Volume Title: Statistical Measures of Corporate Bond Financing Since 1900

Volume Author/Editor: W. Braddock Hickman assisted by Elizabeth T. Simpson

Volume Publisher: UMI

Volume ISBN: 0-691-04178-4

Volume URL: http://www.nber.org/books/hick60-1

Publication Date: 1960

Chapter Title: GLOSSARY

Chapter Author: W. Braddock Hickman

Chapter URL: http://www.nber.org/chapters/c2470

Chapter pages in book: (p. 571 - 582)

GLOSSARY

AGENCY RATING—A composite of the ratings assigned by the four investment agencies: Moody's, Fitch, Standard Statistics, and Poor's (the latter two were merged in 1941 and issued a single rating thereafter). The composite rating is a median of individual coded ratings, where the rating I was assigned to the best grade under each system (i.e., Moody's Aaa, Standard Statistics A1+, etc.); the rating II to the next best grade (Moody's Aa, Standard A1, etc.); and so on.

AMOUNT OUTSTANDING—The par amount of the issue shown as outstanding in the hands of the public on the balance sheet (or related subsidiary schedule of debt) dated nearest to January 1 of the indicated year, net of amounts held by affiliates, in sinking fund, and in the company treasury.

ASSET SIZE OF OBLIGOR—Total assets of the obligor and its subsidiaries but not of its parent company
- *at offering*—taken from the first balance sheet that appeared after the offering, provided it was dated not more than two years later than the offering
- *on outstanding issues*—taken from the balance sheet nearest to, and within six months of, January 1 of the observation year
- *at default*—taken from the balance sheet covering the year of default.

BASIC YIELD (Rate)—The yield on the highest grade of bonds outstanding on a given date with a given term to maturity.

BOND, DOMESTIC CORPORATE—A debt instrument issued by a concern chartered to do business by one of the forty-eight states, the United States, or the territories of Alaska or Hawaii; secured by a trust indenture; having a definite coupon rate, maturity date (at least one year after date of issue), and principal amount; and held by the domestic Investing Public, *which see*. For industry coverage, *see* Minor Industry.

BOND REFUNDINGS—*See under* Refundings.

CALL DEFERMENT—The period of time from offering date (or bond date, whichever is later) to the first date on which, according to the indenture, the issue can be called for purposes other than sinking fund.

CALL DURATION—The period of time from the first call date (for purposes other than sinking fund) to the termination of the call privilege, which may be the date of maturity of the bond issue or some earlier date.

CALL PRICE—The earliest price after offering at which the bond can be called for purposes other than sinking fund, expressed as percent of par.

CALL PROVISIONS—The terms on which the issue is callable: whether for
1. Sinking fund only
2. Other purposes (i.e. whenever it seems advantageous to the obligor to call the issue)
   a. callable both in entirety and in part
   b. callable in entirety only
3. Both for sinking fund and other purposes
   a. callable at a different price for sinking fund than for other purposes
   b. callable at the same price for all purposes
4. Specifically not callable
5. Purpose not well defined (includes issues that could be classified as to whether callable for sinking fund or other purposes but not according to the subclassifications indicated above)
6. Information lacking—no mention in the manuals as to whether or not the issue is callable.

CALL RATE—The ratio of the amount of corporate bonds that was completely extinguished by contractual methods (nondefaults) before maturity, to the total amount in the group under discussion. While the final extinguishment of most of these issues was by call, for a small percentage it was by conversion, purchase in the open market or through tenders, or exchange for new securities worth par or more. Life-span call rates show the proportions of the par-amount totals of bond offerings in selected groups (regular offerings, when based on the offerings experience sample) that were extinguished by contractual methods before maturity. Call rates over selected chronological periods represent the proportion of the par-amount totals of issues in good standing at the beginning of the periods that were extinguished during the periods by contractual methods before maturity.

CASH EXTINGUISHMENTS—Issues extinguished by cash payment: by payment in full at maturity, by call, purchase, or tenders, and in default situations by payment in full after maturity or in less than contractual amount; also included are issues for which the extinguishment payment was mixed cash and noncash—i.e., cash in addition to new or modified securities. Entirely noncash extinguishments are excluded: conversions, exchanges for other securities, and contract modifications without any cash payment. Cash extinguishments are usually measured in these reports in par amounts, but *see* Cash Payments at Extinguishment.

CASH OFFERINGS—Bonds sold at offering for cash publicly, privately (direct placements), or to security holders (mainly stockholders). Bonds offered in exchange for other securities are excluded. Cash offerings are usually measured in these reports in par amounts, but *see* Cash Proceeds at Offering.

CASH PAYMENTS AT EXTINGUISHMENT, GROSS—The aggregate cash receipts of investors upon retirement of their holdings. Obtained by multiplying the extinguishment price by the corresponding par amount of cash extinguishments. Presented in *Volume of Financing* Table A-22 as gross cash flow from corporate sector.

CASH PROCEEDS AT OFFERING, GROSS—The aggregate volume of cash paid for new securities by investors (including commissions to underwriters). Obtained by multiplying the offering price by the corresponding par amount of cash offerings. Presented in *Volume of Financing* Table A-22 as gross cash flow to corporate sector.

COLLATERAL TRUST BONDS—*See under* Lien Position, Type of Security.

COMBINATION SECURITY—*See under* Lien Position, Type of Security.

COMPOSITE AGENCY RATING—*See* Agency Rating.

CONCENTRATION, BOND MARKET—The degree to which the par-amount total of outstandings is accounted for by large issues or issues of large obligors. The following measures were used to test whether the degree of concentration (in terms of size of issue) was increasing or decreasing.

