SURETY RATE-MAKING

An Approach to the Subject

BY

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Section Subjects

- 1. Almost a virgin field of inquiry.
- 2. Rate controversies numerous.
- 3. Adequate rates a vital necessity.
- 4. Origin of the present rating system.
- 5. State control of surety rates.
- 6. The theory of insurance rate-making.
- 7. Life, fire, and marine insurance.
- 8. Differences between suretyship and insurance.
- 9. Eight main classes of surety bonds.
- 10. Miscellaneous surety bonds.
- 11. An infinite variety of risks to be rated.
- 12. Certain surety-company lines excluded from this discussion.
- 13. No single rate theory applicable to all surety lines.
- 14. Objective differences between bonds and insurance risks.
- 15. Their contracts imposed upon sureties, but not upon insurers.
- 16. Many bonds uncancellable.
- 17. The contract incident of the bond of prime importance.
- 18. Suretyship more affected by business cycles than is insurance.
- 19. Surety experience data sometimes absent.
- 20. Surety premiums sometimes imperfectly measure the exposure.
- 21. Comparative loss possibilities.
- 22. Surety losses slow in maturing.
- 23. In some lines the selection is always against the surety.
- 24. Premiums not the sole resource in suretyship.
- 25. The indemnity of outside parties.
- 26. Collateral security.
- 27. The insurance rate theory and depository bonds.
- 28. The insurance rate theory and mortgage-guarantee bonds.
- 29. Bonds must be grouped for rate-making purposes.

- 30. Bonds written on a quasi-insurance basis.
- 31. The "service-charge" rate theory.
- 32. Intermediary rate classifications.
- 33. Fidelity rates.
- 34. Bankers' and Brokers' Blanket Bonds.
- 35. Contract Bonds.
- 36. Merit Rating.
- 37. How competition affects rate-making.
- 38. Rates are sometimes determined or limited by law.
- 39. Acquisition and other incidental costs.
- 40. The essence of it all.
- 41. The Towner Rating Bureau, Inc.
- 42. Interpretative analyses of loss statistics.
- 43. Apologia pro libello suo.

1. Almost a Virgin Field of Inquiry:

Although corporate suretyship has existed in the United States for sixty years as respects fidelity lines (indemnification for losses due to employees' dishonesty) and for forty-odd years as respects most of the other important branches of the business, very little printed material is available to anybody minded to make a study of surety rates. Mr. R. H. Towner, who founded the Towner Rating Bureau in 1909, and conducted it with brilliant success for twenty-eight years thereafter, is the outstanding authority on surety rates; and any bibliography on rate-making would consist of little more than citations to addresses of his, devoted primarily to broader aspects of suretyship but containing incidentally references to rates. In addition, state insurance departments have sometimes compiled tables of statistics showing premiums written and losses paid in various branches of suretyship. Almost always such exhibits have consisted merely of arrays of bare figures, with little or no comment or discussion of value in any thoroughgoing consideration of the theory of surety rate-making. This treatise, in fact, so far as the author knows, is the first prolonged effort in that direction (the word was selected because of its limited connotation). For that reason, if for no other, the author approaches his task with trepidation, half convinced in advance that he will view his completed work very much as Robert Louis Stevenson

regarded a certain textbook. When the professor propounded a question to his brilliant pupil and the latter stated that he did not understand the question, the professor replied, "Why, Mr. Stevenson, that is the very language used in your textbook." "I daresay," countered Louis, "but surely you would not expect one to read a book like that."

2. RATE CONTROVERSIES NUMEROUS:

While thoughtful, well-reasoned studies of the theory of surety rate-making have been singularly lacking, as indicated, and while the rates recommended by the Towner Bureau have been adopted and maintained from the beginning with notable consistency, it is nevertheless true that specific rates have been at times subjected to severe criticism. Dissatisfaction among producers of surety business (agents in the field) has usually been based on rather superficial reasoning—the contention has been that the hazards involved in the given situations were clearly insufficient to justify the premium charged; while the more important and responsible criticisms emanating from state insurance departments or similar public authorities have commonly been premised on premium-and-loss statistics concerned only with the given territory and thus of limited probative value.

Few surety underwriters would deem it safe to gauge the accuracy of a given rate merely by one's general idea of the loss possibilities involved. That is so because plenty of bonds that would seem to most people to be surcharged with trouble are found by experience not to be particularly hazardous; while plenty of others that appear innocent enough at first turn out to be highly dangerous. An example of the first type of risk may be found in the license bonds that real estate agents must give in certain statesbonds running in favor of the general public and guaranteeing that the principals will not be guilty of misrepresenting facts to their clients or otherwise dealing unfairly with them. In their zeal to effect sales real-estate agents have been known to emphasize unduly the merits of a given piece of property and otherwise to breach a broad bond of the kind in question; and one would expect such bonds to show a high loss ratio. In fact, while one notable instance to the contrary could be cited, the experience for years has been favorable, for the most part, and the rate is low.

An example of the other kind may be found in assigned-accounts bonds. Merchants and manufacturers who have accounts owing to them will sometimes assign such accounts to a banker and borrow money from him on the strength of such security. The assignment is not made known to the borrowers of the debtor, who will pay the borrower in due course; and the bond frequently required by the lender in such cases engages that the borrower will turn over promptly to the lender any amount so received from the debtors. The bond may also guarantee that the borrower will assign to the lender none but genuine accounts. The principals on these bonds are commonly well-established and reputable business concerns, and the surety company sustains loss only if the principal is grossly dishonest and is willing to run the risk of a state's-prison term and of permanent business ruin. On general principles the chance of loss would seem to be small, particularly as lenders adopt elaborate safeguards to protect their interests in the assigned accounts. Yet the experience of the surety companies with these bonds has been such that many companies will not touch them any more, notwithstanding the extremely high premium rate in force.

3. Adequate Rates a Vital Necessity:

While it is of prime importance, of course, in every branch of insurance that rates shall be sufficiently high to keep the insurers solvent and yet not so high as to yield excessive profit to insurers, that is pre-eminently true of surety companies. That is so because there is a difference of vast practical importance between insurance companies and surety companies as respects the effect upon policyholders and bondholders of insolvency on the part of the carrier. As for actual losses sustained prior to the date of receivership and discovered in time to be made the basis of claims filable with the liquidator, there is no difference—policyholders of insurance companies and obligees of bonding companies are in like sad case. When, however, we look behind these immediate claims, and consider the effect of insolvency upon all other policyholders and all other obligees, we find that the latter are far worse off than the former. In most kinds of insurance the insolvency of the insurer, while causing some loss and much inconvenience to nonclaiming insureds, does not as a rule work irreparable damage to

them. If a fire company, for example, or one providing automobile liability insurance, falls by the wayside, non-claiming policy-holders may lose a little premium, but they can quickly and easily procure equivalent insurance elsewhere. They have been temporarily inconvenienced, but that is all.

Nothing of the sort is true, generally speaking, of surety companies. When an old and large bonding company becomes insolvent and suddenly ceases to function, it will have outstanding thousands and thousands of contracts whereby under certain conditions, fulfilled in practice in numberless cases, it has agreed to pay enormous amounts of money to widows, wards, and many other classes of beneficiaries who will be grievously affected by the inability of the company to carry out its contracts. Some of these obligations, it is true, will be taken over by other companiesnew suretyship will be substituted for the old. That is true at best, however, only of bonds actively in force on the date of insolvency: it is not true as respects the multitude of bonds that have expired at that time, so far as future liability is concerned, but under which losses may yet come to light sustained within the period of active liability and still subject to claims. As we shall see later, many types of bonds contain no cutoff provision—claims may be made at any time after the bond terminates as to future occurrences, until the Statute of Limitations bars recovery; and many thousands of such bonds will be latently in force when a surety company goes into liquidation.

It is the existence of these latter bonds, whose latent liability will never be assumed by anybody and whose beneficiaries will thus be left stranded, that makes the insolvency of a surety company so much more disastrous than that of an ordinary insurance carrier. When a fire company, for example, that has been insuring a certain house goes to the wall, it is easy for another company to take over the risk, because the house is standing and there is no question about prior losses. When a surety company fails the situation is totally different, because, as respects the great bulk of its business, future losses constitute only part of the risk assumed by a new company, and past losses, unknown at the date of insolvency but certain to come to light sooner or later, will necessarily be covered by any new carrier. That is why it is not always easy to procure fresh suretyship, when a bonding company fails, even

as to risks in force and in good standing on the date of failure. It is quite impossible to procure coverage for the latent liability incident to the bonds issued by the insolvent company and terminated as to future losses on or before the date of insolvency: the beneficiaries of such bonds are helpless, without recourse to anybody, if losses come to light after the dead-line fixed by the liquidator for claim-filing has been passed.

How distressing and far-reaching are the results of suretycompany insolvency, as respects even indemnifiable losses and without regard to those just considered that can never by any possibility be recovered, may be seen from the fact that not until September, 1938, more than five years after a certain company was taken over for liquidation, was any dividend paid to claimants; and then only 10% was paid to only a part of them. Holders of about 70% of the claims so far allowed have received nothing whatever up to this date (November 1, 1938). In the case referred to about thirty-five thousand claims were filed with the liquidator, of which thirty-two thousand have been passed on. While it is true that distribution to claimants was delayed by legal conflicts among creditors, liquidation of assets and determination of liabilities is always a long process in these situations. Incidentally it is of interest to note that, while the claims filed aggregated originally \$250,000,000, it is expected that the amount of claims ultimately allowed will not much, if at all, exceed \$30,000,000.

4. ORIGIN OF THE PRESENT RATING SYSTEM:

That the importance of keeping surety companies solvent is realized by state insurance departments generally is shown by the way in which the Surety Association of America and the Towner Rating Bureau came into being. When only a few surety companies were operating, and there was business enough for all, competition stayed within bounds. Soon after the turn of the century, as more and more companies entered the field, there was no longer enough business to go around, and competition got completely out of control. The insurance commissioners became alarmed, particularly when their examinations of the companies revealed grossly inadequate reserves for losses in many cases and actual impairment of capital in not a few. Rate conditions were chaotic. "Such was the rivalry between the companies," wrote one commissioner,

"that we found any number of risks that were either written for nothing or at a nominal premium."

Under such conditions and when the bonding companies were headed straight for disaster, a number of surety companies, perhaps upon the initiative of and surely with the warm approval of courageous and far-sighted state insurance officials, formed the Surety Association of America, November 12, 1908. All the leading bonding companies joined the Association, and the senseless, suicidal scramble for business at any price gave way to orderly competition. The replacement of the earlier guesswork system of independent rate-making with one based upon dependable data and sponsored by competent authority was, of course, the primary purpose of the Association; and that purpose was accomplished on October 1, 1909, when the Towner Rating Bureau was organized and began to promulgate rates to all Surety Association companies based upon the aggregate experience and the composite underwriting judgment of such companies. For about thirty years now both the Surety Association and the Rating Bureau have continued to function in their respective fields with noteworthy efficiency and success.

5. STATE CONTROL OF SURETY RATES:

From the fact that almost all state insurance departments, with entire justification in the writer's opinion, have approved both the current system of surety rate-making and the practice of most bonding companies of quoting identical rates, it must not be inferred that public insurance authorities stop at that point, and sanction as a matter of course any and all rates that may be promulgated by the Bureau. Quite the contrary is the case. Supervising officials everywhere show a lively interest in rates, and not infrequently call upon the Bureau to justify given rates, by means of statistics or otherwise. Whether or not any specific law in the given state can be cited in support of such a position, all insurance commissioners, it may safely be asserted, deem it their duty to see to it that the rates charged by the surety companies are not unwarrantably high.

Fifty-eight companies were licensed as to surety lines in the state of New York in 1937, and ninety-odd percent, it is safe to say, of the bonding business of the country was done by those carriers. They were all, of course, subject to the supervision of the New York insurance department, as respects operations there. The New York law is quite specific as to the right and duty of the superintendent of insurance to examine surety rates and satisfy himself that they are fair to all concerned. Section 141-b, subdivision 6, of the New York Insurance Law reads—

"It shall be the duty of the Superintendent of Insurance, after due notice and a hearing before him, to order an adjustment of the rates on any risks or class of risks whenever it shall be found by him that such rates will produce an excessive, inadequate, or unreasonable profit."

By virtue of the foregoing provision the New York Superintendent of Insurance reserves the right to approve all rates made by the Bureau. In Illinois, Kansas, Montana, New Mexico, New York, Minnesota, Oregon, Utah, Virginia, Vermont, West Virginia, and Wisconsin the Towner Rating Bureau files with the appropriate insurance official, in behalf of its subscribers, every rate recommended by it. The rates so filed are accepted without either approval or disapproval at the time of promulgation; although tacit approval may presumably be inferred if no exception is taken. In Virginia changes in rates may not be made until a certain legal procedure has been followed and a final approval of the proposed new rate has been so secured. While no rates are filed in the remaining thirty-five states, it is thought that Towner rates are used there as a matter of course by Bureau subscribers. It is understood, however, by all concerned, that conference rules and Bureau rates are not binding upon companies as respects a few "anti-compact" states.

6. THE THEORY OF INSURANCE RATE-MAKING:

While, as we shall shortly see (cf. section 8), suretyship is not insurance, bonding companies are always regarded as insurance companies so far as state supervision of their activities is concerned. It is further true that both state officials and the public, in considering the propriety of surety rates, commonly use the same arguments and apply the same principles as those deemed controlling in the case of insurance rates in general. The present writer does not know upon what theory rates are made in most lines of insurance, his experience having been limited to the casu-

alty and surety branches of the business. As respects the casualty lines he abandoned all hope of attaining even a kindergarten understanding of rates when he learned that they were based on kinematic geometry, barycentric calculus, and tables of logarithmic trigonometrical functions, showing log sines and tangents to every ten seconds of the quadrant to ten decimal places. Moreover, he rather doubted the worthwhileness of attempting to understand the theory of casualty rate-making in current use when he found that in only four of the last eleven years (virtually only three) had the casualty companies operating in the State of New York (and doing, no doubt, the great bulk of the casualty business of the country) made any underwriting profit, and that their total net underwriting losses in that period (1927-1937) had aggregated about forty-one million dollars. Such a result somewhat suggested that the learned casualty rate-makers had failed to include in their occult calculations some important element of Einstein's theory of relativity.

