Since he has increased fixed charges by $30,000 through the issuance of $500,000 6 per cent receiver's certificates, the increase of $50,000 in net does not represent a real gain for the full amount of the increase.

The reorganization committee is confronted with the problem of two issues in default, each with a lien on separate pieces of property. It is important, however, in the interests of both pieces of property that the system be

kept together, and in order to keep them together it is necessary that a plan be formulated that will be just to both classes of security-holders. To form such a plan involved an examination into the relative merits of the two properties. It was found that at the time of the default the net earnings of the X. Y. system proper were $2,525,000. Interest on the issues secured on this property, the two underlying issues and the one in default, required $2,625,000. This made a deficiency of earnings of this part of the system of $100,000, or a deficiency of 5 per cent on the amount required to meet the interest charge on the general 5's in default. Net earnings of the M. X. Railroad, the branch line, all of the bonds of which are deposited to secure the M. X. Railroad collateral 5's, amounted to $225,000. Interest requirements of the collateral 5's called for $250,000. This presented a deficiency in earnings of 10 per cent of the amount required to meet interest charges on account of this issue. Holders of the collateral 5's have the advantage, however, of not having any claim on the M. X. Railroad property ahead of theirs. We will assume that this and other considerations, such as the relative physical condition of the two properties and their relative importance to each other, led the reorganization

committee to the conclusion that the general mortgage 5's and the branch line collateral trust 5's should stand on the same basis in the reorganization. Such a conclusion, of course, simplifies the problem of our reorganization plan in providing equivalents for the securities which the new plan will displace.

We must now consider what success the reorganization committee has met with in getting deposits of the defaulting securities. Again we will simplify our computations by assuming that the same per cent of each of the issues refused to deposit, and place the amount at 5 per cent. So our reorganization committee had to consider —

$1,000,000 general mortgage 5's not deposited.
250,000 collateral 5's not deposited.

This becomes important, as we know, in relation to the upset price the court may name for the foreclosure sale, which determines the amount of cash the reorganization committee must provide for raising through its plan. The committee is able to make such proposals that neither the majority nor the minority of the holders of the collateral 5's are disposed seriously to press for a separate foreclosure. They recognize the essential importance of the properties remaining together and content themselves with exerting such pressure as they can to get better terms.

After the case is fully before it — the appraisals of the property and the representations of the various parties in interest — the court establishes an upset price that will provide a payment of seventy cents on the dollar to the depositing bondholders of both classes. Now, let us consider what cash requirements the reorganization committee will have to meet. The committee estimates that the expenses of reorganization will amount to $150,000. But this charge will be met directly by the depositing bondholders, and need not be considered here. There are $1,000,000 of undeposited general mortgage bonds. The committee will have to provide $700,000 to satisfy their claim. Of the collateral trust bondholders, those owning $250,000 of bonds did not deposit. Providing for them will take $175,000. There are $500,000 of receiver's certificates outstanding and maturing so soon that their payment will have to be provided for, requiring $500,000 more in cash. Miscellaneous claims, such as judgments for personal injuries, will take $100,000. Immediate additional expenditures will have to be made on the property itself, for which the committee feels that it must provide $810,000. Recapitulating cash requirements, then, we have: —

Non-depositing general 5's	$700,000
Non-depositing collateral 5's	175,000
Receiver's certificates	500,000
Judgment claims, etc.	100,000
Two years' interest overdue on $20,000,000 bonds	200,000
Estimated cash requirements for the property	810,000
	$2,485,000
Since the reorganization will require this amount of cash, estimate an underwriter's commission of two per cent on $3,000,000 of securities	60,000
	$2,545,000

Two items in these cash requirements call for some comment. It is customary to bring the interest payments on the old bonds up to date, so that the security-holders may feel that they have had a complete, though interrupted, income return. Of course, this is merely equivalent to making depositing bondholders a better offer by so much. The cash payment is especially good bait. The other item is the underwriting commission. We have already discussed the general principles of the formation of the underwriting syndicate. The financial backing may take the form of an underwriting or of an agreement to purchase any part of the securities to be disposed of for cash which the old stockholders do not subscribe for. We have here assumed the underwriting.