1. Lorenz curve or curve of inequality—a graph showing the proportion of the total par amount of bond issues outstanding at the beginning of a given year that was accounted for by the corresponding proportion of the number of issues arrayed in increasing order of amount outstanding.
2. Coefficient of variation—ratio of the standard deviation of amount outstanding (square root of the mean of squared deviations about the mean size of outstanding issues) to the mean size of outstanding issues (total par amount of bond issues outstanding at the beginning of a year divided by the number of issues then outstanding).
3. Coefficient of concentration (Gini's coefficient)—ratio of the area between a Lorenz curve and the line of perfect size equality (the line with 45° slope) to the total area under the line of perfect size equality.

To measure changes in concentration in terms of size of obligor, curves of inequality were drawn showing the proportion of the total par amount outstanding at the beginning of a given year that was accounted for by the corresponding proportion of the number of obligors arrayed in ascending order of asset size. Such curves are not true Lorenz curves since different measures are used to rank the variables along the horizontal and vertical axes.

CONTRACT MODIFICATION—Change in the maturity date or coupon rate of an outstanding issue. Contract modifications are counted both as offerings of new securities and extinguishments of old. *See* Exchanges and Contract Modifications.

CONVERSION PROVISIONS—The terms on which the bond may be exchanged by the holder for some other specified security. Offerings are classified by conversion provisions in Tables 117-119. The following were convertible only at the option of the obligor and are included only in the "total reported convertible" columns of those tables:

Year	*Industry*	*Issue Size*	*Estimated Number of Issues*	*Estimated Par Amount*
1907	Public utility	small	11*	$5.1 million
1927	Public utility	large	1	27.5 million
1937	Industrial	small	22*	8.9 million

* Estimate based on less than five offerings.

Other convertible issues (convertible at the holders' option) are classified in two separate categories:

1. Conversion period—duration of the conversion privilege.
2. Type of issue into which convertible—bonds, preferred stock, or common stock. For common stock (alone or with other securities), further classified as to whether convertible at
   a. constant ratio—convertible into constant number of shares during conversion period
   b. varying ratio—convertible into varying numbers of shares during conversion period (sometimes called "sliding-scale" arrangement).

CORPORATE BOND—*See* Bond, Domestic Corporate.

COUPON RATE—

1. The annual rate of cash interest payment specified in the contract for bonds with fixed constant rates;
2. The contractual rate in effect at extinguishment or 1944, whichever was earlier, for bonds of varying fixed rates, or
3. The fixed minimum rate for partially contingent bonds. Bonds with entirely contingent rates are income bonds and are not included in this report (*see*, however, *Volume of Financing*, Table A-5).

Offerings are classified by coupon rate in Tables 123-125, with intervals such that the major part of the offerings in each coupon group falls at the midpoint of the range.

CURRENT YIELD—Ratio of the coupon rate to the market price. The current yield is mathematically equivalent to the promised yield of a perpetual bond.

CYCLES IN CORPORATE BOND FINANCING—The behavior of the basic annual bond series presented in these reports (and where available, of monthly and quarterly series) during business cycles, analyzed by means of the National Bureau's techniques; also the relationship between selected bond and stock series similarly analyzed. The method is described in *Volume of Financing*, Chapter 4.

DEBENTURES—Unsecured issues (*see* Lien Position).

DEFAULT—

1. Failure to pay interest or principal in the full contractual amount when due (periods of grace, sometimes specified in a bond contract, being disregarded here), or
2. Noncontractual exchange or contract modification—*See under* Exchanges and Contract Modifications. Noncontractual exchanges and contract modifications before maturity are shown as a separate group in tables on default and extinguishment status (e.g. Table 167, and Table 129 in column headed "less than par"). *Also see* Outstandings in Default.

Sinking fund omissions are not considered as defaults in these studies.

DEFAULT, NATURE OF—Classification of the original default by the form it took: failure to pay interest or principal; or noncontractual exchange or contract modification. *See under* Exchanges and Contract Modifications. Failure to pay interest, even if followed later by a default of principal, is classified as an interest default. A principal default can occur only at maturity. Simultaneous interest and principal defaults at maturity are grouped with defaults of principal.

DEFAULT EXPERIENCE SAMPLE—All defaulted issues in the underlying sample of large and small issues for which realized yields could be computed from first offering to default and from first offering to extinguishment or end of 1943, whichever was earlier.

DEFAULT AND EXTINGUISHMENT STATUS DURING FOUR-YEAR PERIODS—Classification of all issues outstanding at beginning of period as either in default or in good standing. Issues in good standing at beginning of period are further classified by whether defaulted during period, in good standing throughout, or status unknown. Both defaults and nondefaults are subclassified by how extinguished during period. Percents defaulted, paid in full at maturity, called, etc., during period are presented in various tables and are based on the total in good standing at beginning of period for which default and extinguishment status was known. Issues are distributed by default status as follows:

1. Defaults during period—failure to pay interest or principal in the full contractual amount when due (periods of grace, sometimes specified in a bond contract, being disregarded here). Subclassified by method of extinguishment as follows:
   a. Cash payment—Includes payment in full after maturity or in less than contractual amount; also contractual principal repayments after the remedy of an interest default. Exchanges in which the original bondholder had to make a cash payment are treated as liquidated at settlement and are therefore included with cash payments.
   b. Exchange—Default settlements in this group include: issues extinguished by exchange or contract modification after an interest or principal default (*see* Exchanges and Contract Modifications, 2b); and noncontractual exchanges and contract modifications *at maturity* (considered here the simultaneous settlement of a default of principal; *see under* Exchanges and Contract Modifications, Noncontractual).
   c. Outstanding, end of period—including defaulted issues restored to good standing within the period (*see* item 1 *under* Settlement, Nature of), and those still not settled.
2. Noncontractual exchanges and contract modifications *before maturity*, during the period—default coinciding with settlement. (*See* Exchanges and Contract Modifications, Noncontractual.)
3. In good standing during period—all payments of interest and principal made in contractual amount when due. Subclassified by method of extinguishment as follows:
   a. Payment in full at maturity (during period)
   b. Call (during period)
   c. Other methods—conversion, purchase, tenders, and exchanges or contract modifications not preceded by interest default, in which receipts were worth par or more
   d. Outstanding, end of period—still in good standing.
4. Status during period unknown—method of extinguishment unknown.