While it is true that the fidelity and surety figures in the same period showed an aggregate net loss of twenty-five and a half million dollars, such results were wholly out of line with the prior experience; and in the last three years of the period the bonding companies made a remarkable recovery, their net underwriting profit then aggregating forty-two million dollars, or 18.6% of their earned premiums in the three years 1935-37.

"He who knows but one language," says Goethe, "does not know even that one"; and it is doubtless true that one could understand surety rates better if one knew all about the rates for fire, life, marine, and other branches of insurance. Fortunately, however, it is not necessary for the purposes of our immediate inquiry to know much about these other rates. We are more concerned with the results produced by the given rates, however they are determined, and with the way in which such results are interpreted by public insurance authorities. In practice such authorities commonly proceed as follows: from tables of statistics covering a term of years and showing the actual experience of all the companies insuring a given hazard two items are selected as ratebasing points of pivotal importance—losses incurred and premiums earned. From the latter are deducted taxes, reasonable acquisition and managerial costs, and a fair profit. If the remainder is

about equal to the losses incurred, the rates that produced the given premium fund are, as a whole, regarded as fair to all concerned. Any marked difference either way is deemed to justify a corresponding revision of rates.

7. Life, Fire, and Marine Insurance:

These three important lines of insurance exemplify the foregoing method of rate testing. People who survive pay the beneficiaries of life insureds who pass on; the owners of property that remains intact pay for that destroyed by fire; ships that arrive pay for those that never reach port. It is true, of course, that this last statement, frequently made in substance, requires qualification; because in all the three lines referred to the losses paid have previously to some extent been antecedently and anticipatorily collected upon the policies involved. Yet that statement would seem to be true, generally speaking. Anyway, as a practical matter and having in mind at the moment only the attitude of public officials who must approve insurance rates, it is apparently the case that so long as the premiums received in the given classification are sufficient to pay the losses and incidental costs chargeable to such classification and not much more, the rate situation is deemed satisfactory.

For reasons easy to understand such a method of appraising the propriety of rates has worked well in certain lines of insurance. It should work well wherever the conditions that produce the given results are stable and likely not to change abruptly, and especially when such changes as may occur are likely to be favorable from the standpoint of the insurer and to improve the experience. Life insurance is a conspicuous case in point, because the constant advance in medical science has affected profoundly and for the better the experience underlying the mortality tables concerned with life insurance rates. Numerous powerful therapeutic agents that save and prolong lives were unknown when the rates currently used (in part at least) by life actuaries were determined. The death rate per thousand of American white males is less than half what it was thirty years ago. In 1901 the life expectancy of Americans at birth was 49.24 years, while in 1935 (the latest year for which figures are available) a white girl born then in the United States was destined to reach an age of 64.72 years. Life

underwriters, therefore, basing their rates in great part on tables recording an experience that is virtually certain to show continual improvement operate under an automatic margin of safety.

"Time and I against any two," said Philip II of Spain. Fire underwriters may feel similarly serene when confronted with bad breaks, because time is surely on their side. No conflagration of appalling magnitude has afflicted the fire companies of the United States for more than thirty years, and fire-prevention and fire-controlling facilities are all the time becoming more effective. Life, fire, marine, and various other types of insurance have nothing to fear from a method of rate-making based on an experience fairly certain to show continuous improvement.

What bearing has all this on our immediate problem? Because rates are shown by statistical tables embodying the experience of insurance operations to be dependable and satisfactory in the case of certain classes of insurance, must we conclude that the same process of rate testing is applicable to suretyship? Not in the least. That is so because suretyship is not insurance, and because it would clearly be unwise to make the inference suggested before we have ascertained what suretyship really is, and have considered whether or not it so far differs from insurance that rate-making principles appropriate to the latter cannot safely be applied to the former. Our next inquiry, therefore, may well concern this point.

8. Differences between Suretyship and Insurance:

The statement is frequently made, by both laymen and lawyers and even at times by our learned courts, that contracts of corporate suretyship are contracts of insurance. Even learned courts, however, cannot by mere decree make a thing what it isn't; and suretyship is certainly not the same thing as insurance. What they can do, and have done in countless cases, when the bond in suit was executed by a compensated corporation rather than by private sureties, actuated by motives of friendship or accommodation only, is to interpret the bond broadly and in such a way as to effectuate its primary indemnifying purpose, even at the cost perhaps of rather doubtful or at least ingenious reasoning—to treat the bond in that respect as if it were a veritable policy of insurance.

In fact suretyship and insurance differ markedly in a number of important ways. In the first place, there are only two parties to a contract of insurance, the insurer and the insured, while there are always three parties to a contract of suretyship—the obligee (corresponding to the insured in the other case), the principal or immediate obligor, and the surety or co-obligor (corresponding to the insurer). Secondly, an insurance contract does not ordinarily depend for its validity or existence upon any related or incidental contract, while an agreement of suretyship always has to do with some collateral contract—either an explicit, written contract or one imperatively implied in the given situation. So true is this latter, indeed, that if a contract of suretyship is intended and supposed to have been made, and if it is subsequently found that the presumed collateral contract did not in fact exist, the whole thing is off so far as the bond is concerned and the surety cannot be held.

Still another difference between suretyship and insurance—this one extremely important in practical underwriting—is that in the case of most kinds of insurance losses are absolute, generally speaking, and are never recoverable, while in the case of suretyship, as respects numerous classes of suretyship pure and simple, losses are theoretically impossible and in practice they should be relatively rare and small. It is an astonishing fact that this last difference, although fundamental and even antipodean, is not readily grasped by the bond-buying public. One may go further. indeed, and say that many insurance underwriters have difficulty in assimilating the idea. That comment, of course, has no applicability to any member of the Casualty Actuarial Society. Certain it is, however, that many a casualty underwriter outside this membership, when considering the advisability of writing a given bond, is so obsessed with the notion that a breach of the bond will mean a permanent loss that he fails to give proper weight to the element of safety involved in the obligation of the principal to keep the surety harmless. The writer has talked with many surety men about this peculiar and interesting point, and he has yet to find one who has not suffered (the word is used advisedly) from this regrettable deficiency in the underwriting equipment, otherwise above par, of our distinguished colleagues in the casualty field.

While the foregoing statements about suretyship concern bonds

of every character (as distinguished from policies of insurance), they are particularly relevant to bonds of certain types, and they require qualification when applied to bonds of other kinds. It seems desirable, therefore, to define briefly at this point the various groups of bonds that have to do with the different branches of corporate suretyship.

9. Eight Main Classes of Surety Bonds:

a. Fidelity Bonds: Executives, tellers, bookkeepers, and all other employees of financial institutions are commonly required nowadays, as a condition precedent to admission to the staff, to furnish fidelity bonds—guarantees that they will be guilty of no dishonesty in the performance of their duties. The same thing is true, in diverse degrees of completeness, with the officers and other employees of public-service corporations, beneficial associations, fraternal orders, and a great variety of mercantile and manufacturing concerns. More and more, in every walk of life, are fidelity bonds coming to be regarded as a natural and essential incident of the given positions.

In this case, of course, the principal on the bond is the employee and the obligee is the employer. That is true, too, even in the numerous cases where no individual bond is issued in which an employee is named as principal, but where a single instrument covers the entire staff of the employer—a schedule fidelity, bankers' or brokers' blanket, commercial blanket, or blanket position, bond.

In 1937 the fidelity branch of the business produced about fortyeight percent of the entire surety volume of the bonding companies for that year.

b. Public Official Bonds: Almost everywhere persons holding public office are required by law to give a bond conditioned for their faithful performance of duties. Since the words "faithful performance" are always interpreted by the courts in an exceedingly broad way, these bonds are necessarily wide-open instruments. All the money of the political body that the official receives, or would receive if he discharged his duties properly, must be paid over or duly accounted for to such body; and if the official fails to do that, no excuse whatever, generally speaking, other than

an act of God or the public enemy, will absolve the official or his surety from liability. It is undeniably true that when surety companies bond a public official their obligation includes a negligence bond, a fidelity bond, a theft policy, a burglary policy, a fire policy, a depository bond, and other kinds of insurance and suretyship. Public Official bonds provide about 7% of the entire surety premium fund.

c. Contract Bonds: These are instruments by means of which a surety company guarantees the performance of contracts in accordance with their specifications. Such bonds are as varied in character and loss content as are the multitudinous forms of contracts that people are all the time undertaking. They cover, for example, the construction of highways and viaducts, the digging of sewers and subways, the building of bridges and battleships, and so on to an indefinite extent.

When contracts are about to be awarded a frequent requirement is that each bidder shall file with his proposal a bond guaranteeing that he will furnish, in case the contract is given to him, a further bond conditioned for his performance of the contract in accordance with its terms. Bid bonds are thus embryonic contract bonds, and involve, prospectively and conditionally, all the hazards of the latter. Bid bonds, indeed, would be more important and more dangerous than contract bonds themselves, except for the fact that only one of all the bid bonds issued in connection with a given contract ever results in a final bond. They are more dangerous because one exceedingly important underwriting factor, information about competitive bids, that materially affects one's decision over the acceptance or rejection of a final contract bond is necessarily absent in the case of proposal bonds.

At one time contract bonds constituted the most important branch of the surety business, and produced about one-third of the entire premium fund. In recent years, however, the construction industry has been far from flourishing and the revenue derived from this source by the bonding companies has correspondingly declined.

d. Bankers' and Brokers' Blanket Bonds: These wonderful aggregations of suretyship and insurance, issuable in favor of bankers, stockbrokers, and many kinds of financial institutions,

indemnify insureds for losses due to a wide variety of mischances, describable briefly and incompletely as dishonesty on the part of employees and general wrongdoing on the part of the outside public (larceny, theft, burglary, holdup, forgery, etc.). A dozen or more forms of these bonds, adapted to the particular needs of the various types of insureds, are available. This division of the surety business is now producing about twenty percent of the annual premium fund of American companies.

- e. Judicial Bonds: Attachment, replevin, costs, supersedeas, and many other kinds of judicial bonds are required by lawyers in connection with litigation, as well as with legal matters not involving court procedure. From the moment a litigant begins to thread his tortuous way through the mazes of an interminable lawsuit until judgment is handed down in a court of last resort judicial bonds of some kind are likely to be required. While some of these bonds are simple instruments, easily comprehended, others are called for by complicated forensic situations that are hardly understandable by a layman, except perhaps after prolonged study, as regards their legal involvements and resultant loss possibilities. Judicial bonds are comparatively unimportant so far as volume of business is concerned, but they are hard to underwrite understandingly and successfully. They constitute only 5% or so of the entire volume.
- f. Depository Bonds: The principals on these bonds are banking institutions organized under either Federal or state laws, and the condition of the bond is that the given bank or trust company will repay on due demand money deposited with it by the obligee, usually some state, city, or similar political body. At one time premiums from this source aggregated five or six million dollars a year. The experience ultimately became so disastrous that about all the companies withdrew from the field for a year or two. While some companies now write the line, on a pretty restricted basis, the premiums are now of negligible amount. Since the conditions as respects both sureties and principals are far from favorable to the growth of the business, this division of suretyship seems likely not soon, if ever, to attain its former importance. We mention it, however, because the experience has profound significance, as we shall see, in connection with our inquiry.

g. Fiduciary Bonds: These bonds are given by administrators, executors, guardians, conservators, testamentary trustees, and other like fiduciaries. They are primarily fidelity instruments—that is to say, the chief element of risk to the trust estate and to the surety company lies in the possible dishonesty of the executor, guardian, or other fiduciary. The bonds, however, involve vastly more than a mere fidelity hazard; and it is entirely true that a fiduciary may default, and his surety may suffer a heavy loss, when there has been absolutely no dishonesty or even bad faith of any kind or degree on the part of the fiduciary. An executor, for example, may invest his trust fund or a part of it in a way not authorized by law, with resultant loss to the estate; he must make good such loss to the estate, however well-intentioned he may have been, however innocent of any purpose to be false to his trust.

A fiduciary, therefore, must be much more than merely honest. He must show diligence and zeal in assembling the assets of the trust estate; he must be vigilant in protecting such assets after they have been collected; he must disburse them only as valid debts, court orders, or the will or trust deed may require; he must do everything in rigid accordance with the law governing the administration of estates, and ignorance of the law will not in the least absolve him from liability; and if he default as to any part of these comprehensive and unmodifiable obligations, whether or not such default is due to dishonesty, he or his surety must make good to the estate any resultant loss.

All fiduciary bonds fall within one or the other of two classes that present somewhat different problems as respects rate considerations. The first class embraces all those fiduciaries, such as administrators, executors, receivers and trustees in bankruptcy, and guardians ad litem, who merely liquidate the trust estate, assembling and distributing the net assets thereof, if any. The second class embraces those fiduciaries, such as committees of incompetents, guardians of minors and others under disability, and trustees under wills or deeds of trust, who not only assemble (or at least receive) the assets, but who also preserve and invest them in connection with current partial distribution. Bonds issued in behalf of these latter fiduciaries are more hazardous as a rule than bonds covering the first class, not only because the duties and obligations of the fiduciaries are likely to be more onerous in

the latter case, but also and especially because the period of liability and consequent chance of adverse developments is usually much longer. The first class of bonds ordinarily remains in force for a comparatively short term. Administrators and executors, for example, commonly complete their work in a year or so. Fiduciaries of the second class, however, may obviously be years in discharging their trust.