In formulating reorganization plans, there-

fore, the committee faces the necessity of raising an immediate $2,545,000 in cash. Besides raising this cash, it must also see to it that fixed charges are cut down to a point at which the net earnings will cover them with a sufficient margin to make another receivership improbable. Of course, the cutting of fixed charges had to be provided for before the committee knew just how much cash it would have to raise for the non-depositing bondholders, since the bondholders would have a right to withdraw on the announcement of the plan, and possibly some more might come in at that time. Our committee met the situation in a thoroughgoing way. It decided to offer holders of bonds half the amount of their par in interest-bearing securities, half the amount of their par in preferred stock, and to add to that a share of the new common stock for every $1000 bond. They decided, too, that the new bonds should bear interest at the rate of only 4 per cent, as against the 5 per cent on the old bonds, and that the new preferred stock should be cumulative and entitled to preferential dividends of 6 per cent. The result would be that if the full dividend should be paid on the new preferred stock, the old security-holders would be getting the same income as before, and if anything should ever be paid on the new

common stock, that would be so much extra. That is: —

Old security	
Interest on $1000 bond at 5 per cent.....	$50
New securities	
Interest on $500 bond at 4 per cent.....	20
Dividend on $500 preferred stock of 6 per cent.....	30
	$50

We have assumed that 95 per cent of the holders of the defaulted bonds deposited them, and indications were that as large an amount would be on deposit when the plan should be declared operative. So the committee has to provide new securities for the owners of $19,000,000 of general mortgage 5's and for the owners of $4,750,000 collateral 5's. Since they are planning to give owners of each of these issues half their par value in new 4's, they will have to provide a total of $11,875,000 of the new 4's to meet this requirement. An equal amount of new preferred stock will have to be provided to carry out the idea of the committee for the reorganization.

With the earnings of the corporation insufficient or barely sufficient to cover the dividend requirements, the committee can hardly count on selling the new preferred stock to provide cash. So it must provide an issue of the new 4's sufficiently large so that

some may be disposed of to furnish the ready money necessary. Since satisfying the old bondholders will require close to $12,000,000, and since the new bonds will not be worth par, the committee will have to plan for about $15,000,000 of the new bonds for immediate issuance. The committee feels the need, however, of looking forward to future capital requirements, and decides to make the authorized issue of the new 4's amount to $20,000,000. The additional $5,000,000 need not be considered in the immediate reorganization plans.

Let us see, now, what the fixed charges will be on the assumption that $15,000,000 of the new 4's are to be presently issued:—

Interest on underlying bonds	$500,000
Interest on first 4½'s	1,125,000
Interest on new 4's	600,000
	$2,225,000

Against these prospective charges the corporation net earnings now are $2,800,000. On this showing of an amount available to meet the interest requirements of the new 4's of $575,000 in excess of the $600,000 demanded, the new bonds have a substantial value. Let us assume that the market is such that if they are made to run for the term of twenty-five years, as the committee plans, they should sell at 85, or approximately a 5.05 basis.

The reorganization committee has to consider the position of the preferred and common stockholders of the old corporation. In accordance with the principles already discussed, it wishes to give them an opportunity to participate in the reorganized enterprise and so forestall any endeavor on their part to block the reorganization, and at the same time to take advantage of the desire of such as may want to continue with the enterprise to raise part of the cash requirements. With a look toward this situation in particular and toward the rounding-out of the reorganization plan in general, the committee decides that the capital stock of the new corporation shall be $20,000,000 of common stock, in addition to the $12,000,000 of preferred stock already considered. The committee decides to give the preferred stockholders of the old corporation an opportunity to participate in the reorganization by allowing them, for each share of the old stock they hold, to purchase, by the payment of $50, an amount of the par value of $50 of the new 4's and $100 of the new common stock. Since it is estimated that the new 4's should be worth 85, that would make that part of the purchase which is the $50 in bonds have a value of $42.50, and therefore be equivalent to letting the old preferred stockholder

buy the new common stock for $7.50 a share.