DEFAULT RATE—The ratio of the amount of corporate bonds going into default to the amount exposed to the risk of default. Life-span default rates show the proportions of the par-amount totals of bond offerings that went into default at any time between offering and extinguishment. (When based on the offerings experience sample, only regular offerings are included.) Default rates over selected chronological periods represent the proportions of the par-amount totals of issues in good standing at the beginning of the selected periods that went into default before the end of those periods.

DEFAULT SETTLEMENT—*See* Settlement, Default *and* Settlement, Nature of.

DEFAULT STATUS AT EXTINGUISHMENT OR 1944—Classification of offerings and extinguishments by whether or not issue was in default at extinguishment, and whether or not prior default had occurred (cf. Tables 129-131 for offerings, and Tables 132-134 for extinguishments). The breakdowns are as follows:

1. In good standing on January 1, 1944—unmatured issues outstanding on January 1, 1944 with (a) all interest paid when due or (b) prior default remedied by payment of back interest (refers to Tables 129-131 only; Tables 132-134 are limited to final extinguishments and therefore exclude issues still outstanding January 1, 1944).
2. In good standing at extinguishment before 1944—issues extinguished contractually, that is, paid in full at maturity, or retired before maturity by call, purchase, tenders, or conversion; also issues extinguished by exchange or contract modification where the new or modified securities (plus cash payment, if any) at date of extinguishment had a value of par or better for issues extinguished at maturity, or a value at least equal to the prevailing call price for callable issues extinguished before maturity. (When the exchange or contract modification occurred before maturity and either the old issue was not callable or the new issue plus cash was worth less than the call price, the transaction was included under item 6 below. Issues under 6a are considered as nondefaulted issues in these studies, and those under 6b, as defaulted issues. When the exchange or contract modification occurred at maturity and the receipts were worth less than par the transaction was considered a default and was included under items 4 or 5. Exchanges and contract modifications after interest or principal defaults are considered as default settlements, but not as new defaults, since the issue was already in default.)
3. In default of interest—unmatured issues in default of interest at extinguishment or on January 1, 1944 if still outstanding on that date (latter refers to Tables 129-131 only). Issues in default of interest on which a principal default occurred at maturity are included under 5 below.
4. In default of principal—issues not in default of interest at maturity, at which time a default of principal (and possibly of interest) occurred; and similar issues extinguished at maturity by exchange for new securities (plus cash payment, if any) where the value received was less than par (i.e., noncontractual exchanges and contract modifications at maturity; *see* 2 above).
5. In default of interest and principal—issues on which interest was in default at maturity, at which time a default of principal occurred. Includes extinguished issues and those outstanding in default on January 1, 1944 (latter refers to Tables 129-131 only).
6. Exchanges and contract modifications before maturity not preceded by interest or principal default—noncallable issues extinguished by exchange before maturity, and callable issues for which the value received (new securities, cash) was less than the call price (*see* 2 above). Such issues are further classified by value of receipts:
   a. Par or more—such cases are not considered as defaults in these studies.
   b. Less than par (i.e. noncontractual exchanges and contract modifications before maturity)—such cases are considered as defaults in these studies.

DEFAULT STATUS AND METHOD OF EXTINGUISHMENT—

1. Classification of all offerings into regular and irregular offerings (*see under* Offering, Bond).
2. Classification of all regular offerings into defaulted and nondefaulted and of the nondefaulted offerings by method of extinguishment, as follows:
   a. Paid in full at maturity
   b. Called—includes issues extinguished before maturity by purchase, tenders, or conversion; also exchanges or contract modifications occurring before maturity and not preceded by interest default, in which receipts were worth par or more
   c. Outstanding January 1, 1944 with no prior default of interest or principal.

DIFFERENCE BETWEEN PRICE AT DEFAULT AND DISCOUNTED VALUE OF RECEIPTS AFTER DEFAULT—*See under* Receipts after Default, Discounted Value of.

DIRECT PLACEMENTS—*See* Private Placements.

DISCOUNTED VALUE OF RECEIPTS AFTER DEFAULT—*See* Receipts after Default, Discounted Value of.

EARNINGS COVERAGE—Refers to measures based on the obligor's past earnings and used for inferring default risk. The two measures of earnings coverage examined in these studies are the Times-Charges-

Earned Ratio and the Ratio of Net Income to Gross Income, *which see*.

EQUIPMENT OBLIGATIONS—Equipment trust certificates issued under lease-back arrangements, and equipment notes secured by conditional sales agreements. During the period studied, equipment obligations were secured in most cases by the rolling stock of steam railroads and were usually in serial form. Their aggregate volume is presented annually in Table A-3 of *Volume of Financing* and is included in Table A-1 of that book; but they are excluded from other tables of the Studies in Corporate Bond Financing.

EXCHANGES AND CONTRACT MODIFICATIONS—methods of extinguishment not provided for in the original contract. (*See* Default Status at Extinguishment or 1944, *passim*.)

1. Noncontractual—when the old issue was in good standing up to the date of exchange or modification and the new or modified securities (plus cash receipts, if any) received in exchange were worth less than par. Noncontractual exchanges and contract modifications are considered as simultaneous defaults and default settlements in these studies. They may occur either at maturity or before maturity. In such Tables as 129-134, 164-165, and 229-230, the noncontractual exchanges and contract modifications occurring before maturity are shown separately from other defaults; in the first set mentioned, they are identified as exchanges for receipts "less than par." Also, in Tables 229 and 230, noncontractual transactions at maturity are shown separately from other principal defaults.
2. Other—
   a. When the old issue was in good standing up to the date of exchange or modification and the new or modified securities (plus cash receipts) received in exchange were worth par or more (even though less than call). Such exchanges and contract modifications are not considered as defaults in these studies. In tables on default and extinguishment status, for example, exchanges and contract modifications at maturity, where the new or modified security was worth par or more, are considered as extinguished in good standing.
   b. Negotiated after an interest or principal default. Considered throughout these studies as default settlements but not as new defaults (since the issue was already in default).