The following three fundamental considerations apply to almost all fiduciary bonds:

- (1) Character of the fiduciary: Since fiduciary bonds are primarily fidelity instruments, it follows that the character of the fiduciary is an underwriting factor of high importance. If, accordingly, the investigation of a proposed principal's character and career discloses unfavorable features, the bond will be rejected as a matter of course and without regard to other considerations. This point, however, is of theoretical rather than practical importance, because fiduciaries are altogether likely to be persons of excellent character. A testator selects his executor, and the probate court appoints the administrator, largely in both cases because the fiduciary is known to be a person of high character; and for like reasons other classes of fiduciaries are almost always desirable principals so far as their character is concerned. In practice fiduciary bonds are rarely rejected because of flaws in the personal credentials of the applicants.
- (2) Character of the fiduciary's attorney: Underwriters attach great importance to the character and professional attainments of the attorney who is to act for the principal in the administration of the trust estate. That is so, of course, because of the fact that legal questions, sometimes of a rather complex and difficult nature, are all the time coming up in the course of the administration of the trust estate, and must be answered correctly at the peril of the fiduciary and his surety. So important is this underwriting factor in the judgment of many underwriters that they would much rather write a bond for a somewhat weak principal represented by a lawyer famous for his expert and careful probate practice than one for a strong principal represented by an attorney of mediocre talent. Hardly any underwriter would care to provide fiduciary

suretyship for a principal represented by an attorney of dubious reputation, however good the principal's own credentials might be. Fortunately there are legal directories that show with remarkable accuracy the standing of about all the attorneys in active practice in the country, except in the largest cities.

(3) Joint Control: An administrator or other fiduciary holds the legal title to securities and other assets, and so far as third parties are concerned he is the absolute owner thereof. If, therefore, he is permitted to have sole control of the assets, he may do with them what he will, and his surety will be helpless. A dishonest fiduciary, or even an honest but ignorant and incapable one, may easily under such conditions dissipate the trust estate. Experience has abundantly shown that under circumstances continually arising in practice fiduciary bonds cannot prudently be written unless the fiduciary will permit the surety to have joint control over the assets of the trust estate.

The securing of joint control is more or less a futile procedure unless such control be exercised vigilantly and continuously. Strange as it may seem, surety companies not infrequently suffer substantial losses because their joint-control representatives do their work in a careless, helf-hearted manner, and consent to the unlawful and improper disposition of the trust funds. Since a surety is responsible not only for a fiduciary's intentional wrongdoing, but also for his errors and mistakes, regardless of his worthy motives, the extreme importance of this aspect of the matter is obvious.

While joint control is always acceptable, in many cases highly desirable, and under certain conditions absolutely essential, the circumstances are frequently such that joint control will be waived if the business cannot otherwise be secured. Where the fiduciary is a woman, however, or a mechanic, perhaps, presumably unaccustomed to business and legal affairs, or where the bond is a large one, or where the term of the bond is likely to continue beyond two or three years, most underwriters rarely feel able to write the bond without joint control.

h. License and Permit Bonds: The Federal Government and the several states to some extent, and towns and cities to a large extent, require persons who wish to engage in certain kinds of business (auctioneers, junk-dealers, and pawnbrokers, for example) or to do certain things (e.g., to excavate a street, place building material on sidewalks, install a swinging sign), first to file a license bond covering the given business or a permit bond authorizing the given act. This is an interesting and somewhat important field of suretyship, as a multitude of standard bonds of this class have long been in existence, and as new varieties are all the time appearing. To list them all would be like cataloging the Homeric They range from grave to gay, from lively to severe. Embalmers, for example, and handlers of unclaimed dead bodies, must give bond in certain jurisdictions. So, in other places, must collectors of birds, nests, and eggs; oyster and clam dredgers; manufacturers and vendors of lightning rods; carriers of concealed weapons; dealers in hog-cholera serum; practicers of the "art, business or profession of fortune telling," the bond in the last instance indemnifying patrons for losses due to "theft or other unfair dealing" upon the part of the licensee.

10. MISCELLANEOUS SURETY BONDS:

The foregoing eight groups of bonds comprise the major lines of suretyship, and account for the bulk of the aggregate premium fund. In addition there are numerous special types of bonds, most of which could really be classified, because of their essential nature, with one of the major groups referred to, but which are oftener treated by themselves for underwriting and rate purposes as special risks. A few of them may be worthy of mention as follows:

a. Liquor Bonds: Everyone, generally speaking, who wishes to make or to handle any kind of intoxicating liquor or alcoholic compound must first obtain a permit to do so from some public authority, and must accompany such permit, before beginning operations, with a bond conditioned for compliance with the law concerned with the given permit. Numerous such bonds are required by the Federal Government, and the states that now permit the sale of alcoholic beverages (there are no longer any completely dry states) do so only on condition that manufacturers, distributors and dealers engaged in the liquor business furnish bonds of stipulated character and amount.

These bonds thus constitute a species of the License and Permit genus, but they are so important and numerous as to warrant separate consideration. While all the bonds are conditioned for compliance with the liquor law of the given jurisdiction, some of them specifically guarantee the payment of taxes. The hazard involved in the former obligation varies with the rigor of law-enforcement practice; and in the latter with the safeguards embodied in tax-collecting systems. Many other factors, however, affect powerfully underwriting results and rates in the case of these liquor bonds.

b. Lost-Instrument Bonds: When savings-bank books, certified checks, stock certificates, and the like are lost, destroyed, or stolen, the embarrassing situation thus created may often be relieved by the giving of a bond conditioned to indemnify the bank or other obligee for any damage that it may sustain by reason of the reissuance of the lost instrument.

The underwriting of these bonds may be said to hinge upon these three considerations: the character of the principal, the degree of negotiability of the missing security, and the financial responsibility of the principal. The character and general reputation for probity of the principal is of prime importance, because that determines the measure of dependence to be placed upon his or her explanation of the loss of the instrument. The second point is likewise of obvious underwriting importance. A missing registered bond, for example, unendorsed by the owner of record, is a comparatively safe subject for a lost-instrument bond, because of the many safeguards thrown around a change in ownership of such documents. A lost coupon bond, on the other hand, is a highly dangerous instrument to have at large, as possession of such a document is almost universally, and with good legal reason, considered satisfactory evidence of ownership.

The third consideration, financial standing of the principal, is highly important, of course; but this will rarely be a controlling factor in the underwriting of lost-instrument bonds, because the surety company's responsibility for the missing document continues indefinitely, while principals die or lose their fortunes. Sometimes collateral security is required as a condition precedent to the issuance of these bonds. It cannot be held forever, of

course, but if the surety is so protected for a few years, the chance of trouble thereafter is thought to be slight.

Since the bank or other obligee of a lost-instrument bond is under no legal obligation to reissue the given instrument, it requires a bond of a most uncompromising nature—frequently one of unlimited amount and always one that continues the surety's liability until the statute of limitations or the finding of the lost instrument releases it. On their face the bonds would seem to be pretty hazardous: in fact, the experience has been good.

- c. "Blue-Sky Law" Bonds: Forty-five states have passed laws intended to protect investors by stopping the sale of stock in "fly-by-night concerns, visionary oil wells, distant gold mines, and other like fraudulent exploitations"; and many of the states require dealers in securities to give bonds conditioned for compliance with such laws. While the laws vary greatly in the several states, with corresponding gradations of risk in the bonds, yet the hazard is abnormally high in almost all cases. Usually the bonds are quite uncancellable, or are at least of doubtful or difficult cancellability. The penalty of the bond is sometimes not the limit of the surety's liability—there may be successive recoveries of the penalty. Here, as in so many other cases continually arising in corporate suretyship, any company that writes such a bond for the given principal is virtually going into partnership with such principal in the latter's conduct of the bonded business.
- d. Custom House Bonds: Numerous bonds must be given by importers in connection with the entry at custom houses of merchandise received from foreign countries. Only a small fraction of the numerous custom-house bonds issued daily present underwriting difficulties, the vast bulk of the business being exceptionally safe. This is so partly because the rigid rules of the customs service make the risk of loss or trouble almost negligible, and partly because the principals upon the bonds are usually business concerns of ample responsibility. A few types of custom house bonds, however, must be handled with circumspection; and once in a while rather heavy losses occur.
- e. Warehouse Bonds: Warehouse bonds of several varieties, and similar grain-elevator bonds, virtually guarantee the validity of the documents evidencing the storage of the given merchandise.

Theoretically, such bonds would seem to be highly hazardous, and that is doubtless true in some cases. Frequently, however, the warehouses and elevators are operated under regulations refined to the last degree of efficiency and safety, so that error or fraud is well-nigh impossible. Moreover, the principals upon these bonds are likely to be concerns of the highest reputation and responsibility. These remarks apply, in a general way, to the large warehouses and elevator bonds given to Boards of Trade or Chambers of Commerce in places like Chicago, Milwaukee, Minneapolis, and Kansas City. The bonds called for by the United States Warehouse Act are regarded by most underwriters with similar favor (though with somewhat less) and for similar reasonsnamely, because elaborate safeguards have been thrown about the business by law or internal regulation. A radically different situation is presented by what are known as "country elevators"—small institutions representing in many cases slight financial responsibility and not always conducted with good judgment. Numerous losses have been incurred, particularly in the Northwest, under warehouse bonds of this character.

11. An Infinite Variety of Risks to Be Rated:

The foregoing list of miscellaneous bonds could be indefinitely prolonged, and examples without number could be cited of bonds falling within the various classifications portrayed in section 9. It would be interesting to know how many different kinds of bonds there are—different in the sense that diverse underwriting and rate principles apply to them and must be separately developed. One would hardly venture to suggest even a rough approximation of the total number of classes of bonds that all-around surety executives must deal with and master as best they can; but they are as manifold as the leaves of Vallambrosa, and the number would surely mount up into the thousands. Even if one knew the number today, one would not know it tomorrow, because it is all the time changing, as new laws are passed, new bonds prescribed under existing laws, and so on.

It's no wonder that surety executives who are supposed to have all-embracing and infallible knowledge of every branch of suretyship envy their single-line brethren, and resemble the distinguished physician who lamented the fact that he could not replace his general practice with diseases of the nostrils. "Yes," commented a colleague, "but I wish that I could confine my cases to disorders of the *right* nostril."

The only man who knows all the answers in the surety business is a chap named Nemoscit who lives in Weissnichtwo.

12. CERTAIN SURETY-COMPANY LINES EXCLUDED FROM THIS DISCUSSION:

We are concerned here primarily with surety rates, and with insurance rates only so far as they may help us determine how surety rates should be made. While the bonding companies limit their activities for the most part to the various divisions of the surety business, they do write a few insurance lines. coverage of various kinds, provided by all the bonding companies, constitute a conspicuous example; and some of the surety companies similarly write burglary, theft, and robbery insurance. This discussion has to do only with the surety business of the bonding companies. The division is made on the basis of the distinction between the two lines pointed out in section 8 above: if, in the given case, there is a principal, primarily liable, and if there is an incidental contract concerned with the instrument issued by the bonding company, we are dealing with an item of suretvship; otherwise it is a case of insurance. Bankers' and Brokers' Blanket Bonds, however, are included in our discussion, although some of the hazards covered thereunder are insurance risks.

13. No Single Rate Theory Applicable to All Surety Lines:

It seemed worth while to outline in sections 9 and 10, even at wearisome length, the main branches of the surety business, because without such a bird's-eye view of our subject it might not have been clear that no single principle of rate-making could possibly apply to so great a variety of risks, attended with underwriting hazards ranging from the negligible to the terrific. It is clear that bonds of certain types (e.g., a bond conditioned that the principal will pay by a named date a federal income tax, not disputed) could not prudently be written unless the surety were first secured with collateral or indemnity of assured value and

dependability. Bonds of a totally different type, on the other hand (e.g., bonds permitting tobacconists to sell cigarettes), may be written freely, with no thought of collateral and with scant regard for the principal's financial responsibility. It seems clear that rate considerations differing radically in character apply to the two types of bonds mentioned. While those types stand at opposite ends of the scale, multitudinous intervening classes of bonds likewise represent risks of highly divergent character and subject to dissimilar rate considerations.

14. OBJECTIVE DIFFERENCES BETWEEN BONDS AND INSURANCE RISKS:

It was seen in section 8 that suretyship differs markedly and fundamentally from insurance, and it was more or less inferable from the contrasting conditions there shown that a theory of ratemaking applicable to insurance would not be equally appropriate, if at all so, to surety risks. We consider now, in the next eleven sections, certain differences between suretyship and insurance concerned with outward things. These differences are of underwriting and rate significance, and they further suggest that principles of rate-making deemed to be justifiably controlling in the case of insurance risks may not be applicable to bonds.

15. THEIR CONTRACTS IMPOSED UPON SURETIES, BUT NOT UPON INSURERS:

While insurance companies, generally speaking, are at liberty to draft themselves, in accordance with and with strict regard for their own best ultimate interests, the contracts that they make with the insuring public, that is not in the least true of surety companies as respects numerous types of bonds. Insurance companies, of course, could not hope to sell their product to the public unless the latter were at least fairly well satisfied with the quality of the insurance offered; but insurers nevertheless may include in their contracts reasonable limitations of various kinds upon their liability. In the case of certain, extremely important classes of bonds, however, sureties not only may not do anything of the kind suggested, but the contract that they must sign on the dotted line is prepared for them by the obligee, with sole regard for his own

safety and advantage, and with no thought whatever of the surety. The latter has no voice in the form of the contract that it must execute, is not consulted about it, may not modify it to the extent even of relocating an errant apostrophe or deleting a comma.