Along the same lines the committee decides to let the old common stockholders for each share of the old common stock they own buy an amount of $50 par value of the new 4's and $75 par value of the new common stock on the payment in cash of $50. Again, on the estimate of the new bonds being worth 85, this is making the new common stock cost the old common stockholders $7.50 for each $75 of par value, or at the rate of $10 a share. Assuming that the new stock should be worth approximately this amount, this means that the old preferred stockholders are being permitted to realize a computed value of $2.50 a share on their old stock. Since their claim is superior to that of the common stockholders, it is natural that they should be shown some preference in the reorganization.

Let us see how the committee is coming out with its common stock issue. To meet the distribution of one share of the new stock to each deposited bond will take $2,375,000 of the new stock. If all the old preferred and common stockholders should want to participate, they would take more common stock than the committee has in mind to provide. Such unanimous participation, too, would

call for $15,000,000 of the new 4's instead of the $3,000,000 the committee has planned to dispose of to meet the cash requirements, and would provide $15,000,000 in cash. Of course, no such result will follow the offer. Even for the preferred stockholders the computed value of the new securities offered them is so small that a small change in market conditions would wipe it out. The managers know that the syndicate to be formed to underwrite the reorganization plan will be remarkably fortunate if enough of the old stockholders come forward to supply all the cash needed.

We now have the new financial scheme of our hypothetical reorganization committee pretty well formulated. It results then in this manner: —

Securities untouched in reorganization	
Underlying bonds averaging 5 per cent	$10,000,000
First mortgage 4½'s	25,000,000
New securities	
General mortgage 4's (authorized $20,000,000)	15,000,000
Preferred stock, 6 per cent cumulative	12,000,000
Common stock	20,000,000

Summarizing the disposition of the new securities, we have: —

General mortgage 4's

To holders of old general mortgage 5's and collateral trust 5's	$11,875,000
To be disposed of to meet cash requirements	3,125,000
	$15,000,000

Preferred stock

To holders of old general mortgage 5's and collateral trust 5's	$11,875,000
To be held for disposition at any future time to meet the corporate requirements	125,000
	$12,000,000

Common Stock

To holders of old general mortgage 5's and collateral trust 5's	$2,375,000
To satisfy subscriptions of old preferred and common stockholders (estimated)	2,000,000
To be held for disposition at any future time to meet the corporate requirements	14,125,000
To syndicate for part of its compensation	1,500,000
	$20,000,000

It will be noted that besides the cash commission stated in the list of cash requirements, we have provided the additional compensation of $1,500,000 of the new common stock as shown in the list just given for the distribution of the stock. The old bondholders at whose instance the property is being reorganized would probably regard this provision as more advantageous for them than a larger cash commission. The cash would have to be

provided through the sale of a large amount of the underlying security, the new 4's, and would by so much lessen the proportion of assets to debt of that security. They would also consider it desirable that at least part of the bankers' compensation should be in such form that the bankers would be more likely to have a continued interest in the business.

We have assumed a substantial speculative value for this new stock. Earnings are already sufficient almost to cover the requirements of the new preferred stock. Let us assume that the default took place during a time of financial panic followed by a period of business depression. As a result of the bad business period the receiver has not been able to show a material increase in earnings. With a period of reviving business a substantial increase in earnings may reasonably be expected. Practically all of any increase in net will become available for dividends on the common stock. Though presumably a policy of dividend payment would not be undertaken immediately on any increase in net, a stockholder may reasonably expect that within a few years dividends will be forthcoming on the common stock. Under the plan outlined there is only a relatively small amount of stock to absorb increased earnings, the total of $5,875,000 in the hands

of the old bondholders, the old preferred and common stockholders, and in the hands of the syndicate. The large block of $14,125,000 of stock held for corporate requirements is practically, and may be made actually, treasury stock. If any of it is disposed of, it will increase the assets, and consequently, it is to be presumed, also the earning power, of the corporation.

A word should be said about the preferred stock provided in the plan proposed, though the reorganization committee may be able to get the old security-holders to convert part of their old interest charge into a mere dividend, expecting that the old security-holders would probably insist that they shall not run the risk of their expectancy of preferred dividends being made more remote through the creation of a prior claim against the earnings. In order to get its proposal accepted, the committee will have to make it one of the provisions of the preferred stock that no such prior claim shall be created. It may be able to modify this provision to one permitting such a claim to be created on the approval of two thirds or three quarters of the preferred stockholders. Such a provision might seriously hamper the financing of the corporation in future years and the preferred stock might very well be made redeemable. It

might, perhaps, also be made convertible, so that if the corporation should greatly prosper it would disappear through the conversion process.