EXCHANGE ON WHICH LISTED—Classification is according to the stock exchange on which the issue was listed, or traded, if traded unlisted. In tables on outstandings (Tables 34-39), the listing refers to the situation in the first quarter of the indicated year; in tables of offerings (Tables 90-92) the listing refers to the situation within one year after offering. In the former set of tables, issues quoted on more than one exchange were assigned to the exchange on which quotations were most frequent. In the latter set of tables, preference was given first to the New York Stock Exchange and second to the New York Curb Exchange.

(The name of the New York Curb Exchange was changed to the American Stock Exchange in 1953. The Baltimore and Philadelphia exchanges were combined into the Philadelphia-Baltimore Stock Exchange in 1949 and absorbed the Washington Exchange in 1953. The Chicago Stock Exchange was merged in 1949 with exchanges in Cleveland, St. Louis, and Minneapolis–St. Paul to form the Midwest Stock Exchange. The San Francisco and Los Angeles exchanges were combined into the Pacific Coast Exchange in 1957.)

In Tables 34-39, the caption "other exchanges" includes Cincinnati, Cleveland, Detroit, Los Angeles, Minneapolis–St. Paul, New Orleans, Pittsburgh, St. Louis, San Francisco, and Washington. The caption "other exchanges" in Tables 90-92 includes the above plus Baltimore, Boston, Chicago, and Philadelphia.

Securities identified as traded over the counter or not quoted are those for which no evidence of listing or trading on an organized securities exchange could be found in the National Quotation Bureau's *Bond Summary* in the first quarter of the given year (Tables 34-39) or within one year after offering (Tables 90-92).

EXTINGUISHMENTS, BOND—Bonds retired through maturity, call, purchase, or tenders, conversion, exchange, payment of bondholders after liquidation, or a change in the contract not provided for in the original indenture, such as an extension of the maturity of the issue or a change in the coupon rate. An issue may be extinguished in varying amounts over its lifetime, and all such amounts except the last or "final extinguishment" are termed "partial extinguishments."

FINANCIAL CORPORATIONS, BONDS OF—Bonds issued by investment trusts, sales finance companies, acceptance and factoring houses, and other financial corporations are excluded from the studies. Bonds issued by holding companies are classified under the principal activity of the operating companies.

GUARANTY, NATURE OF—The terms under which a corporation other than the obligor promises specified payment in case of default. If a guarantor becomes the obligor, it ceases to be the guarantor. The terms are shown by two separate breakdowns:

1. Time of guaranty—at offering, extinguishment or January 1, 1944, or at both offering and extinguishment
2. Type of guaranty
   a. interest only
   b. interest plus principal and/or sinking fund.

HIGH-GRADE BOND ISSUE—An issue rated I-IV by the rating agencies, or legal for savings bank purchase in Maine, Massachusetts, or New York, or having a market rating of less than one percent. *See* Agency Rating, Legal Status, *and* Market Rating.

HOLDING COMPANY, BONDS OF—*See* Financial Corporations, Bonds of.

INCOME BOND—A bond issue whose interest payments are entirely contingent upon earnings, sales, etc. Aggregate estimates for income bonds are presented annually in Table A-5 in *Volume of Financing* and included in Table A-1 of that book; but income bonds are excluded from other tables in the Studies in Corporate Bond Financing.

INDUSTRIALS—*See* Minor Industry.

INTEREST IN ARREARS—The accumulated amount of interest in default on corporate bonds outstanding on a given date.

INTEREST CHARGES, CONTRACTUAL—The aggregate amount of coupon payments promised by corporate obligors in a given period of time.

INTEREST IN DEFAULT—The difference between contractual interest charges and actual interest payments on corporate bonds in a given period of time.

INTEREST PAYMENTS, ACTUAL—The aggregate amount of coupon payments made by corporate obligors in a given period of time (including any payments of overdue interest).

INTERMEDIATE ISSUES—*See under* Lien Position, Secured Issues.

INVESTING PUBLIC, DOMESTIC—All bondholders in the United States, both individuals and institutions, but excluding governmental divisions and agencies at the various levels and corporations affiliated with the obligor through 50 percent stock ownership or operation under a leasehold. Bonds held abroad were excluded in so far as they were identifiable through being payable in a foreign currency.

IRREGULAR OFFERINGS—*See under* Offering, Bond.

ISSUE—All bonds secured under the same trust indenture; with the exception that when the indenture provides for issuance of the bonds in series, each series is considered a separate issue (*see under* Serial Bonds).

JUNIOR ISSUES—*See under* Lien Position, Secured Issues *and* Unsecured Issues.

LARGE ISSUES—Issues with total offerings of $5 million or more.

LEASEHOLD BONDS—*See under* Lien Position, Secured Issues.

LEGAL STATUS—Eligibility for investment by savings banks in Maine, Massachusetts, and New York as evidenced by appearance on the legal lists of those states.

New York Subdivision 7-a: Nondefaulted railroad bonds not meeting basic earnings requirements of the New York law but kept on the New York legal lists in 1932-37 by omission of years 1931-36 from the earnings tests; also similar bonds kept on the lists in 1938-45 by reduced earnings requirements for the years 1931-39.

LIEN POSITION—A two-way classification of bond offerings by type of security underlying the issue (i.e. whether or not it was secured by a lien on assets), and by the rank of the issue at offering in the funded debt structure of the obligor (senior, intermediate, or junior to other securities).