As respects certain classes of bonds, to be sure, the foregoing statement is not literally true, because the bond executed by the surety company may in fact be prepared by its own legal staff. That is frequently so in the case of public official bonds, for example. Even then, however, the statements made in the preceding paragraph are true in essence and reality, because the bond prepared by the surety company is controlled by the law underlying it. Almost always that law requires the official to furnish a bond conditioned for the faithful performance of duties of his office; and any surety company that bonds an official under such circumstances will be deemed by the law to know all about the statute requiring the bond and to have issued its bond in compliance with such statute. Any words in the bond, therefore, which, if given weight, would limit in any manner or degree the bald obligation of the surety to guarantee faithful performance of duty on the part of its principal would be instantaneously and utterly annihilated by the court as superfluous and meaningless.

Similarly it is true that surety companies sometimes issue forms of contract bonds prepared in their own offices. Here, however, as in the case just considered, the obligee of the bond is the real author of the instrument. That is so because the condition of the bond is that the principal will perform the bonded contract in accordance with its terms and specifications; and the surety company, of course, has nothing to do with the preparation of that contract, and is powerless to change it in any way. Frequently, indeed, in practice the surety has no opportunity even to read the contract that it is bonding—a condition of things less alarming (and less reflective upon surety underwriters) than might appear, because in the cases referred to the precise terms of the contract constitute only one, and a comparatively minor one, of the numerous underwriting factors involved.

As respects judicial bonds, fiduciary bonds, most contract bonds, and numerous other types of suretyship, the surety company does not even see the bond until it is brought to it for execution; and any attempt on its part to change the instrument would be futile—

would indicate, indeed, that the underwriter involved required the attention of an expert alienist.

16. Many Bonds Uncancellable:

This point may well be considered in connection with that just discussed, because both mark important and fundamental differences in the practical operation of the two kinds of business under review, insurance and corporate suretyship. As respects many kinds of insurance risks (e.g., fire and most casualty lines) the insurer may usually cancel the given policy if minded to do so because of the experience or for some other reason. He may, indeed, withdraw altogether from some type of risk found to be undesirable, either by summary cancellation of outstanding policies or by discontinuing each of them at renewal dates.

Nothing of the sort is true of many surety lines. When the bond is once executed and delivered to the obligee, the surety is inescapably bound for the full term of the bond (sometimes many years), whatever may happen meanwhile and however dangerous to the surety the conditions may prove to be or may ultimately become. This feature of uncancellability characteristic of numerous surety lines, so strikingly different from most kinds of insurance, springs from the inherent nature of the obligation assumed by the surety, and follows inevitably from the given circumstances. It is obvious, for example, that a surety company could not reasonably expect to have a right to cancel a bond guaranteeing the performance of a given contract, when the bond had once been delivered in good faith to the contractee; or one conditioned for the payment of a judgment rendered in a lower court and made appealable only by virtue of the bond, when the bond had been delivered to the appellee. Neither the contractee nor the successful litigant would deem such bonds of value if they could be cancelled at the pleasure of the surety company. When a county treasurer, required by law to furnish an official bond as a condition precedent to being sworn in, once files his bond with the proper public authorities, the thing is done so far as the surety is concerned, and the door is closed forever upon the surety: of what use would the bond be to the treasurer, or to the people of the county, if the surety were at liberty at any time to nullify the will

of the people and play havoc with the whole situation by cancelling the bond? In numerous similar cases it is and must be perfectly understood on both sides that the bond is absolutely uncancellable when the surety-company seal and superscription are once affixed to the instrument.

The fact that many kinds of surety bonds may not contain a cancellation provision surely has a bearing upon our main question: if two risks are identical as to underwriting characteristics and loss possibilities, and if the insurer in one case may discontinue the risk at pleasure but may not in the other, is it not clear that a higher rate may properly be charged in the latter case?

The only important exceptions to the rule of uncancellability prevailing in the surety business occur in the case of fidelity bonds, bankers' and brokers' blanket bonds, and a few other classes of risks, where the obligee of the bond will not be permanently or unjustly injured (though perhaps temporarily inconvenienced) if the surety company serves notice, in strict accordance with the terms of the given instrument, that at the end of a reasonable and stipulated period its liability under the bond as to future occurrences will cease.

17. THE CONTRACT INCIDENT OF THE BOND OF PRIME IMPORTANCE:

In discussing the difference between suretyship and insurance (section 8) we saw that agreements of suretyship were always and necessarily accompanied by contracts of some kind. While these incidental contracts are frequently unwritten, they are nevertheless real, invariably present, and highly important from an underwriting and rate point of view. A contract bond, of course, would be meaningless and could not exist without a corresponding contract; and we have already seen how extremely important the underlying, bonded contract is in the case of these instruments. While the connection between the incidental contract and the bond, in other types of suretyship, may not be immediately apparent at times, a little reflection will always reveal the existence and the importance of the contract. Fidelity bonds, for example, vary greatly in hazard with the nature of the contract between the principal and the obligee. A case in point may be found in the familiar consignee's bond-an instrument that guarantees faithful accounting by the principal of all merchandise entrusted to him by the obligee consignor. Obviously the terms of the agreement that the principal makes with the obligee have much underwriting and corresponding rate significance to the surety; and that is true even in cases where the surety does not guarantee that the consignee will fulfil in all respects the agreement with the consignor (when that is done we have a hybrid instrument—a cross between a contract and a fidelity bond), but only that he will be honest in his handling of the consigned merchandise and in his dealings generally with the obligee.

18. Suretyship More Affected by Business Cycles than Is Insurance:

All classes of business, including every type of insurance, are affected profoundly, of course, by the booms and depressions that succeed each other with fatal regularity in the annals of industry and finance. As respects insurance, however, such alternations of prosperity and reverses are reflected primarily in premium volume, and the prolonged, distressful slowing down of business activities does not in most lines affect acutely and directly loss ratios. On the other hand, virtually all classes of suretyship in a period of general business depression not only suffer a heavy diminution of premium volume, but in addition they sustain severe losses upon outstanding bonds as a direct result of the depression. These losses, to be sure, in some cases do not come to light until the worst is over as respects general business. As might be expected, and as the experience of the bonding companies shows with painful clarity, surety losses sustained in the course of or in consequence of a depression affect adversely the calendar-year loss ratios of the companies for years after the business tide has turned and recuperation is well on its way.

While the foregoing comments apply particularly to fidelity risks, to bankers' and brokers' blanket bonds, and to fiduciary instruments, where the bonded principals, finally entrapped by speculative losses, extravagant living, and the like, seek a way out of their financial troubles by methods that ultimately involve their sureties, other branches of the bonding business are likewise

affected by sweeping reversals of industrial trends. In the important division of contract bonds, indeed, the surety companies are in special danger both when the general business tide is receding and when it is strongly advancing. When contracts are few and subject to fierce competition, and when as a consequence jobs are taken at prices unwarrantably low, defaults are numerous and surety companies must often pay the outstanding bills of their principals and in addition relet the unfinished contracts at a figure far in excess of the original price. When, on the other hand, the tide has suddenly turned and a period of activity and rising prices for materials and labor has set in, contractors who have taken on long-time jobs on the basis of the stagnant conditions prevailing at the time may find themselves in no position to complete the contracts, under the enlarged costs confronting them, except at heavy losses. Over and over again contractors and their sureties have come to grief because of unexpected rising costs.

When the conditions upon which tables of loss experience are compiled remain over a term of years fairly stable, as is true of life, fire, marine, and other types of insurance—including, though in a less degree, perhaps, the casualty lines—it is practicable and safe to base premium rates in large part on such tables; but when those conditions are decidedly unstable, as they are in the case of the surety lines, and are certain, indeed, to show violent fluctuations at recurring periods, it is completely impracticable and unsafe to forecast future losses on the basis of factors that are known to be strikingly inconstant.

The point discussed in this section received distressing emphasis a few years ago in the case of depository bonds (cf. section 27). It applies, however, to suretyship in general, and some of the most important branches of the business are affected profoundly by the general economic conditions incident to the long-term trends of trade and finance. Such inevitable evolutions of business always impair and may set at naught the normal results of even expert underwriting. That could hardly be said of most kinds of insurance—fire and life, for example—where premiums accrue and accumulate within planes of time not widely separated, and where the current and past tabulations of losses and other statistical exhibits represent full evidential values, and forecast ultimate results with substantial accuracy.

19. SURETY EXPERIENCE DATA SOMETIMES ABSENT:

While it is doubtless true that situations more or less without precedent arise occasionally in most lines of insurance and particularly perhaps in the casualty lines, where rates must be made without the benefit of experience and on the basis of general reasoning, such conditions are thought to be of relatively rare occurrence in most branches of insurance. The mortality tables. for example, of human lives used by life insurance actuaries for rate-making purposes are matched by similar dependable material of value to underwriters in other kinds of insurance. Not infrequently, however, the bonding companies are confronted with demands for suretyship of a character so unusual that no experience statistics are anywhere available for underwriting use and rate guidance. The loss frequency incident to breaches of the new bonds must be determined by a priori reasoning—conjecture, perhaps, would be a better word for it. Once in a while, for example, some law will be enacted by the Federal Government or by some other political body by virtue of which bonds must be furnished of a type theretofore unknown. That has happened a number of times in connection with New Deal legislation. Only the other day calls went out from Washington for a number of very large and extremely hazardous bonds, to remain uncancellably in force for many years, guaranteeing, among any number of other comprehensive obligations, the maintenance of steamship service in accordance with rigidly defined labor and equipment conditions, to distant ports on routes prescribed by the Government. Where in the world could an underwriter, so far as experience goes, find help in an effort to rate such bonds?

The point considered in this section was exemplified in whole-sale fashion at the outbreak of the Great War in Europe, as shown by this striking passage in a pamphlet written by R. H. Towner ("The Future of Corporate Suretyship," page 17):

"As soon as the Allies established American credits enabling them to come into the American market for war material, corporate surety underwriters were overwhelmed with applications for the greatest variety of bonds guaranteeing new enterprises that had ever come to their desks. The Allied governments contracted in America for a vast variety and an immense quantity of things never before made by American

firms, and demanded the fulfillment of these contracts with the greatest possible speed. To accomplish this the American contractors had to build new factories and new machinery as mere preliminaries to turning out the things themselves that were contracted for; and to hasten this the foreign governments advanced enormous sums to the contractors not only before delivery of the subject matter of the contract but even before the necessary factories and machinery were ready to begin manufacturing. Every day new forms of contract with new provisions drawn by the advisors of foreign governments were presented to surety companies for their guarantee. They were asked to guarantee the advances of money, the quality and quantity of things to be delivered, the time of delivery, the secrecy of plans and specifications and to underwrite a multitude of other provisions too various to be now recounted. And all this was presented to underwriters under the utmost pressure as to speed. Corporate suretyship was not then regulated as 'insurance' and fortunately the bonds guaranteed by surety companies were not required to be classified and rated in advance. It would have been utterly impossible because a new variety of obligation was usually encountered five or six times a week. Nevertheless, it is to the great credit of the corporate surety organizations of that day that through this welter of new demands as to which no 'experience' whatsoever was available, they proved capable of analyzing all this new and foreign business and of rating it and underwriting it successfully.

20. Surety Premiums Sometimes Imperfectly Measure the Exposure:

It would seem to go without saying that an insurer's compensation should vary directly with the extent of his exposure. In the case of fire insurance that end is effected by means of the well known 80% clause, adopted by the New York Tariff Association forty-four years ago and now in general use—a provision by virtue of which the insurer obtains a premium based on a reasonable proportion of the value of the property insured. In two of the major surety lines, fidelity and bankers' and brokers' blanket bonds, no such premium safeguard is feasible; and in practice underinsurance is so prevalent that it may almost be said to be the rule rather than the exception. While many big banks carry large blanket bonds and are thus adequately insured, not infrequently

bank defalcations or robberies occur in amounts exceeding the suretyship in force. As respects ordinary fidelity risks, nothing is commoner in the experience of the bonding companies than the occurrence of dishonesty losses far in excess of the amount of insurance carried. Not long ago the Rating Bureau compiled a list of several hundred such instances. A church treasurer, for example, bonded for \$50,000, stole nineteen times as much; a charitable-institution treasurer, bonded for \$10,000, stole \$139,000; a railway mail clerk, bonded for \$1,000, stole \$150,000; a textile-company cashier, bonded for \$1,000, stole \$155,000. Not long ago a bank in Charlestown, West Virginia, was wrecked because an officer, bonded for \$25,000, got away with \$500,000. It is interesting to note that insurance companies furnish many such examples among their own officers and employees: "Who is worse shod than the shoemaker's wife?"

It is true, of course, that in all the cases referred to the surety company obtained the full premium on the amount of its bond; and it is further true that the company in any given instance could ill afford to have paid the large loss sustained by the insured in return for the additional premium that would have been paid for an adequate bond. If, however, all fidelity principals were bonded in sufficient amount, the resultant aggregate premium fund would be vastly greater than it is now; and the final position of the surety companies, as respects these very important divisions of their business, would be much safer than it is now. It can hardly be doubted that fire companies have a distinct advantage over the bonding companies in the matter of underinsurance, and that point has a bearing upon the rate question.

21. Comparative Loss Possibilities:

Insurance policies, generally speaking (boiler insurance is a conspicuous exception), are of value to insureds only because they involve the possibility of loss to the insurer; and their value increases pari passu as such possibilities increase. The cost of the insurance, of course, is affected primarily and immediately by these same loss possibilities—the greater the chance of loss, the higher the insurance rate.

Is it the same with suretyship? Not in the least, as respects

many types of bonds. Not only is it not true that the bond is desired because a loss is expected, but in many cases it is well nigh certain that no loss will ever occur to either principal or surety because of the issuance of the given bond. When the *Titanic* crashed into an iceberg off Newfoundland in 1912 hundreds of lost-instrument bonds were issued in behalf of owners of securities carried on the fated ship. The possibility of loss under those bonds was and clearly should have been a minor consideration in the determination of the rate charged for them. In numerous similar situations this possibility-of-loss factor, so extremely important in making insurance rates, is almost negligible in the case of some kinds of bonds. It is not in the least true, as respects them, as it is true of insurance generally, that the value of the thing sold, and the price correspondingly charged for it, is measured by or even indicated by the surety's expectation of loss.