It should be noted that our hypothetical plan does not reduce the par of the new securities to be distributed to the old bondholders, but, in order to render more palatable the adulteration of the security of the bondholder, the plan even increases the par value of the new securities offered to him. Though part of the new securities is in stock, and the possibility of income return is the only thing of importance, the investor's mind, nevertheless, clings to par values, and the old security-holder does not feel such a sense of loss if the par of his holdings remains unimpaired.

In our hypothetical reorganization we have had the cash requirements supplied by the bankers and the old stockholders. These sources would be possible in such a case as presented, largely because the earning power of the railroads, even at its low ebb, was still almost sufficient to meet the interest requirements. Under those circumstances, as already pointed out, stock would have a speculative value. On that basis old stockholders will come forward with some funds. The new bonds, so greatly reduced in amount from

those in default, have so substantial a value as to be marketable. To be sure, they will sell at a discount, but that is because the interest rate is made so low, 4 per cent. Though it would more normally be 5, the 4 per cent rate was decided on in order to allow so substantial a par value to be offered as to placate the old bondholders, and still substantially cut down the fixed charges. If the financial condition of the corporation had been worse, the burden of supplying new cash might have been thrust upon the bondholders. They would have to supply it in order to prevent the property from going entirely to wreck. Depending upon conditions, any class of security-holders may be asked to supply cash, even those holding the current debt of the corporation. Calling on the bondholder to contribute new cash is found to be unpopular. He is certain to have some of the feeling of "throwing good money after bad." Stockholders contribute any part of the new funds only under the strongest inducement. Though the contribution is for them also a throwing of good money after bad, they are reluctant utterly to part even with the "bad" money. Bondholders can be made to contribute only when their position comes to approximate that which shareholders are usually in: they must contribute some or lose all.

Indeed, though the general procedure of one reorganization is much the same as that of another, the financial plans present very wide variations depending on the particular conditions of each case. Rather than follow through an actual reorganization which would present many problems of detail that might confuse one considering the subject for the first time, we have taken an imaginary case which we could make as simple as we chose. It should not be understood that the hypothetical case presented is even typical. The elements were chosen to show the situation as simply as possible.

Our imaginary case does not present one often very important situation, that of the lease. If a reorganization involves an enterprise with leased property, those in charge of the reorganization must come to terms with the owners of the leased property. Of course, they may not consider it desirable to retain the leased property in the enterprise. The receiver may already have exercised his right to disaffirm the lease and cut this part of the property loose, or it may otherwise be cut loose in the course of the reorganization. Since it is not owned by the corporation undergoing reorganization, it does not form part of the property in the foreclosure sale. Generally the owners of the leased property

do not want it back on their hands to operate. They have no operating organization. So they are likely to make terms, if they can, in the reorganization. Frequently the making of terms results in changing the status of the property from its former lease to an actual ownership. The leased property is consolidated into the reorganized enterprise. Sometimes, but not usually, an arrangement is made reducing the rental. The whole matter is part of the general problem of reducing fixed charges. The lease may be in so strong a position as to be undisturbed, like the underlying bonds. It may be so weak that it is not desired at all, and can be cut off even more effectively than the stockholders' equity. Or it may be strategically in the position of the bonds in default, and have to suffer a scaling down in some way.

Reorganization expenses are allocated directly to the depositors, and are not provided for in the cash requirements. Any security-holder who has deposited and subsequently withdrawn will have to pay his *pro rata* of the expenses up to the time of his withdrawal. That would ordinarily be up to the time of the announcement of the plan of reorganization. In an organization more complex than the one we have presented, the reorganization committee would have to determine what

proportion of the expenses each issue involved in the reorganization would have to bear.