1. Secured issues—Issues backed by a mortgage on real property, by collateral (stocks and bonds), or by a combination of collateral and leasehold (the right to occupy real property under a rental agreement, usually running beyond the maturity of the bond issue), or of either or both and a mortgage. In tables on lien position in this report secured issues are classified by rank of issue as follows:
   a. Senior—when the obligor's funded debt includes no security with a lien prior to the issue in question.
   b. Intermediate—when the obligor's funded debt includes an issue with a lien prior to the issue in question and another issue, either unsecured or secured by a lesser lien. Intermediate (secured) issues were combined with secured senior issues to form the category "senior liens" in certain tables in *Corporate Bond Quality*.
   c. Junior—when the obligor's funded debt includes an issue with a lien prior to the issue in question but no unsecured issue nor secured issue with a lesser lien.
2. Unsecured issues (debentures)—Residual claims on assets that rank equally with the claims of the general creditors. Unsecured issues are further classified by rank as follows:
   a. Senior—when the debentures comprise the entire funded debt of the obligor.
   b. Junior—when the obligor's funded debt includes secured issues.
3. Type of security—In tables on lien position in

this report secured issues are classified by type of security as follows:

a. Mortgage—those secured solely by a lien on real property.
b. Collateral—those secured solely by stock and bonds.
c. Combination—those secured by a combination of mortgage and collateral, or by either or both and a leasehold (lease contract).

LIFE-SPAN YIELDS—Yields realized from offering to extinguishment.

LOSS RATE—A derived measure obtained by subtracting the realized yield from the promised yield. Although calculated in that way, for some purposes it is more conveniently thought of as an adjustment factor applied to the promised yield to obtain the realized yield; or as the retrospective analogue of the market rating (a prospective quality measure) in that it is what the market rating would have been if investors had possessed perfect foresight. (Perfect foresight implies complete knowledge of the payments to be received and correct pricing of issues in the market, or at offering.) The loss rate measures the average annual rate of capital loss, or, if negative, capital gain.

LOW-GRADE BOND ISSUE—An issue rated V-IX by the agencies, or not legal for savings bank purchase in Maine, Massachusetts, or New York, or having a market rating of one percent or over. *See* Agency Rating, Legal Status, *and* Market Rating.

MAJOR INDUSTRY—Railroads, public utilities, and industrials. (*Also see* Minor Industry.)

MARGIN OF SAFETY—Ratio of Net Income to Gross Income, *which see.*

MARKET APPRECIATION, PERIOD OF—A period when yields on both high- and low-grade bond issues are falling. In such periods, yields frequently fall faster on low grades than on high, so that yield spreads narrow as low grades cluster around the basic yields on high grades.

MARKET DEPRECIATION, PERIOD OF—A period when yields on both high- and low-grade bond issues are rising. In such periods, yields frequently rise faster on low grades than on high, and yield spreads widen.

MARKET PRICE AT DEFAULT—The average of monthly high and low sale prices or monthly high bid and low asking prices for the three-month period following default (or if default occurred in the first fifteen days of the month, for that month and the two following months), expressed as percent of par.

MARKET PRICE FOR OUTSTANDING ISSUES—The average of monthly high and low sale prices or monthly high bid and low asking prices for the first quarter of the indicated year, expressed as percent of par.

MARKET RATING—The yield spread or algebraic difference between the yield promised to maturity on a particular security on a particular observation date and the yield promised on the very best grade of corporate bonds then outstanding with the same term to maturity. Because of special factors (call provisions, conversion features, etc.) the market rating may occasionally be negative (promised yield less than on the best corporate bonds outstanding with the same term to maturity). The market rating is the prospective analogue of the loss rate, *which see.* In the tables on market rating, issues are classified as having "no rating" when:

1. The issue was in default on the given date, or
2. Information was not available on price or term to maturity so that the promised yield could not be computed, or
3. The term to maturity was less than one year. (Basic yields could not be determined with reasonable accuracy for such maturities.)

MATURITY, TERM TO—The number of years from date of offering to date of maturity; or, on outstanding issues, the number of years remaining to maturity (not computed for issues outstanding in default). (Date of maturity refers to the date specified in the bond contract for repayment of principal, not to the date of actual extinguishment.)

Obligations maturing in less than one year from the date the loan was made are excluded from these studies.

MINOR INDUSTRY—The classification by minor industry for industrial issues is identical with that given by the Central Statistical Board in *Standard Industrial Classification* (Washington, 1939), principal divisions A-E, and H, exclusive of "government." Their financial division (section F) is excluded, except for lessors of real property in the extractive, railroad, and public utility groups (industry codes 7131-7134) and holding companies (codes 6611, 6621, and 6631), which are classified in these reports under the principal activity of the lessee or operating company. Section G of the *Standard Industrial Classification* (transportation, communication, and other public utilities) is subclassified in our studies into rails and public utilities. The rail classification consists of two classes: companies operating passenger or freight railroads; and companies performing services incidental to railroads, such as terminals, stockyards, transfer lines, bridges and tunnels. The public utility classification consists of four groups for companies performing only a single service: electric excluding other services, gas, communication (telephone and telegraph being classed as a single service), and street railways (including bus and trucking concerns). In addition, there is a group for public utilities distributing electricity as well as other services; and a catch-all group of miscellaneous utilities, including companies combining services other than electricity, as well as water companies, storage warehouses, bridges, canals, and other transportation systems (excluding railroads and companies performing services incidental to railroads).

MORTGAGE BONDS—*See under* Lien Position, Type of Security.

NET CASH FLOW FROM PRIMARY CAPITAL TRANSACTIONS IN CORPORATE BONDS—The difference between gross cash proceeds at offering and gross cash payments at extinguishment. (*See* Cash Payments ... *and* Cash Proceeds ...)

NET CHANGE IN DEFAULTED OUTSTANDINGS (par amount)—

1. Difference between outstandings in default at the beginning and end of a period, or
2. Difference between new defaults and default settlements during a period, or
3. Difference between interest and principal defaults and the settlements of such defaults (obtained by subtracting noncontractual exchanges and contract modifications from both defaults and settlements).

The relationship between the net change and the component series in definition 2 above is explored in *Volume of Financing*, Chapter 5. A similar analysis based on the components of definition 3 would not yield materially different results from the one already worked out.