22. Surety Losses Slow in Maturing:

In this respect suretyship differs markedly from most lines of insurance. Life companies, for example, continue to collect premiums as long as any given risk remains in force; and fire companies similarly know all the time just about where they stand as respects risks that are still in force and producing revenue and risks that have definitely and absolutely terminated, either without loss or with a known and fixed loss. The same thing is true in the case of certain types of casualty insurance; and much the same thing is true of the other casualty lines. While liability and compensation losses sometimes do not come to light until the period of active liability of the given policy has terminated, it is nevertheless true that casualty underwriters, in common with insurance underwriters generally, if they understand their business and put up loss reserves honestly and expertly, know pretty well at all times whether or not they are losing money on a given line of risks, and what their financial position is otherwise.

All the foregoing is either not true at all, or requires serious modification, in the case of most surety lines. As we have seen (section 15), the contracts executed by the bonding companies, as respects many important branches of the surety business, are prepared by obligees, with sole reference to the latters' rights and

advantages. Under such conditions the contracts naturally contain none of the limitations and conditions which commonly form a part of insurance policies, and which, while deemed no more than fair to insurers, are of distinct value to the latter under loss conditions that frequently arise in practice. Insurance policies. for example, usually embody a cutoff provision—a requirement that the insured shall have only a stated, limited time within which to file claims after the policy has expired. No such provision can ever be found in surety bonds of the kind referred to; with the result that claims may be made under a given bond, for losses sustained within its term of active liability, years after the premium period has terminated—as long, indeed, as may be permitted by the Statute of Limitations controlling in the given situation. This consideration is by no means of mere theoretical importance, and the annals of the surety companies abound in cases where losses have turned up years after the given bond has been deadfiled and forgotten.

When the 18th Amendment became effective on January 16, 1920, a great variety of bonds were required by the Federal Government to insure compliance with the National Prohibition Law. Claims were made under such bonds years after the principals had ceased to use the permits that necessitated the bonds. Indeed, although the necessary thirty-six states had ratified the 21st Amendment, repealing Prohibition, by December 5, 1933, nearly five years ago, not even yet has the experience under these Prohibition bonds fully matured.

Public official bonds are particularly dangerous as to this point; and fiduciary bonds as well must sometimes be resurrected from ancient files because of greatly delayed claims. Any bonds conditioned for the payment of taxes may exemplify the point under discussion. Some years ago, for example, the Commonwealth of Pennsylvania imposed a tax of so much per gallon on sellers of gasoline, and required all operators and filling stations to furnish a bond guaranteeing the payment of the tax. Since the tax was payable every month, it was thought by underwriters at first that principals would be quickly brought to book and put out of business if they failed to pay the tax, and that losses under the bonds would hardly be large in any event. It failed to work out that way, and most companies, it is thought, lost money heavily (in

proportion to the premiums received) on these bonds. Years after the bonds had expired, the companies were confronted with claims for unpaid taxes based upon audits and other administrative checks made so long after the gasoline was sold that nothing could be done by the surety companies in the way of salvage. In many cases their principals, by the time claim was made, had gone out of business altogether and disappeared for parts unknown.

Contract-bond claims usually come to light with painful promptness. Sometimes the first word of trouble is that the principal has decamped from the job, leaving the work only half done and the bills more than half unpaid. Yet the bond itself rarely contains any cutoff provision, and the claim-making period is almost always determined by the Statute of Limitations applicable to the given conditions. One notable example of delayed notice occurred in connection with bonds aggregating about five million dollars guaranteeing the construction of cantonments, arsenals, aviation stations, and the like for the Federal Government. About twenty enormous contracts were involved, all awarded soon after the United States declared war on Germany on April 7, 1917. Years after the contracts were completed—to the entire satisfaction of the contractee so far as the surety companies knew-suits were instituted by the obligee against the various principals and sureties on the bonds to recover claims aggregating more than fifty million dollars. The last suit was not begun until 1924; and it was not for some years thereafter that the surety companies interested were in a position to close their claim files.

23. IN SOME LINES THE SELECTION IS ALWAYS AGAINST THE SURETY:

Life companies examine their risks in advance and weed out any that fail to satisfy their underwriting requirements. Fire companies similarly reject, or accept at high rates, subnormal risks. Casualty companies see to it in numerous ways that they get at least average risks. So far is this from true in the case of certain surety lines that in the latter the selection is always, necessarily, and as a matter of course, against the surety: it is known in advance that the conditions, either generally or in certain

important respects, actually favor a breach of the bond about to be written.

When, for example, a litigant has lost his suit in a lower court, and is permitted to try again in some higher tribunal if he will first furnish a bond conditioned for the payment of any judgment that may be rendered against him in the appellate court, the dice are loaded, so to speak, against the surety, since its principal has already lost once and will presumably have no better luck next time. The same thing is true of any other judicial bonds which must be given only because of a presumption by the law of guilt or error on the part of the applicant for the bond.

This point is exemplified most importantly perhaps in the great department of corporate suretyship that has to do with the bonding of public contracts. Such contracts are almost always—the exceptions would constitute a permillage rather than a percentage of the whole—awarded to the lowest bidder. The adequacy of the contract price is, of course, a matter of the utmost importance to the surety; and yet at the very start the surety knows that it is bonding, not one of the high bidders, but the lowest bidder of all. In this respect at least the selection is obviously and emphatically against the surety company. The point is important, but it need not be labored, because it is easy to see that this inevitable feature of contract bonds handicaps the surety company in a way before the race is even begun. While it would be easy to cite somewhat comparable situations in certain types of insurance (plate glass, for example), the point is of outstanding importance in some branches of the bonding business.

24. Premiums Not the Sole Resource in Suretyship:

Having considered in the last eight sections numerous differences, all of rate-making interest, between bonds and insurance risks, we come now to a diametric difference that overshadows all the others in importance. In life, fire, casualty, and most other insurance lines the only source of revenue available for loss payments, or at least the chief source, is the premium fund. In suretyship, however, premiums constitute only one of four resources that bulwark the bonding companies against ultimate loss.

Two of those resources oftener than not are absent, but the other two are always present—the one considered in this section and the premium fund. In addition to that fund the surety company, as respects every bond issued, always has the automatic and assured indemnity of the principal on the bond.

Most people think of the bonding business as a form of insurance, and this indemnity feature of suretyship is so foreign to the average man's idea of insurance that he has some difficulty at first in grasping it. Not infrequently, indeed, principals on bonds protest when they are requested to execute agreements of indemnity, and ask in an aggrieved tone what they are paying the premium for anyway. The situation must be explained to them, patiently and clearly, and they must be shown that the obligation underlying the bond is primarily and absolutely their obligation, and remains theirs after the surety has signed the bond with them exactly as much as it was before.

The average man, moreover, is not alone in his failure to understand what indemnity is, and how important it is to surety companies. Not long ago, when a high officer of a fire company asked me to issue an appeal bond for one of his affiliates, and when I ventured to suggest that the indemnity of the parent company would be in order, he almost suffered a stroke of apoplexy over the preposterousness of the idea. While his remarks lacked coherence, it was evident that he deemed surety bonds and fire policies identical as to this point, and thought that the payment of the premium for the bond absolved his company from any further liability in connection with the matter.

While some classes of bonds are written "on an insurance basis," as the saying is—that is, without much reference to the indemnity of the bond principal, because that is known to be of little or no practical value (cf. section 30)—in plenty of cases the bond is deemed prudently issuable only because of the financial responsibility of the principal and of his obligation to stand between the surety company and loss; and a vast number of bonds are breached every year, with no loss whatever to the surety company, because a solvent principal either discharges the obligation of the bond before the surety is required to do that or subsequently reimburses the bonding company in accordance with the contract of suretyship.

25. THE INDEMNITY OF OUTSIDE PARTIES:

In addition to the premium fund and the automatic indemnity of the principal, surety companies frequently enjoy a third resource—the indemnity of relatives or friends or business associates of the immediate principal. Such indemnity is required by surety underwriters, as a condition precedent to providing the desired suretyship, under conditions that continually arise in practice. If a young man, for example, of slight financial responsibility should apply for a consignee's bond, he would be deemed by most underwriters ineligible for such suretyship on his own merits. If, however, his father were a reputable business man and fairly well-to-do, and if he would agree to indemnify the surety company for any loss that it might sustain in connection with the desired bond, some underwriters would deem the bond writable.

Indemnity agreements are continually executed by large and responsible corporations in connection with bonds needed by subsidiary or affiliated concerns that are deemed by underwriters not to qualify in a financial way for the given risk. A supply house that hopes to profit from the execution of a given contract will sometimes agree to indemnify a surety company if it will issue the bond that must be furnished by the contractor. Under numerous other circumstances third persons who may be advantaged in some way if a certain bond is issued will indemnify the surety.

When a person is quite unworthy, on his own merits, of surety-ship, it is rarely prudent to bond him merely because outside indemnity, even of apparent good character, is offered. That is so because experience shows that in the event of trouble indemnitors will frequently seek to evade liability, and will often find means of doing so. When the indemnitor is a corporation extreme care must be exercised to make sure that the indemnity agreement executed by the corporation is legally valid. A resolution passed by the Board of Directors referring specifically to the given indemnity agreement may be necessary; and even then under some conditions the courts will deem the giving of indemnity ultra vires and thus not binding on the corporation.

While indemnity agreements, as indicated, sometimes prove to be of no value in the hour of need, they are continually taken nevertheless by the surety companies, for their moral effect if for no other reason, when the principal does not quite satisfy normal underwriting requirements. In practice, too, in many cases such agreements are found to constitute a real resource in the final liquidation of bond losses.

26. COLLATERAL SECURITY:

This is a fourth barrier against loss when surety bonds are breached. It has no counterpart in the insurance business, and is, indeed, inconsistent with the whole idea of insurance. What would be thought of a fire underwriter who, in giving a house owner a \$10,000 policy on his house, should simultaneously demand from the insured \$10,000 in cash or government bonds to secure the insurer in case the house should burn down? Yet that very thing is done blithely every hour in the day by shameless surety underwriters. Many millions of dollars are held by the surety companies all the time as security for outstanding bonds.

While surety men are grievously misunderstood in numerous respects, and are concededly a much abused segment of humanity. they are particularly disliked because they will issue certain types of bonds, generally speaking, only if first fully secured with collateral of acceptable character. The bonds referred to are commonly known as "financial guarantees"-bonds conditioned absolutely that the principal will pay a given amount of money on some stated date or on the happening of some described contingency. Applicants for such bonds, and many insurance agents representing them, are likely to take the position that the surety company, as a matter of course and as part of their general obligation to serve the public, should provide such suretyship without security, for principals of good moral character and of such financial responsibility as in the judgment of the principals and the agents will enable the principals to discharge the debt at maturity without loss to the bonding company.

In fact, of course, no surety company writes these bonds on any such basis, or could stay in business long if it did. Generally speaking, all companies issue appeal bonds, writ-of-attachment bonds, tax-abatement bonds, and similar instruments the execution of which by a surety company is substantially equivalent to an endorsement by the surety of the principal's note for the amount of the bond, only on the basis of full collateral security.

Why in the world should they be expected to do anything else when the premium received is trifling in comparison with the liability assumed, when it is always more than probable and sometimes fairly certain that the bond will be breached, and when, for underwriting purposes anyway, it is quite necessary to assume that the bond will be breached? The examples cited were all judicial bonds: frequently the financial guarantee given by the surety has to do with some routine detail of the principal's business (payment of the monthly rent, say); and when that is so, the surety is really going into partnership with the principal, in no very strained sense, except that the principal gets all the profit if the business is successful, while the surety holds the bag under reverse conditions.

Much of this comment may seem to the reader superfluous and unconnected with our general inquiry; but we shall see shortly that it all has a close and direct bearing on rates.

27. THE INSURANCE RATE THEORY AND DEPOSITORY BONDS:

We have cited a number of respects in which suretyship differs from insurance. More could be mentioned, but enough has been said perhaps at least to suggest that theories of rate-making applicable to insurance may not be appropriate to suretyship. That future underwriting results in a given line of surety risks may not always be accurately forecast from a study of the actual experience over a long term of years in such line is strikingly shown by the sad history of depository bonds. They began to be written soon after the turn of the century, and a considerable volume of business was in force in the fall of 1907, when the financial troubles of that year came to a head. For a few days surety executives were distracted with anxiety lest conditions get completely out of hand, and they suffer disastrous losses. In fact, the panic was arrested before very serious damage was done so far as depository bonds were concerned. For nearly twenty years thereafter the depository experience of all the companies was excellent -so good, indeed, that in the later years principals, obligees, and insurance officials were unanimously of the opinion that the rate should be reduced. For more than twenty years a rate of 1% of 1% per annum on the amount of the bond was maintained with no variation.

If the principles of rate-making used in most insurance lines had been applied to depository bonds in the early 1920's, say, a reduction from the rate stated would clearly have been in order, because experience tables over a long term of years would have shown loss ratios ranging from 5% or so to 20% or so, and an average, it is thought, of not more than 10%. In fact, the rate throughout those years was too low, on the assumption that the business was to be written on an insurance basis (that is, without security); and a rate very much higher would have been necessary if the companies were to accumulate a fund sufficient to care for the enormous losses yet to accrue.

Just as life actuaries base their rates in large part on tables of human mortality, so depository underwriters, if insurance theories of rate-making are to be controlling, should be governed by the ratio between bank suspensions in a given year and the number of banks operating in the year. In the first twenty years of the present century one-third bank in one hundred failed each year on the average (in only two of the years did more than one bank in two hundred fail). In the next thirteen years, 4.36 banks, on the average, out of every one hundred operating, closed their doors; in the three years 1931-33 more than ten banks out of every hundred operating went under each year on the average; and in the year 1933 more than twelve banks in every hundred that operated in that year became insolvent.