We have presented only one device for scaling down fixed charges, that is, by a substitution of stock in the place of interest-bearing securities. This is the best method, but is not always followed. A plan more commonly adopted in earlier reorganizations than recently was the substitution of income bonds for bonds with less elastic interest provisions. The objectionable characteristics of income bonds were discussed in the first volume. In substance, from the standpoint of a security-holder in reorganization, income bonds give practically no greater assurance of payment of income than a preferred stock, and lack the voting power which helps the preferred stockholder protect his position.

The "adjustment bond" is another device resorted to in reorganizations to effect an immediate reduction in fixed charges. The reorganization committee may ask the old bondholders, whose securities carried interest, let us say, at 5 per cent, to take new bonds carrying interest for the first year say of 2 per cent, for the second year of 3 per cent, for the third year of 4 per cent, and the fourth year reaching the interest return of the replaced securities of 5 per cent. Though these rates

involve an immediate cutting-down of the bondholder's income, they include a definite and absolute promise that the income will be restored by the steps indicated. This places the security-holder in a stronger position than the expectancy of income offered by a preferred stock. From the standpoint of the probable permanency of the reorganization it is not so good as the preferred stock. If the reorganization committee relies upon it to effect the entire scaling down and does not materially reduce the principal amount, fixed charges will go back to their original amount at the end of the four-year period. Since the committee is not likely to get the bondholders to accept a reduction of both principal and rate of income, the principal amount will probably remain unimpaired. The adoption of the device of the adjustment bond indicates a reliance on increasing earnings. If this expectation should not be realized, the corporation would again face reorganization.

For the reorganization plan we have followed through, we have had the reorganization managers assume the burden of the work of effecting the purchase and of distributing the securities. The position of the underwriting syndicate involved only the taking-up of such of the securities provided for the raising of cash as the old stockholders did not

subscribe for. After formulating the new financial plan, the reorganization managers might have turned the whole matter over to the syndicate if they had made such an agreement. In that event, the syndicate, which we have termed the "underwriting syndicate," would be denominated the "purchase syndicate." It would have bought the property at the foreclosure sale, turned it over to the new management for the securities, and distributed the securities in accordance with the provisions of the agreement the syndicate had made with the reorganization committee. This agreement would have included the same distribution of the new securities as we have discussed. In this, as in every other aspect of a reorganization, the details may vary widely. In the space at our disposal there is opportunity to discuss only the general principles involved.

READJUSTMENT OF THE CAPITAL ACCOUNT

We have restricted our use of the word "reorganization" to situations involving a foreclosure, or otherwise a sale of the property at the instance of creditors. Common use applies this term more broadly to include any substantial change in the financial plan, not only when there is no sale at the instance of creditors, but even when the change does

not at all result from insolvency. It seems in the interest of a more careful nomenclature to reserve the term "reorganization" to cover such cases as we have already discussed.

Sometimes substantial changes are made in the plan of capitalization as a result of insolvency without involving a judicial sale. This can most advantageously be done when, though the assets are ample, some business reason has made it impossible for the corporation to meet its interest charges or its maturing obligations. It can sometimes be forced through when a class of creditors realizes that a reorganization involving a judicial sale would cut them off or would reduce the amount they are apt to realize from their claims below the amount they believe the values really in the property ought to produce for them. It may especially be utilized when the stockholders believe that the insolvency is temporary and are willing to aid substantially in having the finances arranged in some way that will not involve cutting off their equity. Any creditor whose claim remains unpaid can eventually force a judicial sale of the assets, and those interested in effecting a solution of the corporation's financial troubles can hold this whip over those who are inclined to block, or refuse to support,

endeavors to procure an adjustment without such a sale. If the financial difficulties are surmounted without a judicial sale in a way that involves substantial changes in the financial plan, we will say that there has been a "readjustment of the capital account."

A readjustment involves much the same matters as we have discussed under the heading of "Reorganization," but it is carried through without the judicial sale. The property is not, however, transferred to a new corporation, and new securities, including the new stock, issued in payment for the property transferred to the new corporation. Since, generally speaking, no property is being transferred in any way, any new stock issued must be paid for in cash at par. Either the stock of the corporation must be worth par in spite of the present embarrassment, or worth so near par that parties having an interest in the situation are willing to pay par for it in order to straighten out the situation and avoid greater loss in some other direction.