NET CHANGE IN HIGH- AND LOW-GRADE OUTSTANDINGS—First difference in the annual amounts outstanding that were rated high or low grade by the agencies, state banking boards, or the market. *See* High-grade Bond Issue *and* Low-grade Bond Issue.

NET CHANGE IN OUTSTANDINGS (par amount)—

1. Difference between outstandings at the beginning and end of a period, or
2. Difference between offerings and extinguishments during a period, or
3. Difference between gross new-money offerings and repayments (obtained by subtracting bond refundings from both offerings and extinguishments).

The relationships between the net change and the component series in definitions 2 and 3 above are explored in *Volume of Financing*, Chapters 2 and 3.

NEW-MONEY OFFERINGS—In these studies new-money offerings refer to straight bond issues only.

1. Gross new-money offerings—difference between total offerings and bond refundings.
2. Net new-money offerings—difference between total offerings and total refundings or gross new-money offerings and "other" refundings.
   a. Net new-money offerings for nonfinancial purposes—Net new-money offerings less bonds offered to acquire securities for affiliation or investment. Consists of bonds offered for the construction or purchase of new plant, equipment, and improvements; for the acquisition of existing property; for expansion of net working capital; and for general corporate purposes.

NONCASH EXTINGUISHMENTS—Issues extinguished by conversion, exchange for other securities, or contract modification without a partial cash payment.

NONCASH OFFERINGS—Bonds offered in exchange for other bonds, for other types of securities such as shares of stock, dividend liabilities, or construction bills, and for miscellaneous noncash assets; also old bonds substantially modified as to coupon rate or maturity date. To the extent that the bondholder in effect receives a new (straight) bond issue in exchange for an old one, contract modifications are treated as both offerings and extinguishments (of straight bonds).

NONCONTRACTUAL EXCHANGES AND CONTRACT MODIFICATIONS—*See* Exchanges and Contract Modifications, Noncontractual.

OFFERING, BOND—Any part of a bond issue sold (or given in an exchange) by the issuing corporation at a particular time. Offerings are classified as follows:

1. Irregular offerings—contract modifications and exchanges growing out of corporate reorganizations.
2. Regular offerings—all other offerings.

OFFERING PRICE—The price given in the advertisement (expressed as a percent of par). It includes fees and commissions paid by the issuing corporation to the underwriters. Refers to cash offerings only.

OFFERINGS EXPERIENCE SAMPLE—All offerings in the underlying sample of large and small issues for which realized yields could be computed from offering to extinguishment (or, in the case of issues extinguished by noncontractual exchange during corporate reorganizations, etc., through five years of the life of successor securities), or from offering to the end of 1943.

OTHER REFUNDINGS—*See under* Refundings.

OUTSTANDINGS, BOND—*See* Amount Outstanding. Growth and retardation rates in total amount outstanding are analyzed in *Volume of Financing*, Chapter 2.

Outstandings in Default—Upon failure to pay interest or principal at the time or in the amount specified in the bond indenture, an issue is outstanding in default until the amounts due are paid or other settlement is negotiated. (Noncontractual exchanges and contract modifications never appear among outstanding defaults, since the dates of default and settlement coincide.)

Par Amount—The dollar amount that the obligor contracts to pay at maturity (usually $1,000 for the individual pieces of an issue).

Partial Extinguishments—*See under* Extinguishments, Bond.

Period of Investment—The period over which the investments are assumed to have been held:

1. Chronological—The four-year periods, 1900-1903, 1904-07, and so on, and selected combinations thereof, starting in each case on January 1 of the initial year and ending on December 31 of the terminal year. An issue was included in a chronological period for yield analysis if it was in good standing at the beginning and had a contractual maturity date later than the end of the period, and if information was available for the computation of the realized yield. Note that issues actually extinguished during a period were not excluded, provided the maturity date specified in the bond contract was later than the end of the period.
2. Natural
   a. Life-span—from offering to final extinguishment, except when extinguished by noncontractual exchange during corporate reorganizations, etc., in which case the successor securities were assumed to have been held for five years or until such earlier time as the successors were liquidated for cash. In calculating realized yields, securities still outstanding on January 1, 1944 were assumed to have been liquidated on that date. For regular offerings, life-span realized yields are classified in the tables of this report by selected periods of offering and extinguishment.
   b. Up to default—from first offering to default.
   c. After default
      (1) from default to extinguishment (or January 1, 1944) including five years' experience on successor securities
      (2) from default to two or five years later on issues still outstanding at the end of those periods
      (3) for five years on successors—from extinguishment by exchange or contract modification to five years later, or to liquidation of the successors by cash principal repayment, or to the end of 1943, whichever earlier.

   Promised yields were not computed for the periods after default. Discounted values of receipts after default were computed over the period from default to extinguishment (or January 1, 1944), including five years on successor securities.

Periodic Experience Sample—All issues in the underlying sample of large and small issues in good standing at the beginning, and having contractual maturity dates later than the end, of four-year periods starting January 1 of the quadrennial years 1900, 1904, etc. (or of eight-year or longer periods beginning on one of the quadrennial dates), for which realized yields could be computed over at least one of the periods. Note that issues actually extinguished during a period were not excluded, provided the maturity date specified in the bond contract was later than the end of the period.

Price—*See* Market Price *and* Offering Price.

Private Placements—Cash offerings specifically designated as privately placed in the manuals, plus those in which fewer than twenty-five investors participated.

Promised Yield—The yield that would be obtained by the investor under the bond contract if the issue were paid in full at maturity with no prior delay in the payment of interest. Computed at offering, and for issues in good standing at the beginning of the chronological investment periods.

Public Utilities—For types of industry included, *see* Minor Industry.

Railroads—For types of companies included, *see* Minor Industry.

Rank of Issue—*See* Lien Position.

Ratio of Net Income to Gross Income—Ratio of net income available for distribution to stockholders (dividends plus retained earnings) to the gross operating income before any deduction for expenses or charges, both averaged over the full five years preceding the year of offering.