Is it not obvious that theories of rate-making based on the assumption that tables portraying past experience may safely be used in forecasting future experience have no applicability to surety bonds of the character just considered? What sort of rate would a life company make if, having seen from its mortality tables that at the end of a given twenty-year period, one out of three hundred of its risks had died each year on the average, it found, a few years later, that thirty-nine instead of one out of every three hundred were dying each year?

28. THE INSURANCE RATE THEORY AND MORTGAGE-GUARANTEE BONDS:

The story here, in essential respects, duplicates that just told. For thirty years or so, prior to five years ago, the guaranteeing of the payment of principal and interest of real estate mortgage loans

had been found to be not only safe, but extremely profitable. The cost of the guarantee was the same, as it happens, as that of guaranteeing the solvency of banks-1/2 of 1% per annum-and that rate, as stated, seemed on a statistical basis to be more than ample. The bonding companies (few in number) that slowly embarked in the business of guaranteeing such mortgages, after the title companies had monopolized the field for a quarter of a century, were surely justified in their course on the basis of the careful and fully recorded experience, even though considerations of a more fundamental character might well have given them pause. Everybody concerned with the business came to grief, in 1933, when the experience was utterly reversed, and when all the New York companies whose business was confined to guaranteeing mortgages were taken over by the Insurance Department for liquidation. Once again it had been demonstrated with deadly emphasis that surety rates, as respects certain types of bonds at least, could not safely be based on premium-and-loss statistics covering many years of experience. Incidentally it may be noted that surety companies operating in New York are now prohibited by law from providing mortgage guarantees.

29. Bonds Must Be Grouped for Rate-Making Purposes:

Two fundamental facts seem to stand out from the foregoing. In the first place, suretyship differs from insurance so markedly and in so many ways that, at least as respects certain important branches of suretyship, the simple method of testing rates applicable to insurance—by means of tables of premiums and losses recording the experience of prior years—will not work. Secondly, while some lines of suretyship have so many qualities in common that a single method of rate-making would be suitable for them. other lines vary so widely from the group possessing common qualities as to require separate rate treatment. In the case of certain classes of bonds few or no losses are expected, because of the nature of the risk assumed or of the underwriting rules followed; while in other cases it is known in advance that losses will be numerous and sometimes heavy. It seems clear that classes of bonds upon which few or no losses are likely should be rated in accordance with principles differing from those applied to bonds

upon which a considerable loss ratio is expected. In practice bonds are grouped for rate-making purposes into a large number of classifications. To go into all the refinements of practical surety rate-making would take us far afield, and our immediate inquiry will be satisfied perhaps if we consider merely the general principles that appear to be fairly acceptable as rate foundation stones.

30. Bonds Written on a Quasi-Insurance Basis:

It must be admitted at the outset that certain classes of bonds are regarded, even by surety underwriters, as insurance for all practical purposes and especially for rate purposes. Although the risks in question are really bonds, and always have a principal who is primarily liable and to whom in theory the surety company can always look for indemnification in case of loss, in practice the bonds are written with little or no regard to the indemnity feature and as if the bond were really a policy of insurance.

While certain important species of license bonds do not in the least fit the foregoing description, the general class of license and permit bonds provides numerous examples of the risks referred to in the preceding paragraph. In such cases the bond amounts are small (\$500 or \$1,000, say), the loss ratio is low and fairly constant, and the principals could rarely qualify for suretyship of any character on the basis of financial responsibility. It is frankly taken for granted by underwriters, as respects this type of risk, that losses will be irrecoverable and must be absorbed by a premium fund, accumulated for that precise purpose as in the case of ordinary insurance.

Notary Public bonds afford another outstanding example of risks that are commonly written in the way described. While they are classified as public official bonds, and are conditioned for faithful performance of duty, they virtually run in favor of the general public, and their real purpose is to protect notary-public patrons who might otherwise suffer loss from fraudulent acknowledgments, satisfactions of mortgages, and similar instruments or from other wrongdoing on the part of the bonded official. Losses under these bonds occasionally occur, as might be expected, but they are few in comparison with the number of bonds issued; and it has been found quite practicable to write the business in reliance upon the

premium fund and with little or no regard to the obligation of the notary to hold the surety harmless.

31. THE "SERVICE CHARGE" RATE THEORY:

We come now to a principle of rate-making which is largely though not wholly foreign to insurance lines generally, but which is so dominant in the determination of rates for certain important classes of bonds as to render other considerations more or less negligible. From an underwriting point of view the bonds referred to are completely unlike those just considered; and they could not possibly be written on a quasi-insurance basis. They include financial guarantees and such bonds in general as are written almost if not altogether in reliance upon the financial responsibility of the principal or other indemnitors or upon collateral securitynot in the least because of any expectation that the total premiums collected on the given line of bonds will be sufficient to care for losses. On the contrary, it is perfectly well known at the start that the premium fund will amount to only a small fraction of the losses that would fall upon surety companies because of breaches of the bonds, except for the indemnity or collateral referred to.

Appeal bonds afford an excellent example of the type of risk under consideration. They are given by litigants who have lost their cases in some inferior court, and who are privileged to try again in an appellate tribunal if they will give bond to the successful litigant conditioned for the payment of any judgment that may be handed down against them by such higher court. Seventyfive percent, it is said, of the primary judgments so appealed from are sustained by the superior courts. If, therefore, appeal bonds were to be written on a quasi-insurance basis, it is obvious that the rate for such bonds would have to be 75% of the penalty of the bond in the given case (assuming that such penalty equalled the amount of the judgment, plus interest and costs), in order to care for pure losses: if costs, expenses, taxes, and the like were taken into account, the rate would have to be well above 100%. Any such charge for appeal bonds would be out of the question, of course. In fact, the rate for bonds of the type under review (service-charge bonds) varies from ½ of 1% to 2% per annum, according to the circumstances of the given case.

Numerous examples could be cited of surety risks that belong in the same class with appeal bonds for rate-making purposes—many other kinds of judicial bonds, tax-abatement bonds, workmen's compensation bonds, insurance-company qualifying bonds, guarantees that lessees will perform lease contracts, etc. In all the cases referred to the rates are made with little or no regard to possible losses (which are assumed to be non-existent so far as rates are concerned), and almost wholly on the theory that the premium represents a service charge. Some debtor, actual or prospective, whose word or written promise will not be accepted by his creditor, needs a guarantor; and a surety company, if adequately indemnified or collateralized, will provide the required credit, lending to the debtor the responsibility of its seal and signature, in return for a microscopic (comparatively) service fee.

We saw in section 19 that insurance rate-making methods were quite impracticable in some cases of suretyship for the excellent and conclusive reason that no experience was available from which to estimate future losses. While such situations occasionally confront insurance underwriters, they frequently arise in the neverending development of corporate suretyship; and when they do this service-charge principal of rate-making is likely to be available, appropriate, and fair to all concerned. About eight years ago, for example. Oklahoma City passed an ordinance requiring oil operators, in the case of every oil or gasoline well drilled within the city limits, to file a \$200,000 bond conditioned for the payment of loss if the wells should get out of control or catch fire or otherwise cause damage. No suretyship of that nature had ever before been called for, and a rate for the new bonds, for which numerous and urgent applications were immediately received, had to be planned on some basis and promulgated promptly. This principle of a service charge was deemed controlling and proper in every way, and the situation was handled on that basis to the satisfaction of all concerned.

Many similar examples could be cited of rate problems, suddenly sprung upon underwriters, that have proved to be easily solvable by this same service-charge principle. It is particularly adaptable to suretyship because of an objective difference between insurance and suretyship which was not mentioned when we considered that point (cf. sections 14-23), but which is highly relevant to our

immediate topic. We have in mind the fact that surety bonds have a positive intrinsic value to the people who buy them. Insurance policies are, of course, of value to insureds, but they are negatively advantageous, so to speak—they are a sort of necessary evil, something that one must have to guard against possible mischances. Surety bonds, on the other hand, in many cases have a positive value to the buyer that vastly exceeds their cost. The oil drillers would simply have had to go out of business, so far as Oklahoma City was concerned, except for the bond. The defeated litigant would have to pay the judgment and abandon all hope of final success, unless an appeal bond were available. Thousands of business concerns that questioned the constitutionality of certain processing taxes levied upon them by the Federal Agricultural Adjustment Administration Act were able by means of surety bonds to stay the collection of the proposed taxes, and ultimately (since the law was found to be unconstitutional) to escape payment of it altogether. A lost-instrument bond is obviously of great and intrinsic value to the principal thereon, who because of it is completely reinstated as a security-holder and enjoys for all time to come the benefit of such ownership. Not every insurance policy nor every surety bond exemplifies the point under discussion; but we have here undoubtedly an important general difference between suretyship and insurance.

32. Intermediary Rate Classifications:

A wide gulf exists, as respects our main question, between bonds written on a quasi-insurance basis and those classified for ratemaking purposes as service-charge instruments. Between the two lie a multitude of risks assumed by surety underwriters that are not so easy to rate with confidence in one's guiding principles. What shall we say, for example, of fiduciary bonds? When we guarantee that a guardian or a testamentary trustee will faithfully perform his duties for the many years that the trust will continue, we surely do not underwrite the risks as if they were insurance policies. On the contrary, we investigate fully the applicant's eligibility for such suretyship; and not infrequently we either reject the bond out of hand, or agree to write it only if our principal will subject the trust estate to our joint control. The service-

charge theory of rate-making, moreover, while applicable somewhat to fiduciary bonds, seems not quite to serve the purpose. Here, as in numerous other intermediary classifications, it seems necessary to adopt in part insurance methods of rate-making, and to be governed largely by tables of experience showing underwriting results, not for a few years only but as far back as possible. Those results, of course, in the case of individual companies, will be determined by the skill and judgment with which the business is underwritten; but rates are necessarily made on an assumption that risks will be underwritten, not with an absolute maximum of expertness but only with average ability—with such a degree of perfection as is attainable in the actual conduct of the business.

It is to be remembered, in connection with the whole question of rates and underwriting, that the bonding companies are not at liberty to reject any and all applications for suretyship that fail to fulfil every last condition of acceptability: they must sometimes issue bonds that they would really prefer not to write. Such situations result from agency pressure particularly, but also at times from the fundamental obligation of the bonding companies to satisfy the public demand for suretyship so far as that can possibly be done with reasonable regard for their own ultimate solvency and well-being.

These comments regarding fiduciary bonds apply as well to public official risks and to many miscellaneous surety lines; that is, rates are determined more by the experience in the given line than by any other single factor.

Three classes of suretyship produce so large a proportion of the total revenue derived from the bonding lines that it seems worth while to consider each of them separately with reference to rates. We do that now in the next three sections.

33. FIDELITY RATES:

While bonds guaranteeing honesty on the part of their principals satisfy all the requirements of suretyship, this branch of the business is frequently referred to as fidelity *insurance*. The term is convenient, and it is surely the case that fidelity bonds have more characteristics in common with insurance than do most of the other types of suretyship. For rate-making purposes particularly may fidelity risks be deemed a good deal like insurance. In

both cases losses are paid, generally speaking, out of a premium fund accumulated for that precise purpose: they are not paid, as in the case of many branches of suretyship, from collateral furnished by principals when the bonds are issued, or from cash procured upon the occurrence of loss from responsible principals or indemnitors. It is further true that fidelity rates are tested by, and largely determined by, tables showing premiums, losses, and other underwriting experience over a term of years.

In thus applying insurance actuarial methods, however, to fidelity experience it is necessary to give special consideration to three features of these risks that are included in the premium and loss statistics either not at all or only imperfectly, as follows:

- a. While all insurance and surety underwriting involves, of course, certain costs incident to the preliminary examination of the risk or obligation to be assumed by the insurer or the surety, such costs, generally speaking, are inconsiderable in the case of most insurance lines, while they use up a large part of the premium in the case of many fidelity risks. In some of the fidelity rate classifications (department stores, for example), where a large proportion of the risks are bonded in small amounts and where the premium per person bonded may average only two or three dollars, it is clear that investigation expenses may use up about all the premium that is left after acquisition and other costs are cared for. Obviously the rate for fidelity lines of this type could not safely be computed on the usual insurance basis, with allowances for only losses and normal costs.
- b. We have noted already (cf. section 22) the important fact that surety losses are slow in arriving. That is particularly true of fidelity bonds. Under the stress of competition, if for no other reason, surety companies quite commonly nowadays give the insured continuous protection as long as the bond remains in force; that is, losses are indemnifiable so long as the employee remains in the service and bonded, even though the loss may not be discovered for years after it occurs. Moreover, the cutoff period applicable to the entire bond is commonly, nowadays, from one to three years. If a bond remains in force twelve years, say, and if an employee in the service and bonded throughout that period caused the insured a fidelity loss, covered under the bond, at the beginning

of the twelve-year term, the insured can collect the loss even if it is not discovered for fifteen years. This is not a mere theoretical danger. The discovery by insureds of fidelity losses years after they were really sustained is a common occurrence.

This condition of things is now recognized by Insurance Departments, which require bonding companies to maintain a substantial reserve for "incurred but not reported losses"—10% of the amount of fidelity premiums in force and $3\frac{1}{2}\%$ of the amount of surety premiums in force (the New York requirement). This rule has not been in force long enough to show whether or not the foregoing percentages are adequate.

When, not long ago, a certain state protested that bank fidelity rates were too high, the defendant companies pointed out that in an adjoining state there had recently come to light a \$250,000 bank defalcation extending over a period of ten years—a loss amounting to more than eighteen times the average annual premiums paid by all the banks of the kind insured in the rate-complaining state. In another similar bank case the loss was one of \$3,000,000, not discovered until 1931, though the defaulter began his operations twenty-eight years earlier.