Of course, it would be rather extraordinary that the common stock of an insolvent corporation should be worth par. Ordinarily, if new stock is to be issued an issue of preferred stock would have to be authorized. Or, if there is an existing issue of preferred stock, a new issue with a prior preference may be

created. The stockholders may be sufficiently interested in carrying out the readjustment to contribute some of their holdings to the corporation, which, becoming treasury stock, the corporation may proceed to sell at less than par. This would involve practically unanimous action, otherwise some of the stockholders would be making a sacrifice for the benefit of other stockholders who are not sacrificing at all.

The readjustment of the Westinghouse Electric and Manufacturing Company following the financial crisis of 1907 presents a good illustration. The company had been expanding its business rapidly, and as a result had a large floating debt, the maturities of which the corporation was unable to meet in the face of the existing stringent financial conditions. This debt consisted of two classes: (1) merchandise debt or credit given by concerns which furnished materials to the company, and (2) bank debt, the result of floating the company's paper generally throughout the country and of borrowings from the local banks. The business depression which set in after the general financial crisis of the fall of 1907 caused a marked falling-off in the earnings of the company and made its situation one of great difficulty. Several plans for readjustment failed before one finally succeeded.

A business situation proved really the pivotal point. Merchandise creditors naturally looked forward to continuing business with the rehabilitated company. It frequently happens that in smaller enterprises than the Westinghouse business adjustments are made on this principle. If those in charge of a business are known to have such abilities and reputations that they will continue in the same business and use the same materials after their financial difficulties are adjusted, their merchandise creditors are likely, rather than force them through bankruptcy, to make a composition with them in the expectation of continuing their good-will. Such creditors expect to benefit through the profit of future business more than enough to make up present losses. By forcing the debtor into bankruptcy they would lose his good-will and probably gain nothing over the composition. The Westinghouse difficulties presented a case in which those who were creditors on account of current liabilities were most immediately concerned. The merchandise creditors wanted to continue in the good-will of the dominating interests in the enterprise for the sake of future business. The local banks also looked to future business. These two divisions of the creditors were the easiest to deal with.

Other bank creditors presented a more

difficult problem for those who were seeking to arrange the finances of the company. For the various reasons which make it necessary or expedient for a concern like the Westinghouse Company to seek a broader area of credit than the local community, it had through note brokers placed large amounts of its paper with banks throughout the country. These banks had nothing to gain from business relationships with the concern. Whatever they were to rescue from the situation they had to salvage at once. They were not so easy to deal with.

Under the plan that finally gained acceptance, merchandise creditors to the amount of some $4,000,000 agreed to take stock of the company at par in the settlement of their claims. The plan offered the bank creditors 50 per cent of their claims in convertible long-term bonds. They were given an option of several proposals in settlement of the other 50 per cent of their claims: (1) to take 30 per cent in four, five, and six year notes and 20 per cent in stock; (2) to take it entirely in fifteen year notes; (3) to take it entirely in stock. There was about $8,000,000 of this bank debt.

The concern required some actual cash, however, to get its affairs straightened out. The stockholders were asked to subscribe to

$6,000,000 of stock at par. Though the concern was embarrassed with its large floating debt, its assets and earning power in normal times made its stock valuable. During this period, however, the stock was not selling in the general market at par, and the purchase of stock at par was equivalent to making a cash contribution to the treasury of the company. Only the large stockholders saved the situation at this point. With some banking assistance they came forward and subscribed for the necessary amount of new stock. Of course, no compulsion could be put on the stockholders, and, as the corporation was issuing this stock for cash, it had to be sold for par.

Non-local bank creditors did not look with much favor on the proposals made to them. A gradual revival in business conditions, however, made it seem probable that the new securities would have a sufficient value at least to let them out whole, and finally they agreed to the plan.[1]

Only the threat of a judicial sale makes possible a voluntary readjustment of the

[1] The facts here presented about the Westinghouse readjustment are gathered from Dewing's *Corporate Promotions and Reorganizations* (Harvard University Press. 1914). The reader is referred to that volume for a complete and interesting discussion of this readjustment of the capital plan.

capital account: Do this or worse things will happen to you. Even with this threat, generally anything requiring a unanimous consent cannot be carried through. Some recalcitrant (from the viewpoint of those trying to carry through the readjustment) will refuse to act except under court compulsion. Yet, if the number of people who are directly affected is not too great, and if the situation is strong enough, sometimes practically unanimous action may be had. In a sufficiently strong situation the writer once succeeded in getting all of the second mortgage bondholders of an enterprise to agree to accept the position of third mortgagees in order that cash might be provided by a smaller issue of bonds with a second mortgage claim.