The ratio was not computed for guaranteed issues, issues of companies deriving their major income from rentals, or for railroads when the requisite earnings statements reflected years of federal operation (1918-20).

Real Estate Mortgage Bonds—Bonds secured by office buildings and residential property are excluded from the Studies in Corporate Bond Financing. Bonds secured by garages, hotels, and theatres are included with industrials under the minor category, "service industries"; and bonds issued by lessors of real property are classified under the principal activity of the lessee company.

REALIZED YIELD—The annual rate of return obtained by the investor over an assumed period of investment, after taking account of call premiums, default losses, etc., based on the price paid at the beginning and received at the end of the period, and the full record of cash receipts in the interim. Realized yields were computed by the method of semiannual compounding except for (1) negative yields and (2) periods beginning with date of default or date of exchange for successor securities. In these special cases the method of simple interest was used.

RECEIPTS AFTER DEFAULT, DISCOUNTED VALUE OF—The "present value" on date of default (expressed as a percent of par) of all subsequent receipts of interest and principal up to the date of cash liquidation, or up to five years after extinguishment in the case of securities exchanged for successors. Liquidation of successor securities by sale in the open market five years after the extinguishment of the original issue was assumed, in the event that the successors had not already been liquidated for cash. Sale in the open market was also assumed for securities still outstanding at the end of the period studied (January 1, 1944). In computing discounted values two different rates of discount were used, 3 percent and 6 percent, with interest in each case compounded semiannually. The use of the two discount rates permits rough estimation of discounted values for other assumed rates of discount.

The difference between market price at default and discounted value of receipts after default provides an estimate of the lump-sum capital gain or loss (at an assumed rate of discount) for bonds purchased at default.

REFUNDINGS—Bonds offered to refund or replace other securities of the same obligor or of its predecessor or affiliate. In these studies refundings refer to straight bond issues only, and are classified as:

1. Bond refundings—to replace other (straight) bonds. Canceled out of both offerings and extinguishments, they leave (straight) bond outstandings unchanged.
   a. Involuntary bond refundings—all contract modifications and all exchanges for the purpose of correcting or avoiding a default.
   b. Voluntary bond refundings—all other exchanges and all cash offerings the proceeds of which were used to retire straight bonds at maturity or by call.
2. Other refundings—to retire preferred stock, income or serial bonds, equipment obligations, or unfunded long-term debt.

REGULAR OFFERINGS—*See under* Offering, Bond.

REPAYMENTS—The difference between total extinguishments in a given period and bond refundings. In these studies repayments refer to straight bond issues only. They include bonds retired with funds procured from any source other than the sale of straight bonds, bonds extinguished by exchange for other than straight bonds, and small amounts of bonds adjudged worthless.

SECURED ISSUES—*See under* Lien Position.

SENIOR ISSUES—*See* Lien Position, *under the subentries* Secured issues *and* Unsecured issues.

SERIAL BONDS—Bond issues in which contractual maturities are spaced over a span of years, the separate parts of the issue usually maturing regularly over time (annually or semiannually). Equipment obligations are mostly of this type, but are considered as a separate category in these reports. Groups of bonds secured under a single indenture but distinguished, say, as series A, B, and C bonds, possibly with different maturities, are treated in these studies as separate straight issues. Series bonds (as distinguished from serial bonds) are usually offered at different times, and reflect different money market conditions. Aggregate estimates for serial bonds are presented annually in Table A-4 in *Volume of Financing* and included in Table A-1 of that book; but serial bonds are excluded from other tables of the Studies in Corporate Bond Financing.

SETTLEMENT, DEFAULT—Cancellation by a majority of the bondholders of their claims against the obligor for overdue payments. A default settlement occurs when a defaulted issue is either restored to good standing or extinguished. When the act of default consists in a noncontractual exchange or contract modification, the date of settlement is coincident with the date of default.

SETTLEMENT, NATURE OF—Classification of defaulted issues by settlement plan accepted by the majority of the bondholders. In tables on nature of settlement, defaulted issues are classified as follows:

1. Restored to good standing—includes cases in which overdue interest was or was not paid in full.
2. Extinguished by
   a. Cash payment—includes payment in less than contractual amount, payment in full after maturity, and payment in full before maturity when principal declared due by the trustee
   b. Exchange—contract modified by change in coupon rate or maturity date, or issue exchanged for new securities with or without a cash payment. When the original default

took the form of a noncontractual exchange, this was also the form of the settlement.

3. Not settled by 1944—issue still outstanding in default at close of period studied.

SINKING FUND PROVISION—The proportion of the issue that would be retired by sinking fund by the date of maturity if the obligor made the minimum periodic contributions required by the indenture. In the tables on sinking fund provision the proportions are distributed into the four classes:

25 percent or less
Over 25, to 50 percent
Over 50, to 75 percent
Over 75 percent

Issues for which such information was not available are classified as follows:

1. Funds not confined to given issue—The bond indenture permits investment of sinking fund monies in physical property or improvements or in other bond issues of the same or other obligors (except U.S. Government bonds and legals); or, under certain conditions, reversion of funds to the obligor.
2. Amount of required contributions entirely contingent—The indenture states that contributions to the fund shall be a certain percentage of a variable factor such as earnings, ton miles, sales, etc. (If, in addition to such contingent contributions, a minimum periodic contribution is required, the issue is classified according to that minimum rather than as entirely contingent.)
3. Amount of required contributions not defined—Includes a few issues for which the sinking fund formula was defined but was extremely complex.

SIZE OF ISSUE—

1. The aggregate par amount offered to and taken up by the investing public throughout the life span of the issue (i.e. the sum of all offerings). On that basis, all issues were separated into two samples, Large Issues and Small Issues, *which see.*
2. The corresponding category in the tables on outstandings is called amount outstanding, *which see.*

SIZE OF OBLIGOR—*See* Asset Size of Obligor.