Obviously the factor of delayed discovery of losses must be taken into account by a fidelity rate-maker. The premium fund must cover, not only such losses as are reported within the active premium term, but as well those that are certain to arise after the end of such term.

c. In many, though not all, kinds of insurance a loss paid is total and final, and the matter ends there (except perhaps as respects the acceptance of future business from the insured). That is far from true of fidelity losses. In every such case there is always a principal who is primarily liable for the loss. Sometimes the principal himself makes good the loss to the bonding company, wholly or in part. Oftener perhaps indemnitors, or people otherwise interested, do that. This salvage feature of fidelity suretyship is highly important in practice; and frequently, in individual cases, the final figures are changed from red to black because of it. One important company, for example, showed, over a period of fifteen years, an average ratio of recoveries against losses paid of 23.6%, varying from a low of 17.2% in 1931 to a high of 37.5% in 1927. These figures had to do with surety bonds of all kinds, but salvage

from fidelity losses presumably predominated. The cost of effecting this salvage was doubtless considerable.

34. BANKERS' AND BROKERS' BLANKET BONDS:

The number of hazards to which blanket-bond underwriters are exposed varies with the degree of refinement shown by the analyzer, but any enumeration would have to include these ninedishonesty of employees, safe burglary, theft from insured premises by outsiders, messenger holdup, losses in transit other than holdup losses, destruction, misplacement, mysterious unexplainable disappearance, and outside forgeries. Some of these hazards are clearly far greater than others; the one first named, for example, accounting for 60% of all losses in the calendar year 1936, and the one last named for 16%. Every exposure mentioned, however. is a source of loss, and all must be considered in connection with these ten determinants of the final charge for bankers' and brokers' blanket bonds: the amount of the bond; the form of the bond (they vary markedly in loss content); the number of employees; the premises covered (whether or not there are branches); the class of insured (bank, stockbroker, title company, investment trust, etc.); the riders attached to the bond; the extent of the covered zone about insured premises; the general discount, if any, applicable to the given class of insured; the general surcharge, if any, applicable to the given class of insured; and underlying or concurrent insurance, if any.

These bonds, by the way, illustrate aptly the point considered in section 19—namely, that in some cases rate-making based on experience is out of the question in suretyship because there is no experience. When five audacious surety companies (quickly followed by five more), in the summer of 1915, ventured to write blanket bonds on the basis of equal participation in every risk misgivingly accepted, they had absolutely no experience data upon which to base their rates.

While the diversity of exposures and the numerous factors affecting the question somewhat complicate the determination of blanket-bond rates, the problem is not hard to solve now that years of experience and a large body of illuminating statistics are available. The risks involved are largely insurance hazards; and our task is to assemble complete and dependable premium, loss, and expense statistics, covering a long experience, segregated as to types of risks, and to calculate therefrom a final net rate. Since the fidelity exposure, in the case of bankers' and brokers' blanket bonds, constitutes so large a proportion of the whole, the methods employed in rating fidelity bonds in general are largely applicable to blanket bonds as well.

These bonds were first written in this country about twenty-three years ago. The volume of business was small at first, but before long it increased with startling rapidity. While the whole venture was untried from the beginning, new types of exposure were continually added; some of them, like outside forgery, involving explorations into vast and hazardous insurance and surety areas theretofore completely unknown. Yet even under such extremely difficult conditions it was found practicable in most of the intervening years so to rate the business as to make it writable with substantial satisfaction to all concerned. At times some classes of blanket bonds have been found unprofitable and rates have been correspondingly increased. Oftener, however, they have been lowered, in line with shrinking loss ratios. The experience has been fairly good, and the rate situation, it is thought, has been acceptable, on the whole, to insureds.

The continued and extraordinary success of bankers' and brokers' blanket bonds must be attributed in great part to the skill and judgment of the Rating Bureau and its advisory underwriters.

35. Contract Bonds:

While the surety companies have usually gotten along fairly well with most of the people who buy their bonds, that has not always been true of contractors. The story is too long for telling here, and it suffices anyway for present purposes to say that dissatisfaction with rating methods has played a leading part in the trouble. It is not easy, in fact, to explain and justify, briefly and convincingly, some aspects of contract-bond rating. Generally speaking, the large, experienced, and responsible contractors, bidding on given jobs, will pay for the bond guaranteeing performance of the contract precisely the same premium that all the other bidders will pay, including those who may be in a different class

as respects experience, equipment, and general resources. Obviously such a condition of things will stand a lot of explaining.

Contract bonds, of course, constitute perfect examples of surety-ship pure and simple. The principal commonly signs the bond ahead of the surety; and whether he does that or not, he always understands that he is primarily liable, and must make good to the surety, to the last penny of his resources, any loss that the surety may sustain under the bond. The likelihood that the principal, as indicated by his character, experience, equipment, and financial statement, will in fact perform the bonded contract without loss to the surety is thus the pivotal point upon which all underwriting thought converges. Yet the rate, as stated, is not affected by the condition of things in this respect.

While numerous factors have weight with underwriters in considering given cases, the chief point, aside from the one of preponderant importance just mentioned, concerns the nature and the terms of the contract to be bonded. The rate is affected, and radically affected, by this point. Ordinary supply contracts, for example, take a rate of $\frac{1}{4}$ of 1% of the contract price. Contracts other than supply, of certain types, pay $\frac{3}{4}$ of 1% of the contract price; and of certain other types, $1\frac{1}{2}\%$ of that price. On bonds conditioned for the performance of road-building contracts, the rate is 1%. Contracts that are very large, difficult of performance, and of long duration are always specially rated. While the rule is subject to numberless exceptions, it may be stated generally that the rate for contract bonds is $1\frac{1}{2}\%$ of the contract price for any term up to twenty-four months, and $\frac{3}{4}$ of 1% thereafter on the amount of work unfinished at the premium-anniversary date.

The responsibility of the contractor and the nature of the contract are the main considerations of underwriting value. As we have seen, the rate for contract bonds varies with only the latter and less important of these two considerations. That is so because the nature of contracts, the hazard involved in performing them, is subject to little or no change, whereas the conditions affecting the other and dominant consideration always change more or less and sometimes change markedly with every bidder.

The fact, moreover, that the rate is not affected by the real or presumed responsibility of the principal is not so singular as might at first appear. The same thing is true, indeed, of surety rates in general. An impecunious principal on an appeal bond, for example, pays no more for the surety company's guarantee of his obligation than would a multimillionaire pay for the same service. In both cases the rate is based on an assumption that no part of the premium resulting from the rate will be needed for loss-paying purposes, and on the further assumption that underwriters will do whatever is necessary to make the given situation consistent with such a theory of rates. The surety executive, for example, referred to could get *his* bond only upon a prior deposit of full and prime security, while the multimillionaire, if the bond were not too large, would perhaps be cared for merely on the strength of his automatic indemnity.

All the foregoing applies equally to all classes of bonds, except those written on a quasi-insurance basis. In the case of contract bonds, for example, the rate takes into account, as stated, the character of the work to be bonded, increasing as the hazard increases; but the rate ignores differences of acceptability in principals among contractors, just as it views appeal bonds without regard to the financial standing of individual applicants. In other words the Rating Bureau assumes a condition of things that every contract underwriter would emphatically declare to exist—namely, that no company will issue a contract bond unless it has confidence in the ability of its principal to perform the given contract.

There is the further assumption as before, on the part of the Bureau, that the underwriter will take whatever measures may be necessary to ensure the absence of loss. Such measures include, though not often, the deposit of collateral security; frequently the furnishing of good indemnity; sometimes, when practicable, the assignment of estimates (payment for work accepted); and other similar safeguards.

While it is hoped that none of the foregoing statements are either misleading or inaccurate, it is known, of course, by both the Rating Bureau and underwriters that contractors, for a multitude of causes that are always unforeseen and are sometimes unforeseeable, do in practice, not infrequently, fail to carry out the bonded undertaking; and it is known additionally that in many such cases the principal's indemnity proves to be without value, and that the surety company is found either not to have taken the loss-preventive measures referred to above or to have found them insufficient.

Knowing all this full well, the Bureau supplements other means of determining proper contract rates with comprehensive and minutely classified tables of experience. Weak spots in the rate structure, not otherwise discoverable, are sometimes thus revealed.

36. MERIT RATING:

Because, as stated, under the present and all past methods of rating contract bonds no consideration is or has been given to the financial responsibility and other qualifications of the given applicant for contract suretyship, it has sometimes been suggested that a differential system of rating these bonds be adopted, and that contractors be individually debited or credited, as the case might be, with percentages of some rate, deemed fair to the average contractor and thus normal, in accordance with the given principal's character, experience, equipment, financial resources, and eligibility in general for suretyship of this type. No fully developed, detailed plan of experience rating for contract bonds has ever been devised and published, so far as the writer is aware, but some such system as that roughly outlined above is thought to underlie the proposal.

Thoroughly and satisfactorily to formulate and expound a plan of experience rating would require far more space than is available here—even if the rash assumption were made that the present writer would be equal to such a task. The suggestion has been considered on many occasions by rate experts and by underwriters, but they have never been able to convince themselves that it was wisely adoptable. These are some of the reasons for that conclusion:

a. One of the first conditions laid down by all awarders of contracts is that bidders shall compete on an equal basis. No such equality will exist if one bidder gets his bond for ½ of 1% of the contract price, say, while another or others must pay two or three times as much. The cost of the bond is taken into account, of course, by the bidder in his estimate of the cost of performing the given contract, and is included in his bid for the work. It happens all the time, in highway lettings and in many other kinds of public construction, that the bids are exceedingly close; and under such conditions even a small difference in the cost of the bond might determine the successful bidder.

- b. In compensation and other casualty lines, where experience rating has long been practiced (not with conspicuous success in the opinion of some underwriters), the conditions appear to be essentially different from those confronting contract-bond ratemakers. A principal either performs his contract, without loss to his surety, or he defaults, with resultant loss and trouble to his surety. As long as he continues to perform every bonded contract, he has a 100% experience record. If, however, he involves his surety company in loss even once, he is pretty well out of it, generally speaking, so far as future suretyship is concerned. Compensation insureds, on the other hand, may have a high accident frequency, and may still be deemed insurable, and the experience will be an important factor in the fixing of the compensation rate. An important difference in this respect, however, may be noted between compensation insurance and contract bonds. In the former maladjustments of rates, demonstrated by the experience, are remediable with comparative ease and may be made promptly effective. A contract-bond rate, on the other hand, is determined when the contract is awarded, and necessarily remains in force until the contract is completed, long after and perhaps years after the rate is fixed. So far, therefore, as past performances might be deemed to justify departures from normal charges, the plan of experience rating would seem to be of limited applicability to any theory of contract-bond rating.
- c. So far as merit rating, in the contract-bond field, might depend, not on the past performances just considered, but on financial resources, equipment, and similar claims to suretyship, it is obvious that the assignment of just ratings to the thousands and thousands of contractors continually buying bonds would be a task so vast and baffling as in all likelihood to defy successful Moreover, even if it were assumed that such an completion. encyclopedic catalogue of contractors could be once compiled with substantial accuracy and fairness, is it not clear that the rates would be subject to continual change, and would quickly become misleading and undependable unless far-reaching and expensive means were adopted to keep them up to date? Every time a contractor completes a job his financial condition is either better or worse than it was when the contract was undertaken, and his experience rating should be correspondingly changed. In practice,

of course, it would not be-unless an army of statisticians and accountants were constantly employed in such work. The business death-rate of contractors is and always has been extremely high. Not infrequently big names in the construction industry ultimately become only distant memories. It is thought, indeed, by some experienced contract underwriters that all contractors, generally speaking, sooner or later come to grief. The claim records of all the bonding companies show with sad emphasis how little it takes, in the way of mischance or poor judgment, to "break" the average contractor. How easy it is for an underwriter to be entrapped by an old and honored name is shown by a Cramp Shipyard loss. The Cramp concern had been building ships for nearly a century, and its contract bonds were eagerly sought. Yet it finally defaulted upon a contract to build two cruisers for the United States Government. Although the loss to the surety companies interested was ultimately very much less, at one time they were involved to the extent of one million dollars.

- d. If experience rating were practicable and advisable in the case of contract bonds, why would it not be in other lines of suretyship? Indeed, something of the sort has been proposed at times, especially by banks which have gone along year after year without loss, and which for that reason have felt entitled to special rate consideration. A very large Chicago bank, for example, complained bitterly to the Rating Bureau and to insurance officials because American bonding companies insisted on charging the regular rate for the big blanket bond that the bank carried for many years, without making even one demand upon the surety companies under the bond in all that time. Finally the bank dropped its unreasonable American insurers in favor of more considerate gentlemen doing business at London Lloyds. Only a short time thereafter a fidelity loss of \$4,000,000 came to light. Every year for many years before the discovery of the defalcation the bank had been losing \$100,000 or so. Yet it would have been entitled throughout much of the period to a high credit under any system of experience rating.
- e. In the absence of a detailed, well defined plan comment is bound to be more or less futile, but perhaps it may be assumed that the advocates of experience rating for contractors have two

aims in view—to benefit the large and responsible contractors, thought to suffer unjust discrimination under the existing system, and to improve underwriting results by increasing the premium fund procured from the class of contractors presumed to cause most of the losses. It is not clear to this writer that the first aim is necessary or that the second would effect the end desired.

From the nature of the case large contractors have manifest advantages over smaller ones under the present system in that they procure bonds readily, as a rule, and without being subjected to inconvenient or perhaps impossible underwriting requirements. All the time it happens, on the other hand, that relatively weak contractors, minded to compete with bigger men on undertakings thought to be too large or difficult for their existing resources, are forced by the surety companies, as a condition precedent to the issuance of the given bond, to modernize their equipment or increase their capital or furnish dependable indemnity or otherwise to qualify for the suretyship needed.