RECAPITALIZATION

By the term "recapitalization" we mean a substantial change in the financial plan of the corporation that does not result from insolvency. Quite the contrary situation is the most frequent cause of recapitalization. Those in control of the corporation bring about an increase in the outstanding securities to make their par present more nearly the actual capital value of the business. This situation frequently arises when an incorporated family enterprise is being turned into one for

general market purposes. Many enterprises have their origin, not in an original large promotion, but through the growth of some small business undertaken by an individual or a very small group of individuals. Very likely the business was not incorporated at the beginning, but was started as entirely a matter of direct individual proprietorship or as a partnership affair. Some of the various reasons for incorporating finally led the proprietors to take the step of incorporation. The business grew and the owners added to the capital account out of the earnings, so that the present value of the plant is far in excess of the capitalization. It may be that the business has passed through the hands of several generations in this way. Or it may be that the business met with rapid and large success. In recent years the automobile industry has presented examples of especially swift expansion, and the building-up of assets out of earnings. Whatever the business, let us assume that for some reason a time has come when the owners are willing to part with their exclusive ownership and admit outside capitalists to an interest in the business. It may be that one of the present owners wishes to withdraw and the owners are not able or are not ready for any other reason to buy out his interest. Perhaps an owner has died and

the beneficiaries of his estate want to liquidate his interest in the business. Very likely the present owners wish now to expand the business more rapidly than they can exclusively out of earnings. For one of these reasons, or for any other, they want access to the general market for capital, and are prepared to part with some of their stock interest. Their present stock, however, is worth too high a premium to be disposed of advantageously in the general market. So they must recapitalize.

Let us assume the case of a business which has taken advantage of the principle of trading on the equity and in times past has borrowed some capital by issuing bonds, so that its capitalization now stands in this way: —

Stock	$250,000
Bonds	1,000,000

Its earnings, however, show that the capitalization does not represent the actual values in the business. Let us say that the income account shows in a normal year: —

Net earnings	$525,000
Interest	50,000
Available for dividends	$475,000

A careful management would advise carrying $50,000 of this to a reserve account, and leave for actual distribution $425,000. This

approaches 200 per cent on the present capitalization, and would exceed 7 per cent on a capital stock of $6,000,000. Let us assume that an appraisal would show a valuation of assets of $7,000,000 so that the corporation, considering its $1,000,000 of bonds, may properly increase its capital stock outstanding by $5,750,000.

The owners decide to increase the capital stock authorized to $8,000,000 and declare a stock dividend of 230 per cent. Let us assume that the purpose of the stockholders in doing this was to permit such of them as chose to dispose of part or all of their ownership in the business, and that, as a matter of fact, the owners of a quarter interest wish to dispose of all their holdings, and enough others wish to realize some cash to dispose of one twelfth more of the ownership of the business. Since the stock is "full paid," they can dispose of it at any price they see fit.

If the recapitalizing were done with a view to providing cash for corporate purposes, the private owners would have agreed to contribute such a *pro rata* of the stock dividend to that end. They may sell, let us say, $2,000,000 of the stock at 90, and raise $1,800,000 for the corporation. Putting through such a transaction by means of recapitalizing would depend upon unanimous consent,

and would be practicable only in the case of corporations with a very small number of shareholders.

Sometimes the situation may be just the opposite of that we have described. Though a corporation may be solvent, it may have so large an amount of stock outstanding and its earnings be so small that there can be no hope of a policy of dividend declaration on the existing stock. This situation is more likely to exist with corporations which have large amounts of preferred stock, especially if it is cumulative and has arrears of dividends. In such case the corporation can simply go through the legal procedure for reducing capital stock.

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