SMALL ISSUES—Issues with total offerings of under $5 million.

SMALL ISSUES SAMPLE—A representative ten percent sample selected by arraying a card catalog of all small issues by year of maturity within year of first offering and pulling every tenth card. For the tables in the sections of this volume on Characteristics of Outstanding Issues and on Characteristics of Offerings and Extinguishments, "raising" factors for each major industry, year, and series (i.e. outstandings, offerings, and extinguishments) were applied to the individual issues in the small issues sample so that they summed to the universe totals. (In tables of number of offerings and extinguishments, however, raising factors for major industry were not used; see notes to Section II.) In *Volume of Financing* this was also done for total defaults, but the calculation of reliable raising factors was more difficult for defaults than for the other series, and the detailed data of the section on Characteristics of Defaulted Issues in this report did not warrant such a procedure. Accordingly, tables in that section and in the three sections on Measures of Experience show large issues and the small-issues sample separately, with no adjustment to universe totals.

SPREAD BETWEEN GROSS AND NET PROCEEDS—The total of bankers' discounts and other expenses of flotation expressed as a percent of gross proceeds.

STRAIGHT CORPORATE BONDS—All corporate bond issues whose coupon rates are partially or entirely fixed and that mature in a single lump sum, with the exception of equipment obligations. Straight corporate bonds accounted for between 90 and 95 percent of the par amount of all corporate bond issues outstanding during the years 1900-1944. Unless otherwise indicated, the data in the Studies in Corporate Bond Financing are for straight bonds only.

TIMES-CHARGES-EARNED RATIO—Ratio of the gross income of the obligor from all sources, less all expenses and taxes (including federal income taxes) but before the deduction of fixed charges, to the sum of the following: all fixed-interest charges whether on funded or unfunded debt; net rentals incurred for leased lines, terminal facilities, buildings, or equipment; and amortization of debt discount and preferred dividends of subsidiaries. The numerator of the ratio is an average of income over the five-year period next preceding offering, and the denominator is the actual fixed charges in the year following offering. The ratio was not computed for guaranteed issues, issues of companies deriving their major income from rentals, or for railroads when the requisite earnings statements reflected years of federal operation (1918-20). A negative ratio means that average gross income did not cover expenses and taxes.

TURNOVER RATE FOR BOND OUTSTANDINGS—Ratio of the par amount of extinguishments during a calendar year to the par amount of all the issues outstanding at the beginning of that year. The reciprocal of the turnover rate throws light on the average length of life of corporate bonds.

UNDERLYING SAMPLE OF LARGE AND SMALL ISSUES—100 percent of large (straight) bond issues and 10 percent of such small issues.

UNDERWRITERS' SPREAD—Spread between Gross and Net Proceeds, *which see.*

UNSECURED ISSUES—*See under* Lien Position.

UPGRADING AND DOWNGRADING OF BOND ISSUES, NET—The difference between the amount of high-grade issues outstanding at the end of a given year that were rated low grade at the beginning of the year and the comparable amount of low-grade issues formerly rated high grade. This is termed net upgrading if the resulting sign is positive, and net downgrading if negative. Since all issues were not rated throughout their lives and information was lacking on partial extinguishments, two variant series were developed:

Variant I = net change in outstandings − offerings + extinguishments (*all variables referring to high-grade issues*), and

Variant II = −(net change in outstandings − offerings + extinguishments) (*all variables referring to low-grade issues*).

See High-grade Bond Issue *and* Low-grade Bond Issue; also *Corporate Bond Quality*, pp. 162-170.

UTILITY HOLDING COMPANIES, PYRAMIDED: BONDS OF—Junior debentures issued in the prosperous twenties by high leverage electric light and power holding corporations having few mortgageable assets and a tenuous claim on the earnings of the underlying companies. Defaults were heavy on these bonds in the thirties, and prices at default and receipts after default were low.

VARIANTS OF UPGRADING AND DOWNGRADING—*See* Upgrading and Downgrading of Bond Issues, Net.

WARRANT PROVISIONS—The terms under which rights attached to a bond may be exercised by the holder for the purchase of other securities. Offerings are classified by warrant provisions in Tables 117-119 under two separate breakdowns as follows:

1. Warrant period—shorter than or equal to term of bond
2. Ratio at which exercisable:
   a. constant ratio—for the same number of shares throughout warrant period
   b. varying ratio—for varying numbers of shares at different times during warrant period (sometimes called "sliding-scale" arrangement).

All warrants were for the purchase of common stock (alone or with other securities) except one for preferred stock, attached to a large industrial issue with par amount of $8 million offered in 1926.

YEARS FROM DEFAULT TO EXTINGUISHMENT OR 1944—The number of years from default to extinguishment or terminal date of successor securities for issues extinguished before 1944, and from default to the beginning of 1944 for issues not extinguished by that date. The terminal date for successor securities is approximately five years after exchange, or the length of time the successors were outstanding, if less than five years. When the act of default consisted of a noncontractual exchange or contract modification, no time elapsed between default and extinguishment. (Such issues are included in the "less than 1½ years" column of Table 233.)

YEARS FROM DEFAULT TO SETTLEMENT—The number of years during which an issue was in default (i.e. the number of years from default to the acceptance of a plan of settlement by the majority of the bondholders). When the act of default consisted of a noncontractual exchange or contract modification, no time elapsed between default and settlement. (Such issues are included in the "less than ½ year" column of Tables 161, 162, 231 and 232.)

YEARS FROM OFFERING TO DEFAULT—The number of years from the first offering for which the offering date and price were known (or from January 1, 1900 if the issue was offered before that date) to the date when default occurred.

YIELD SPREAD—*See* Market Rating.

YIELD-MATURITY SCHEDULE—A curve (or tabulation) showing the relationship between the promised yields (basic yields) and maturities of highest-grade corporate bond issues, constructed annually from first quarter price data for purposes of the Studies in Corporate Bond Financing.