With regard to the second point, it is suspected that the adoption of an experience rating plan would in practice diminish substantially the revenue derived from large contractors without increasing much that procured from the remaining principals, and that the net result would be a greatly diminished contract-bond premium fund and a correspondingly increased loss ratio.

Even if it were conceded that an experience rating plan would confer upon the construction industry and the surety companies the benefits referred to, and perhaps others unknown to this commentator, it would still be the opinion of most contract-bond underwriters, it is thought, that the other and necessary consequences of the plan would vastly outweigh any merit that it might have—the confusion, uncertainty, inevitable unfairness and something not far from general chaos that would eclipse and nullify such merit.

37. How Competition Affects Rate-Making:

Throughout this discussion we have written about rates as if the Bureau were free to recommend to its subscribers any rates that might seem to it fair and advisable after a study of all relevant statistics, consultations with expert advisers, and due deliberation. In fact, of course, surety rate-making is not as simple and easy as

that. Sometimes, when a certain rate, after profound thought perhaps and prolonged research, has been definitely fixed as fair to all concerned and otherwise appropriate, it is found impracticable to use it. All the processes of rate-making considered thus far, and of rates resulting therefrom, are in numerous instances modifiable if not nullifiable by reason of three disturbing influences, almost entirely beyond control of the Rating Bureau, as follows:

a. While most companies doing a surety business in the United States are subscribers to the Towner Rating Bureau, and consistently quote the rates recommended by it, certain companies operate outside the Bureau and make their own rates. To a large extent, indeed, such companies deem it to their advantage to use Towner rates, even though they are under no obligation to do so. None of them, however, invariably follow the Towner Manual; and some of them are notorious rate-cutters, particularly in certain lines. This condition of things is, of course, perfectly well known to the Bureau, and it doubtless to some extent influences its action.

As a matter of historical interest, if for no other reason, it may be worth while to record the fact that in 1937 92½% of all the fidelity and surety business done in the United States was written by conference companies (Towner subscribers). Since non-subscribing competitors, as indicated, write a good deal of their business at Towner rates, it is perhaps fair to assume that 95% or so of all the surety business written in the United States carries Towner rates.

b. For many years corporate suretyship in this country has been subject, in a few important lines, to persistent and aggressive competition on the part of Lloyd's underwriters in London. That has been particularly true in the very important field of bankers' and brokers' blanket bonds; and at one time many of our big metropolitan banks, as well as numerous smaller institutions, were blanketbonded in London. In recent years, it is true, this blanketbond competition has been materially tempered by reason of arrangements that may or may not prove to be permanent. On the other hand, our British cousins have become increasingly troublesome in recent years in the domain of general fidelity insurance. Numerous important risks of this character, enjoyed for years by American companies, have been transferred to London.

This situation, too, must be constantly in the minds of Bureau managers, and must affect their decision in close cases.

c. Public officials charged with the duty of approving bonds of various kinds that must be filed with them always prefer corporate to private suretyship. That would be expected on general principles; and in some cases the laws that require the bonds also provide that only corporate bonds shall be accepted. In plenty of instances, however—rather commonly in the case of public official and fiduciary bonds—personal suretyship is not only permitted, but is in practice, particularly in certain parts of the country, pretty prevalent. An actual count, for example, recently made in a county courthouse in Pennsylvania, disclosed the fact that out of 149 bonds covering administrators filed within a recent period, 137 had been executed by personal sureties.

It is clear that the foregoing condition of things operates as a sort of automatic safeguard against excessive rates in the lines affected. Few of the people who are asked to become surety for fiduciaries or public officials do so cheerfully; if they are well informed and wise, they will deem it a good investment to buy a corporate bond instead of exposing their personal assets to the perils of private suretyship. The Rating Bureau, of course, knows all about this potential competition, ever present in certain lines; and such knowledge, it may safely be assumed, has a restraining influence to some extent upon the Bureau.

38. RATES ARE SOMETIMES DETERMINED OR LIMITED BY LAW:

Not only are rates affected by competition, as just described, but in many cases the Rating Bureau and the surety companies are absolutely barred by law from charging more than a stated maximum. That is true, for example, in the case of a large number of bonds required by the Federal Government. That particular law, as it happens, works no great hardship on the surety companies, because the rates now in force are in most cases lower than those required by the rule. The statutes of a number of states provide maximum premiums chargeable on bonds given by public officials and fiduciaries. Generally such statutes fix a maximum rate of 1%. It does not follow that the rate named by the Bureau is the maximum permitted by statute: in numerous instances the Bureau

deems the business prudently writable at a rate lower than the maximum prescribed in the given law.

39. Acquisition and Other Incidental Costs:

The average man's method of determining an insurer's profit is to deduct losses from premium income and regard the remainder as the answer. That is absurd, of course, as respects all insurance, but in the case of suretyship particularly, important deductions must be made from the premium dollar before losses, not to speak of profits, come into the picture. The combined, country-wide experience of the sixty-four stock companies entered in the state of New York in 1937 shows that the total expenditures made by those companies in that year, outside of losses paid, aggregated, as respects the fidelity business done then, 55.8% of the net premiums written; and as respects surety business, 62.4%. The fidelity figure is somewhat higher than the average, for the seven-year period 1931-37 (51.4%); while the surety 1937 average is slightly lower than the seven-year average of 63.4%.

Although this point is not immediately concerned with our inquiry, it seemed worth while to include it, because it is obvious that in suretyship the premium dollar is not even a fifty-cent dollar for loss-paying purposes.

40. The Essence of It All:

Our long discussion may be skeletonized, and the conclusions implicit in it or fairly inferable from it may be stated, as follows:

- a. Suretyship is not insurance, and should not be treated for rate-making purposes as if it were. This general statement, however, is subject to the broad qualifications outlined below.
- b. In many types of bonds the chief determinant of the rate is the value of the service rendered by the bonding company in furnishing the suretyship. Breaches of the bond referred to are not expected, and no attempt is made in rating them to accumulate a premium fund for loss-payment purposes. Some kinds of license bonds, most kinds of custom-house bonds, grain warehouse bonds furnished by very large concerns to rigidly supervised boards of

trade, and lost-instrument bonds may be cited as falling within this classification.

- c. In many types of bonds the chief determinant of the rate is, again, the value of the service rendered by the surety company. In these cases breaches of the bond are expected—are virtually assumed, indeed, for underwriting purposes; but the certainty of numerous bond breaches is ignored by the rate-maker, and the premium prescribed makes no provision for loss absorption. It is assumed by the Bureau that underwriters will care for loss contingencies otherwise than through premium revenue. Appeal and similar judicial bonds are cases in point.
- d. While the service-charge theory of rate-making is controlling in the two classes of bonds just referred to, other considerations affect the rate to some extent—acquisition costs; taxes; expense incurred in supervising risks, procuring termination evidence, adjusting claims, etc.; a modicum of profit.
- e. In many types of bonds the chief determinant of the rate is the experience of the surety companies in the given case-actual underwriting results over a term of years. Only one of the four possible barriers against loss that safeguard surety companies (cf. sections 24-26) is available here—the premium fund; and such a rate is prescribed as will not only cover the items referred to in the preceding paragraph, but will also provide for the inevitable and foreseen losses. In other words the bonds in question are written on a quasi-insurance basis (cf. section 30), and are rated very much as if they were ordinary insurance policies. Numerous examples of bonds falling within this classification may be found in the "License and Permit" branch of the business. The minimum annual premiums and minimum earned premiums prescribed for license and permit bonds control the rates in a multitude of cases. and leave little room for speculation about rate theories. Bankers' and Brokers' Blanket Bonds, since they embody so many risks of pure-insurance character, rather less aptly but still fairly well, exemplify the method of rate-making referred to in this paragraph.
- f. Most types of fidelity bonds are rated in accordance with the preceding paragraph, except that one important element of cost in the handling of such business, investigation expense, largely absent

when bonds are written purely on a quasi-insurance basis, must be considered and cared for in determining rates.

- g. Between the types of bonds whose rates are fixed or tested primarily by insurance methods (experience statistics) and the types whose rates are based on the service-charge theory lie numerous intermediate kinds of risks. They do not fall squarely within either of the classifications mentioned; and rates for them are determined, in varying degrees, by a combination of the two factors referred to, one of them sometimes predominating and at times the other. While no loss is expected in the instant case, when individual risks are accepted, it is known nevertheless that losses are bound to occur; and such a rate is named as will not only compensate the surety for services rendered and for incidental charges, but also will provide a fund for the payment of losses. Bonds issued in behalf of executors, guardians, testamentary trustees, and the like are rated in this way.
- h. The following two fundamental considerations affect all surety rates, and require them to be somewhat higher than those apparently adequate if only short-term statistics are weighed, and if anything less than a very broad view is taken of the entire rate situation:
- (1) The undoubted fact that industry and finance are subject to long-trend cycles of alternate activity and stagnation, certain to affect profoundly the results of normal surety underwriting;
- (2) The further undoubted fact that the insolvency of an important surety company, with consequent inability to fulfil its contracts, affects disastrously and in great part irremediably thousands and thousands of innocent bond obligees, including many political bodies. It were far better that rates should be somewhat too high than distinctly too low; and they are too low if they do no more than permit the surety companies, with prudent management and reasonably good underwriting, merely to cover current costs and current losses and a little profit, but do not permit in addition the accumulation of a surplus against contingencies unforeseen but certain in the course of time to arise.

41. THE TOWNER RATING BUREAU, INC.:

Some such plan of surety rate-making as that roughly and incompletely outlined in the preceding section is thought to be followed by the Towner Rating Bureau. The plan is regarded by the Bureau and by surety executives generally, it is believed, as conveniently workable, consistent with approved underwriting practices, and likely to produce rates involving no injustice to either the bond-buying public or the surety companies.

How extremely important the Rating Bureau is to the surety companies, and how essential it is to the welfare of corporate suretyship that Bureau operations be conducted with eminent skill and fairness, was indicated by the promulgation only the other day (September 12, 1938), in a single mail, of a typical collection of Towner bulletins. They were eight in number and almost all of far-reaching importance, alike to underwriters, principals, and obligees. One of them had to do with a new variety of warehouse bond that seems likely to involve suretyship of forty million dollars and to produce a premium fund of \$400,000. Another of the bulletins referred to, similarly necessitated by a Federal department ruling, rated bonds never exactly duplicated in the past, but needed at once and probably in penalties aggregating millions of dollars. Hardly a week passes when the Bureau is not confronted with a variety of problems of the character indicated that must be solved quickly and correctly.

"Everything can be improved" is a sound and useful maxim, and it applies, no doubt, to the existing system of rate-making and to the Towner Rating Bureau. Yet so far as this writer sees the methods followed by the Bureau, refined and perfected in the light of nearly thirty years' experience, are admirably suited to the end in view, and could not be greatly changed without serious damage to the best ultimate interests of all concerned. While its aim may not be attained completely, the Bureau, it is clear, strives to exemplify Matthew Arnold's definition of culture, "A disinterested endeavor after perfection."

42. Interpretative Analyses of Loss Statistics:

It is of interest to note in connection with our main inquiry that little information is available, except perhaps in the files of

the older and larger surety companies, regarding the specific causes of loss under given classes of risks. Principals on fiduciary bonds, for example (executors, guardians, trustees, and the like), may breach their bonds in any one of numerous ways-by continuing without authority a profitless business conducted by the decedent; by failing to convert promptly into safe securities investments of illegal character forming part of the original estate: by purchasing speculative stocks or bonds with the trust funds; by mishandling otherwise (however innocently) the property to be conserved and distributed; and of course and particularly by downright stealing of the assets of the estate. Would it not be both interesting and highly useful to underwriters if it were known that out of every hundred thousand dollars lost by the surety companies on fiduciary bonds, a certain percentage was due to dishonesty on the part of the principals involved, a certain other percentage to unwise investments made by them, and a third part to general incompetence, and so on?

Similarly in the case of contract bonds it would surely be of decided value to underwriters to know, in connection with a given large volume of losses, what proportions were due respectively to the moral risk, to inadequate equipment, to inexperience in the particular line of work, to washouts or similar disturbances of nature, to labor troubles, to rising prices, and other mischances.

In the important division of fidelity risks a most illuminating and valuable analysis of losses could be made. It would show what percentage of the whole was due to addiction to drink, for example; how much to horse-racing and other types of gambling; to what extent night-life and general dissipation contributed to the grand total; what part the stock market played in the sad exhibit; and so on.

While analyses of losses of the kind suggested have probably been made by some surety companies as respects their own operations, no comprehensive and dependable digest of the experience of all the companies has ever been compiled so far as this writer is aware. It seems singular that an aid to underwriting so obvious, simple, and elementary should never have been made available generally.

43. Apologia Pro Libello Suo:

"Gratiano speaks an infinite deal of nothing, more than any man in all Venice. His reasons are as two grains of wheat hid in two bushels of chaff: you shall seek all day ere you find them, and when you find them, they are not worth the search." Many a wearied reader perhaps will liken the author to Gratiano, now that we have come so far and achieved so little. No attempt has been made, in fact, to show how surety rates are determined in actual practice-still less, to fashion formulas and lay down rules in accordance with which rates should be made. It may be doubted, indeed, that the Bureau is governed in its fixing of rates by the rigid methods followed in some branches of insurance (in arriving at compensation rates, for example)—by theories and formulas based on mathematical concepts. Perhaps it is more a matter of general judgment, grounded in long experience, guided and controlled by certain broad principles, tested by actual underwriting results.

However that may be, a discussion of the methods that should be used in the determination of surety rates must be reserved for another occasion, or, much better, for other and more competent hands. All that was attempted here was to point out and discuss some of the numerous and striking ways, affecting rates, in which corporate suretyship differs from insurance; some of the difficulties of ascertaining just and adequate rates for surety bonds; some of the principles that may well underlie and control the processes of surety rate-making. Possibly some such preliminary study as this will be of use in connection with the larger and more important task of determining what precise methods may best be followed in fixing surety rates.